



In-Car Guides for EXPERT Habits

The Driving MIND

Pocket Coach eBook

by

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Welcome to Professor Mottola's Driving MIND System!

The **Driving MIND System**, which consists of the *Driving MIND Pocket Coach* and the *Driving MIND eCoach*, provides a new model of training that gives **teenagers and adults** choices for what type of actions they want controlling their vehicle. For parents of newly licensed teens it provides effective GDL practice for a life-time of **Zero Crashes!**



This *Pocket Coach* provides MIND Cues that define what and how to practice one action at a time. You will learn about an action from *The Driving MIND eCoach*, then use the MIND Cues in this book to guide you in **repetitions of deliberate practice until habit forms**. Practice can take place while a pedestrian, a backseat passenger, a front-seat co-driver, or a driver.



To cultivate strategic habits requires **awareness** of the need to take an action; knowledge of how to perform the **action** in a timely manner; and desire for the **reward** received by cultivating the Zone Control Strategies into habit.



Any member of the family — from 4-year-olds to 94-year-olds — can cultivate strategic habits as pedestrians, bicyclists, passengers, co-drivers, and drivers, to operate within traffic situations in a responsible, efficient, enjoyable, stress-free, and crash-free manner.

Four Levels of Driving Performance

There is never a moment of driving when some action is not being controlled without thinking by habits. Our goal is to help you reach level 4 okay performance.

4 = OK No Hesitation, 3 = OK With Hesitation, 2 = Ok With Coaching, 1 = More Practice

The Habit Cycle



Level 4. Okay - Correct No Hesitation is the best level. The driver performs the correct action by habit without thinking about what needs to be done. Habits makes it possible to perform multi-actions.

Level 3. Okay - With Hesitation is the level where learning takes place. The trainee is able to “deliberately practice” a few actions at a time and make corrections when wrong performance occurs.

Level 2. Okay - With Coaching is the level where the trainee becomes aware of the error that was made. With effective coaching the wrong behavior is corrected — not repeated into habit.

Level 1. Not Okay - More Practice Is Needed to prevent wrongful habits from being formed. The driver does something wrong without any recognition that the error was made. The action gets repeated and begins to take place without thought — by habit.

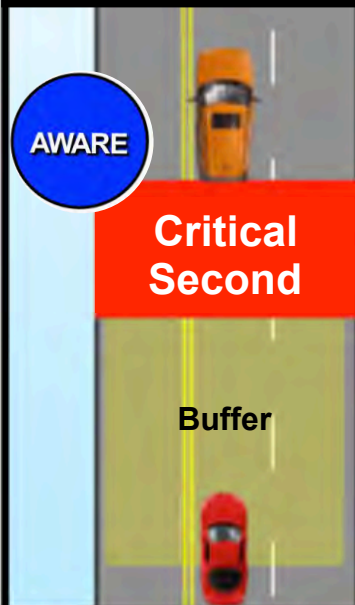
Message for Parents and Licensed Drivers

The structure of Professor Mottola's Driving MIND eCoach provides students with opportunity to learn, practice, and master each of the Awareness, Space Management, and Car Control strategies into habit that will serve as safeguards against 99 percent of crashes.

If a licensed, experienced, driver were to cultivate into habit only these three Space Management Strategies — Courtesy, Separation Space, Control Critical Seconds — the majority of crashes could be prevented. To avoid crashes, you only need to know how to Find, Solve, and Control the “Critical Second,” and have the willingness to be courteous and the willingness to practice control of separation space. “Separation Space” is what we used to call “Following Distance” or “Following Space.” But, if we are *following*, we are not in control. Separation space in a vehicle is as important in preventing crashes as separation space is important in preventing spread of the COVID-19 virus. **You're not likely to get the virus, nor likely to crash, if you are separated from others.**

At this time, you either have the four-second separation habit or you don't. If you do have it as a habit you cannot argue with me more on how beneficial it is. However, if you don't have it as a habit, and the shorter your separation space currently is, the more internal resistance you will experience. It is not bad to feel this way. In fact, if you fight that “monster” within you, and you acquire a new internal value of feeling good with a four-second separation space, then you have tamed the monster and you now have a lifeguard inside you!

Explore the Strategies of the Driving MIND System and practice into habit those that you want controlling the life of your family members.



AWARE

Critical Second

Buffer

**Find the
"Critical Second."**

The "Critical Second" is when other vehicles and users of the roadway are within one second of your vehicle.

It's the last second before a potential crash!

Challenge: Spend 10-15 minutes while being a Co-Driver to see how many Critical Seconds you Find, and could be in control of if you were driving. Repeat this challenge on several days. Share with the driver the critical seconds you find.

The “**Critical Second**”–
when you are within one
second of others!



1. **FIND: Critical Second in the A Zone Window (Target Area)**
2. **SOLVE: Critical Second Before Reaching the Danger Zone**
 - Detect LOS-POT Blockage
 - Get Best Speed Control, LP, Communication
3. **CONTROL: 4-Second Danger Zone**
 - Separation, Speed Control, LP, Communication
4. **CONTROL: 2-Second PONR (Point-Of-No-Return)**
 - Cover Brake, **100% Focus**, 45° Search

You're in CONTROL of the Critical Second!

Habit 2: Search the A Zone (Target Area) for Critical Seconds

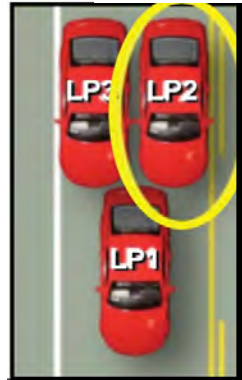
AWARE

Find “Slow” or “Go”
Conditions and LP’s of Vehicles

Four things to Search
the A Zone for.

1. Look for **Slow** conditions.
2. Look for **Go** conditions.
3. Look for the **LP** of vehicles.
ahead as well as oncoming.

ACTION



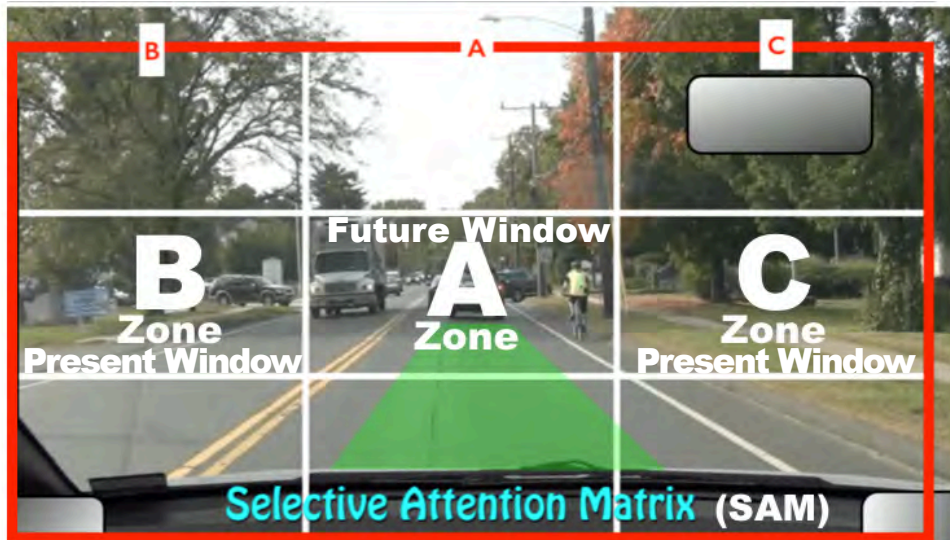
4. Search A Zone for a **car tailgating** a vehicle making a right turn, **who may zigzag** into your path.

REWARD

1. **Reduce your speed.**
2. **Find Escape Path - Take LP5.**
3. **Flash high beam headlights.**
4. **Blow your horn.**

Habit 4: Find Zigzaggers and Vehicles in LP2

Search A Zone for “Go” or “Slow” and for LP2



Habit 5: Find “Go” or “Slow” Condition



Find Closed A Zones!

ACTION

Slow Condition requires a speed reduction, which could be achieved by any one, or all three, of these techniques:

1. Ease Off Gas Pedal
2. Cover Brake
3. Apply Brake • Check Rear

Reduce Speed

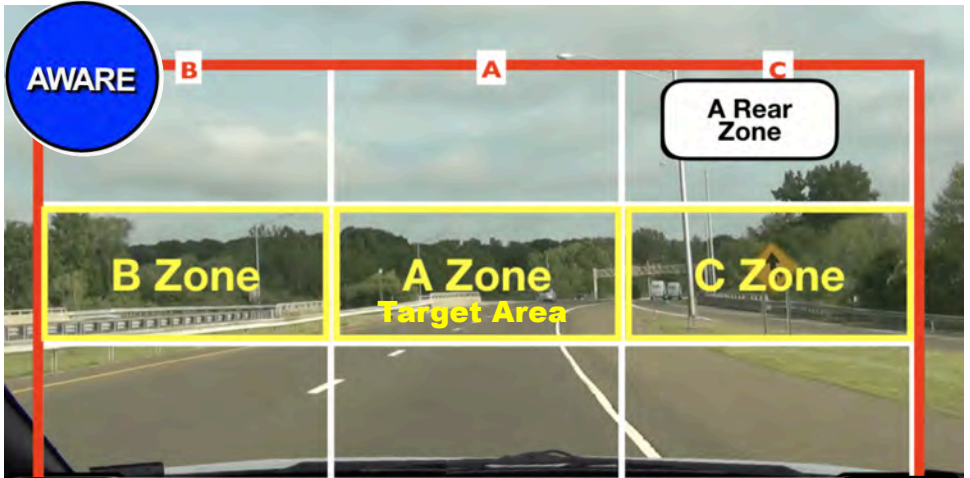
Go Condition means you have an open "A (Front) Zone" with space to enter.

1. Keep Same Speed
or
2. Increase Speed

Keep Speed

REWARD

Habit 6: **Select the Best Speed Choice**

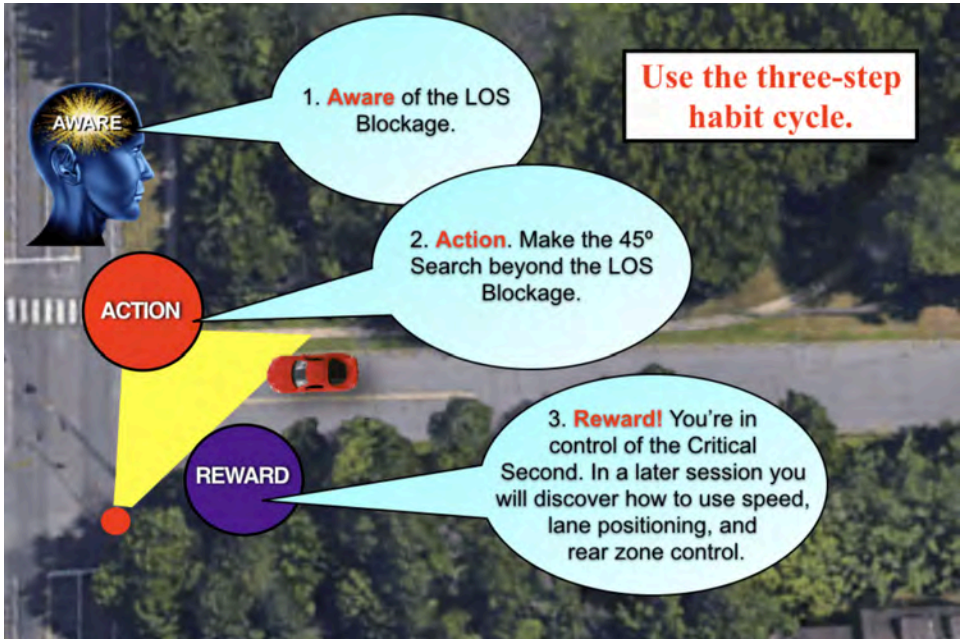


B Rear Zone

Adjust mirrors to show vehicles to the rear.

C Rear Zone

Habit 5: Six Searching Locations



To Earn First Star of Pedestrian Awareness (PA) Badge you should be able to explain these actions.

- Define the “Critical Second.”
- Find LOS (Line-Of-Sight) Blockages.
- Make 45° Search at LOS Blockages.
- Make 90° Search at Intersections before entering them.
- Know how to locate and evaluate the Target Area.
- Be able to evaluate the Targeting Path of Travel.
- Determine whether the Targeting Path (TP) is open or closed.
- Earn a score of 100 on the Exiting Quiz.



Pedestrian Awareness Badge

Habits for First Star: Pedestrian Awareness Badge

While crossing an intersection with the “Walk” light, you are in competition with drivers who are turning and want to occupy the same space. Look at it from a driver’s point of view making a left turn. He has the “green light,” while you have the “walk light.” His concern is to make the turn before the oncoming vehicles, and while the light is still green. He may even increase his speed to “beat” the oncoming traffic. He did not acquire the habit of evaluating the path to be entered before turning the steering wheel to be in control of the “critical second.”



What text or call is more important than seeing a vehicle coming at you?



Habit 7: Dangers Crossing with the Walk Light

√	X

Observe the stopping distance of other drivers.

Place a **√** for every driver you see that is stopped to see the tires.

Place an **X** for every driver without the proper stopped position.

After you fill one column with **√**s or **X**s, total each column.

Compare how many drivers receive the following rewards to those who don't.

Reward for having space:

- Gives you independence from others' actions.
- Gives you an escape path.
- Prevents being boxed in.
- Prevents stress.
- Puts you in control.
- Helps prevent robbery, carjacking, kidnapping.
- Eliminate or reduce rear-end crashes.
- Reduce severity of whiplash injury.
- In bumper-to-bumper traffic reduce distraction error.
- Reduce intake of exhaust fumes.
- During slippery conditions, slide into empty space.





ACTION

Habit 9: Stop to See the Tires



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

A target is a fixed object that appears in the center of the path you intend to drive. To select a target, first decide where you want the vehicle to travel, then aim for an object in the center of that path. A piece of tape on the 12 o'clock position of the steering wheel helps fringe vision keep the car on target. See if the Path Of Travel (POT) is open.



DEMONSTRATE how to detect when the car is on target, or off target. Search to the Target Area and evaluate whether your POT is open or closed. Look for “Critical Seconds.” For closed POTs consider the best speed choice.

Habit 2: Search to Target Area for Open POT

Get 30 Repetitions Judging Separation Space

Get reps while you're a Co-Driver or a pedestrian.

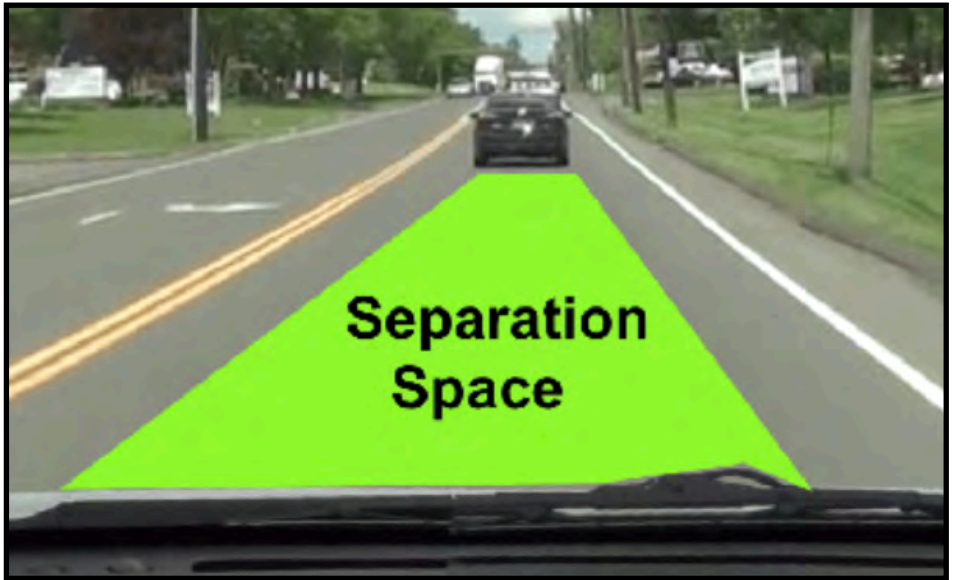
If you are more than 1-second off by the end of the 30 reps, do more until your estimates are accurate.

Judge separation space from the vehicle ahead of the car you are in, and judge space that other drivers maintain.

To Measure Space

1. Take a guess.
2. Select a marker.
3. Car ahead passes marker.
4. Begin counting.
5. Stop counting when you reach the marker.

Taking a guess before counting is very important for habits to develop.



Habit 9: Keep 4-Seconds Separation Space

Practice in a Parking Lot from the Driver and Co-Driver Position

Work in teams as adult drivers and as parent and teen co-driver. Drive the car in position with the front bumper even with a line. View how the line appears in relationship to the car. Get out of the car and view the position of the car. Then, switch seats — the driver views the reference point from the co-driver seat, and the co-driver views the reference point from the driver's seat. Use this same process for viewing the left and right side reference points from the driver and co-driver views.





Habit 4: Practice Viewing In a Parking Lot

DEMONSTRATE the reference point for the **Safety Stop Position** 24 and the **Forward Position** before making a **right turn**.



Forward Position — even with



Searching left to target area.

Front Even with Curb

When the front of the car is even with the curb, the passenger side mirror will appear to be aligned with the curb, as the top photo shows. This is the **Forward Position** for making a right turn.

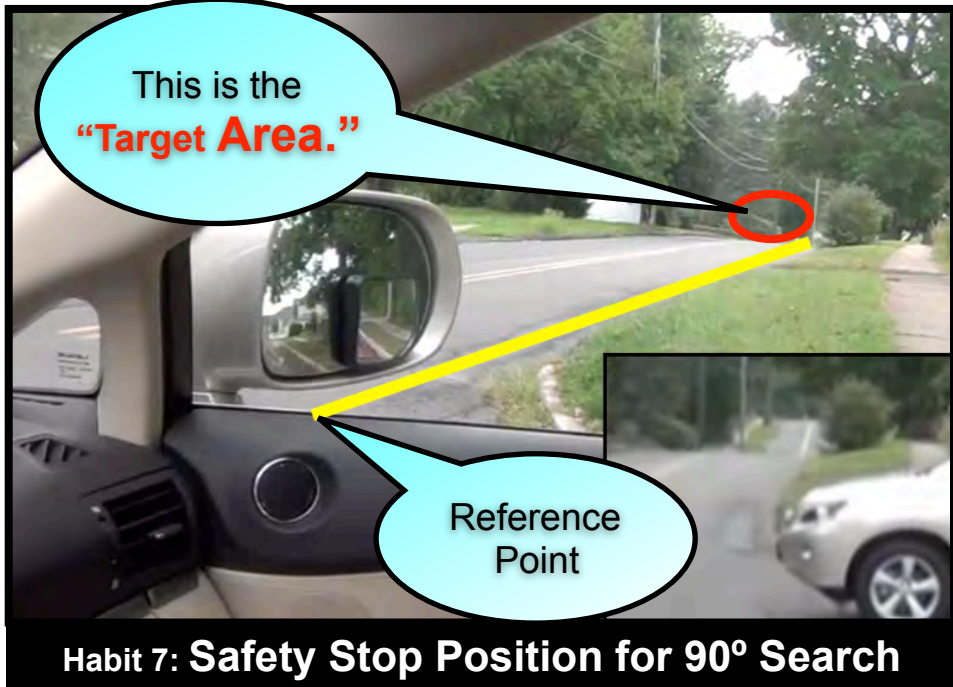
It's also the **Safety Stop Position**. You are able to search deep to the **target area** from this position..

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

This is the
“Target Area.”

Reference
Point

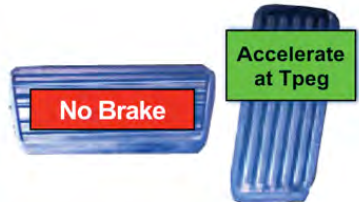
Habit 7: Safety Stop Position for 90° Search



All Drivers in the Family should take turns doing this.

Practice Detecting & Correcting Skids — Swivel Chair Practice

1. **Teen**, get on target. Move right foot on simulated “accelerator pedal.”
2. **Parent**: rotate the chair off target. (Begin with slow movements, and increase the quickness as success increases.)
3. **Teen**: a. keep turning head to stay on target; b. foot off pedals; c. make a steering motion to the target.
4. **Parent**: observe to be certain the teen’s head stays on target as the chair is rotated.
5. **Teen**: Select a target. Have foot on “brake.” When ready to go, take foot off “brake,” press “accelerator.”
6. **Parent**: rotate the chair slowly to make ten 90° right turns. Then do ten 90° left turns.
7. **Teen**: turn head on target. Make a steering motion to the target. Reverse steering motion at the Transition Peg and increase acceleration.
8. **Parent**: observe to be certain the teen’s head is turned before steering and that steering is reversed at the Tpeg.



H3: Identify and Correct Off-Target Skids

An In-Car Activity

Whether as a driver or co-driver, roll the window halfway down and feel the edge of the glass. Give a light rap on that edge with your closed fist — then imagine how it would feel if you were moving your fist at 40 mph, which may be the speed of your head's impact into that edge during a T-boned crash, or a rollover.

Having windows closed and the air conditioner on will give you better fuel efficiency at highway speeds than having the windows open. Another advantage of having windows closed is it prevents flying insects from entering the vehicle and causing distractions that have resulted in loss of car control.

If you have children in the back seat, half-opened backseat windows can be a danger to them as well.

For Co-Drivers:

When asked, be able to explain the effects of the open window during a T-bone crash.

4 = No Hesitation 3 = OKAY With Hesitation 2 = Okay With Coaching 1 = More Practice




Habit 1: Windows Up — No Guillotines!

**ACTION****For Licensed Drivers:**

You should make certain that all occupants in front and rear seats fasten their belt before placing the car in motion. Convincing some adult passengers to buckle up may be difficult. The older the adult, the more likely they may resist using the belt by making such statements like: “I trust you; you’re a good driver.”

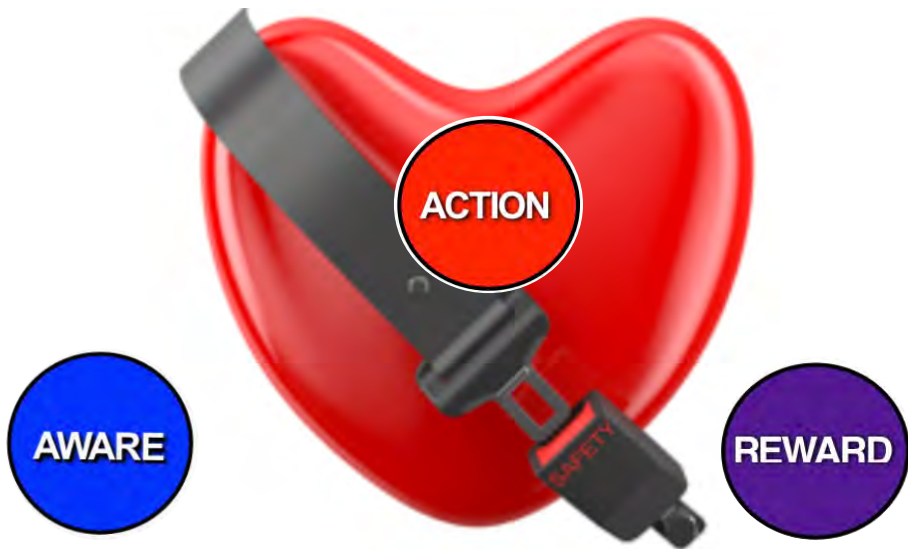
The fact is, an unattached rear-seat passenger becomes a flying missile into the head of a driver when a hard braking action or frontal crash occurs. An unbelted rear-seat passenger can prevent the driver from maintaining control of the vehicle. If your family and friends resist using safety belts, have this MIND Cue visible to show that you are striving for Zero Crashes.

Reward for Insisting all Occupants Use Belts:

- 
- Keeps you in control of the vehicle.
 - Satisfaction in knowing you care about protecting your occupants.
 - If a crash does occur, survival rate for all more than doubles.
 - Belts on reduces the impact of the brain crashing into the skull.
 - With belts on you reduce the crash forces that take place.
 - If a crash does occur, occupants are not thrown into the crash.

For Co-Drivers:

When asked, be able to explain these rewards gained by using safety belts.



Habit 1: Safety Belts On for All

ACTION**1. Place phone on the back seat.**

2. If a text message comes in and you want to see the message, find a safe place to pull over and stop.
3. Read your message. Decide whether it was worth the effort.
4. Would that message have been worth being involved in a crash?
5. Go online and find a “No texting while driving app.”
6. If you must communicate while driving, get a bluetooth connection as a lesser risk, and learn how to **Find Critical Seconds** that require **100% attention** to control the situation so that you will know when **not to use** the phone.

Co-Driver: Be able to explain this strategy when asked.

4 = No Hesitation 3 = OKAY With Hesitation 2 = Okay With Coaching 1 = More Practice

Place phone on back seat.

You'll be a **positive influence** on your family and friends to keep all safe.

REWARD



Habit 1: Get Rid of the Texting Habit!

Become aware of your personal biological clock. What time of day do you feel most drowsy? Almost everyone feels sleepy in the middle of the afternoon. When you recognize that you are in a condition susceptible to drowsy driving, you can force yourself to move your eyes more:

- Search to your Target Area looking for LOS-POT (Line-Of-Sight, Path-Of-Travel) blockages, then evaluate conditions that are 15-seconds and 4-seconds away.
- Consciously search intersections deep to the left, front and right zones before crossing from a stopped position.
- Check your rear zone more frequently than normal.

When your eyes begin to resist the movements there is only one choice left for you. Find a safe place—perhaps a well lit parking lot at a fast food restaurant — to rest. Lock the doors. Close your eyes and relax for 15 minutes. If you fall asleep, that should tell you that sleep was needed. If this pattern occurs frequently, investigate the possibility that you have a sleep disorder. For more information see: www.sleep-foundation.org.

4 = No Hesitation 3 = OKAY With Hesitation 2 = Okay With Coaching 1 = More Practice

Be Alerted to Danger Time: 2-4 in the afternoon!

How To Tell If You Are Sleepy

- Your eyes close by themselves.
- You have trouble keeping your head up.
- You can't stop yawning.
- You drift between lanes.
- You keep jerking the car back into the lane.
- You drift off the road.
- There is resistance to moving your eyes for mirror checks.



If You Become Tired While Driving

- Search to Target Area, then evaluate the 15 and 4-second ranges.
- Consciously search intersections deep to the left, front, and right.
- Check your rear zone more frequently.

When your eyes resist movement there is only one choice...

- Stop in safe area, lock the doors and relax for 15 minutes.

Habit 1: Detect and Correct Drowsiness

Practice Checking Mirror Blind Area in a Parking Lot:

1. Find a parked car and position your vehicle one lane to either side; in this case the parked car is to the driver's side.
2. Park your vehicle and exit it. See the amount of actual space you are away from the car.
3. Get back in the vehicle. Study how the car appears in the mirror.
4. **To check the blind area**, move your head 10-12 inches forward and away to the side.
5. Roll your eyes rearward immediately after viewing the mirror.



Repeat these actions several times.

DEMONSTRATE how to adjust the outside mirrors. Explain when the outside mirrors should be checked. Is it important to see the rear car?

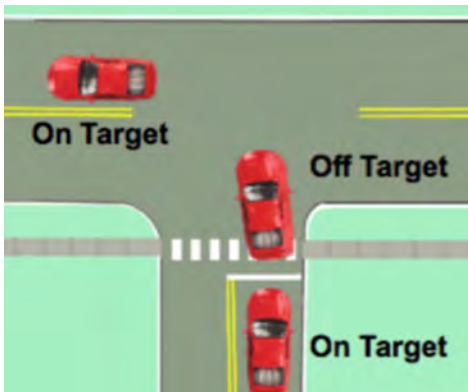


1. Adjust tilt to have the horizon appear near the center of the mirror.
2. Adjust viewing angle to detect any vehicle directly to your rear. **The outside mirror should be checked** before moving the vehicle to the side, such as before making a lane change or making a turn. Always make the last check of mirrors on the side you will move into.

Habit 1: Adjust Mirror to See Car in Rear



On-Off target while standing. Pick a target at a 90° angle. Turn your head on target. Turn wheel and your body to get on target. Demonstrate position at Tpeg.



See the car get “Off Target.”
See the car at the “Tpeg.”
See the car get “On Target.”

As a Co-Driver notice the movement of the front of the car as the driver begins to make a turn. Notice as the car is at the Transition Peg for the new target. Notice when the car is on its new Target.



Habit 2: Practice Detecting On/Off Target

Prevention Stage



When you start the engine the car is like a tamed animal, ready to obey every command. However, without proper car control, it can quickly turn into a monster. 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 of Zone Control provide automatic protection.

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 awareness of the four-second danger zone easily detects a violation of speed control. 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. Their effectiveness 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

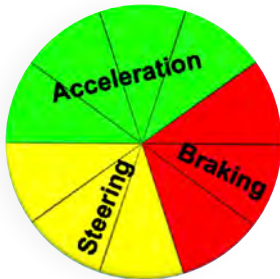
A driver never knows of all of the risk factors that are likely to combine within a fraction of a second, calling for a demand of more traction. If only one or two risk factors are present they are not likely to result in a crash. It is when there are several risk factors occurring at the same time that the monster gets fed.

The Solution

We need to eliminate those risk factors contributed by our performance, and instead acquire the Zone Control Actions into habits that can serve to automatically give low-risk behavioral patterns. A driver needs the ten empowering habits, like an insurance policy, to prevent the monster from breaking out of the cage during that one “critical second” before a potential crash.

Professor Mottola's Driving MIND eCoach and this *Pocket Coach* present Awareness and Space Management Strategies to give you Control of the “critical seconds.”

Approach Curves/Turns as if Driving the Skid Monster

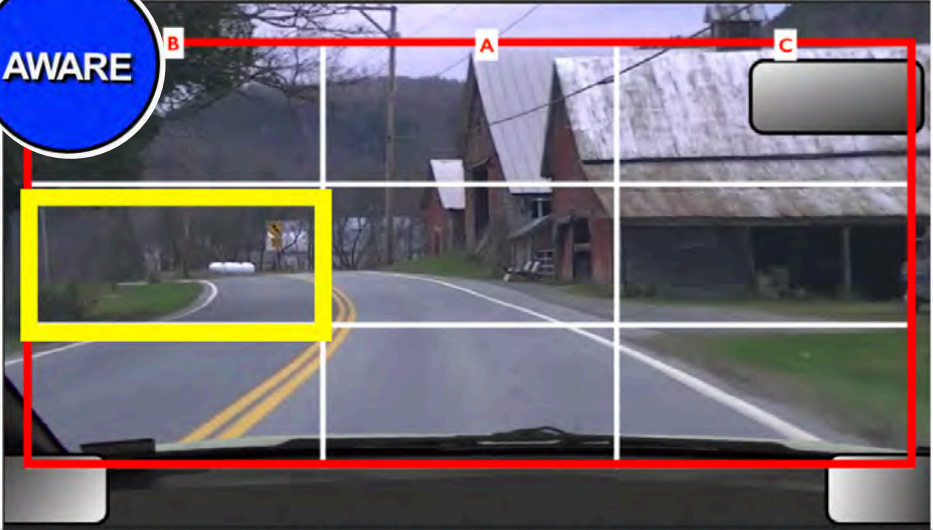


Traction Pie

1. Test your traction pie at a time when you will have "Slide Space" straight ahead.
2. Reduce speed on the straightaway, before entering the curve or turn.
3. For sharp curves and turns, hold partial braking until you are at the transition peg.



AWARE



Habit 3: Approaching Curves and Hills

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 or ice, apply the brakes to test the tire-road grip. If the tires slide, reduce speed before entering the curve.

Look for Oncoming Traffic and Get the Best Lane Position (LP) Become aware of the positioning of oncoming traffic. If there are no oncoming vehicles, the approach into a right curve could be lane position (LP) two. If there is oncoming traffic, take LP one. For a left curve, if the right-front zone is open, the approach begins in LP three. If closed, take LP one.

Look Into Curve - See Four-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 LP one.

Evaluate Path-of-Travel (POT) at Hill crest — Be Curious! Approach a hill crest from LP one. Search over the crest to see if you have an open POT. Look for the option of moving into LP three if there is a problem caused by oncoming traffic in the left-front zone.

Test Tire-Road Grip Use Slide Space

Before entering the curve when roads are wet from rain, dew, snow or ice, apply the brakes to test the tire-road grip before reaching the apex to provide “slide space” before steering into the curve.



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

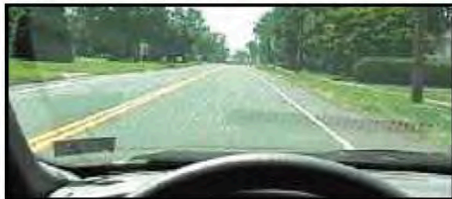
Habit 3: Approaching Curves Slide Space

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.

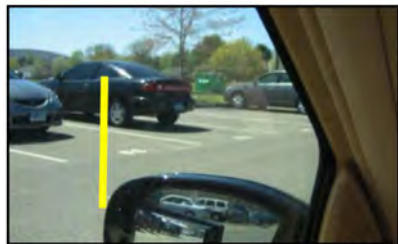
10. You can make the best decisions for using the various lane positions to get maximum control of the zones to either side of the vehicle.

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 tired, ill, or after taking medication.



Driver's body is in center of space.



45-target is aligned to edge of mirror.

Two KEY reference points for Expert backing into parking space.

H4: Discover the Power of Reference Points



Co-Driver's Tpeg for a Right Turn is when the corner post is aligned with the target. During turns, observe the Tpeg approaching the target.

Co-Driver's Tpeg for a Left Turn

is when the mirror is aligned with the target.

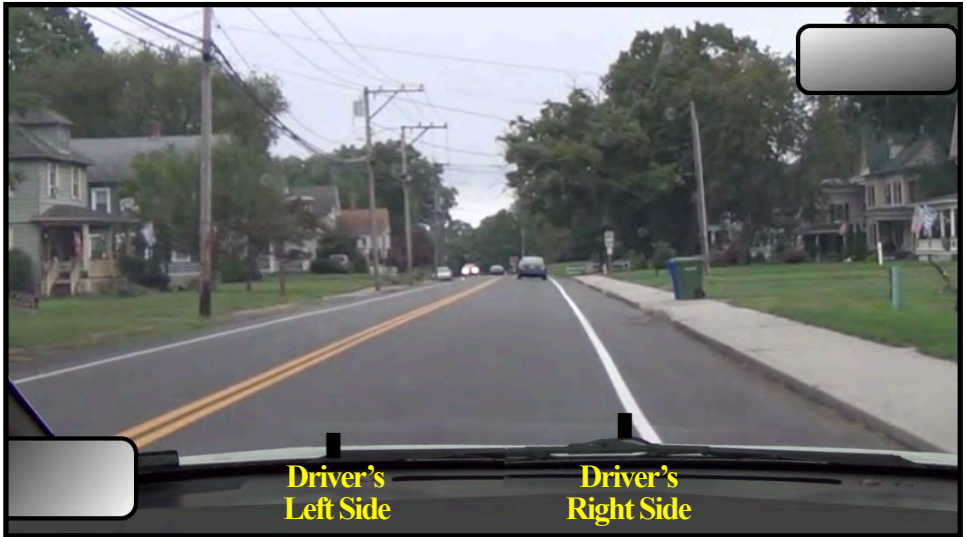
During turns, observe the Tpeg approaching the target.



**Practice while you're a
Pedestrian or as
a Co-driver.**

1. **Select a target** before a turn is made.
2. Turn head aligned with the Target.
3. See if POT is Open or Closed.
- 4a. Pedestrian, turn body toward target.
- 4b. Co-Driver, see car move toward target.
5. Recognize when you're at the Tpeg.
6. Visualize when you're **On Target**.

Habit 3: Co-Driver Use of Transition Peg

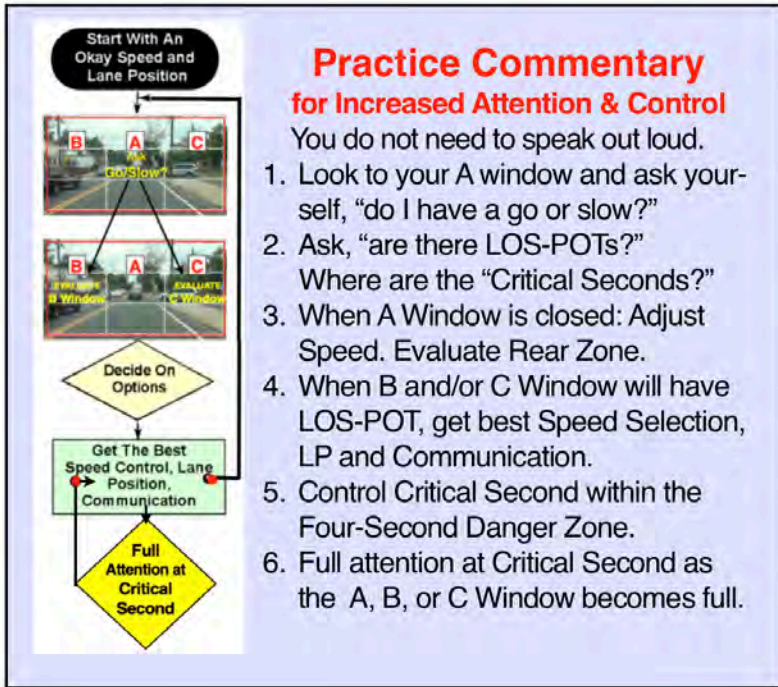


Establish these reference points while in a parking lot. See the information below. By placing a piece of tape on the inside of the windshield it increases the effectiveness of your fringe vision seeing the vehicle's placement to road as central vision is looking ahead.

In a parking lot, line up the vehicle with a left line for the driver's view. Place a piece of tape for the driver's left side. Then, position the car for the driver's right side. The same tape can be used for the Co-Driver's side. Then, position the car for the Co-Driver's right side.



Habit 4: Co-Driver Left & Right Reference Points



Co-Driver Activity: When you see a road with an off-shoulder downslope, such as the one shown here, pretend to be the driver of the car as it goes off the road. Project your vision to open space on the downslope. Visualize a target to head towards. Stay off the brakes until the vehicle is level. Or, use light braking to bring the car to a stop. Repeat this process 30 times.

For Downslopes:

1. Locate open space.
2. Steer down the slope.
3. Avoid hard braking.



Habit 3: Off-Road Downslopes — Stay Down!

Conditions and Actions to Take

1. Brake and steer to get back onto the road when:

- Shoulder is level with the road
- Shoulder is lower than the road
- Shoulder is firm
- Shoulder slopes towards road
- Path of travel is open

2. Steer away from road and brake when:

- Shoulder slopes away from road
- Shoulder is soft

3. Brake and stop as soon as possible when:

- Path of travel is closed
- High rate of speed
- Slick road surface

The number one cause of rollovers on freeways is drivers making the wrong actions when their vehicles drift onto the shoulder. The three common errors drivers make are: 1. Steering in the wrong direction, 2. Over-steering, and 3. Incorrect use of targeting vision. See the three conditions and actions listed above .



With the tires on a soft surface, or a downslope, it is easy for inertia to combine with roll forces to push the vehicle over.



Practice: As a Co-Driver, be observant of shoulder conditions on any road. Give yourself the challenge as to what action would you take if your car drifted into that condition. Use the information listed on the above page to see how many conditions you can correctly control.

During an actual situation there are no second chances!


 AWARE


 Stage 1. FIND

Target Area Information

1


 ACTION


 Stage 2. SOLVE

15-Second Awareness

2

Even in NYC it is possible for you to use all the principles and habits that we have advocated in this book.

Photo 1: A search 15 seconds ahead to our target area shows there is a closed POT caused by the red light.

Photo 2: We are applying slight braking action to delay our approach into the closed front zone. The car ahead of us rushed up to the red light only to have a longer delay, and more stress, while stopped for the light.



Photo 3: The traffic light changed to green and the car in front is moving. We have an open front zone. We evaluate the LOS conditions at the intersection and see the greatest LOS blockage is created by the stopped delivery truck in our 4-Second Danger Zone.



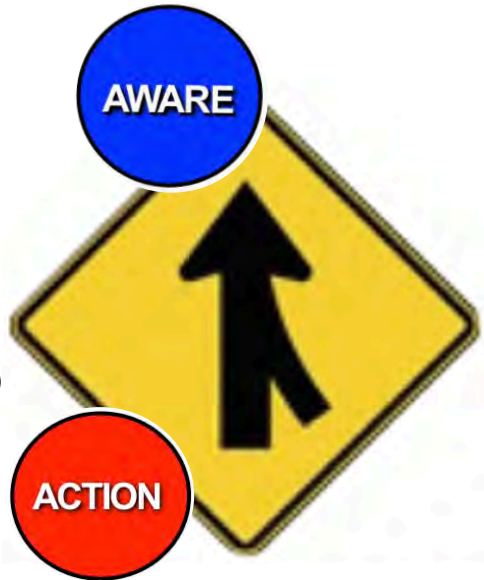
Photo 4: We want to search to the front of the parked truck when we are able to see at a 45-degree angle to its front. While moving, this gives us the final view before we are beyond our PONR (point-of-no-return).

Habit 6: 4 Stages FIND • SOLVE • CONTROL

1. See merge sign in A Zone
 - Evaluate B and C Rear Zones
 - Plan for Open Zones
2. At 4-Second Danger Zone
 - Check B or C Rear Zones
 - Adjust Speed and LP
 - Get Open Zone at Merge
3. See Cars on Entrance Ramp
4. At PONR Adjust Speed

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?



Habit 7: Time Arrival into Open Zones

Let the Deer Warning Sign be a Cue to get your Mind involved.

1. Every time you see a deer crossing sign **check your rearview mirror** to know what the rear zone condition is.
2. Tell yourself that you will **not steer** in an attempt to avoid it.
3. Brake to **reduce speed** if the deer is seen ahead in your A Zone.
4. **Do not brake while hitting** the deer to prevent it from flying into your windshield. (When you brake the front of the car pitches downward hitting the deer low, which flips it into your windshield.)



Habit 6: Read Cues of Traffic Signs

See Numbers On Image

1. Search your immediate POT.
2. Search your rear zone immediately after seeing the intersection, before braking and while stopped.
3. Search for traffic approaching from the B (left) zone.
4. Search for traffic approaching from the C (right) zone.
5. Search for oncoming traffic.
6. Before turning, search an open path.
7. When going straight, search your intended POT.
8. Before making a right turn, search for an open path.
9. Search all corners for pedestrians.

Search the left, front, and right zones of Danger Squares before entering.

The sequence of searching the three zones will vary according to LOS conditions. When there is an LOS blockage, your final search should be in that direction before entering the intersection. Often, you must make more than one search of a zone. When making a turn, always make your last search in the direction you are turning.

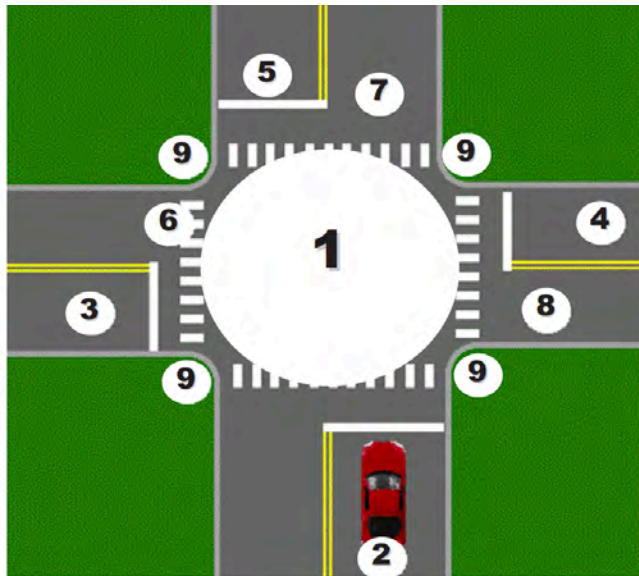
For Co-Drivers

Evaluate the Points of Conflict at 30
Danger Squares.

Make 45° Search
at LOS Blockage.

Practice covering
an imaginary brake.

Use a Co-Driver
Rearview Mirror.



Habit 7: Control Conflicts at Danger Squares

Whether a driver, or co-driver, practice will provide perfect timing with split seconds of accuracy.



Search is too early.



Perfect timing.

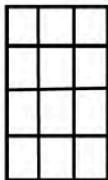


No awareness,
which is how drivers
get victimized.

Directions for use: Before placing the MIND Cue in your shoe lace holder, read the information. Then, practice in a parking lot how to search beyond parked vehicles at a 45° angle, which takes place in slow-motion at 10 mph.



Habit 7: 45° Search at LOS-POT Blockage



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

Know condition of traffic from right.

Waiting to make a left turn at a green traffic light, with oncoming traffic, is a high-risk rear-zone exposure. **Go no more than 1/4 of the way into the 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.

Co-Drivers Practice making the four searches at all intersections as if you are waiting for an open gap or hole to enter.

1. Check Rear
2. Find Gap
3. See Path
4. See Light

**Know condition
of traffic from right.**



Habit 7: Four Searches for Left-Turn at Green Light

The traffic light is turning red. Try to time your arrival for a green light.

The red light is a closed front A zone. By treating it as a closed front A 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 A 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 A 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!*





When light is Red, use speed control to arrive into a Green Light with no stopped traffic. Know the Rear Zone Condition.



When light is Green, approach expecting the light to change. At the **2-Second PONR** make **45°** searches and be prepared to stop. Be able to Control Rear Zone.



When light changes to Yellow, before, or at, the PONR, **STOP**. If yellow after the PONR, and with Open B, A, C Zones, go.

Habit 7: Control the Danger Square's Traffic Light



Habit 7: Make 45° Search at LOS Blockage

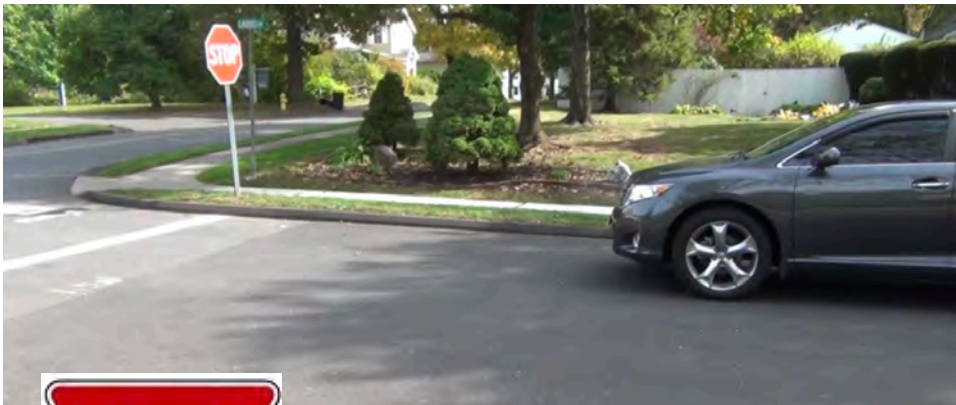
Get 30 repetitions **“Covering the Brake”** to control Critical Seconds at LOS-POT Blockages.



Habit 6: Cover Brake at LOS-POT Blockage

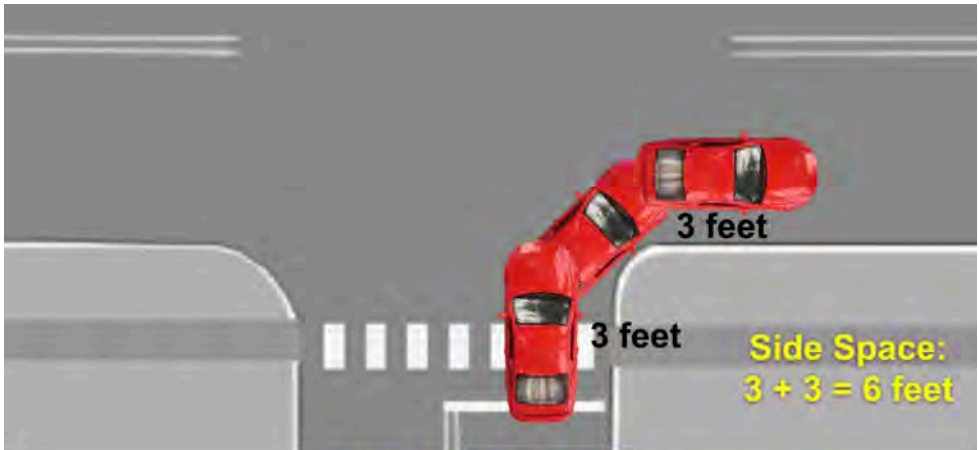
Notice the stop line is just ready to disappear, which is the Staggered Stop Reference Point.





Treat each approach to a stop sign-controlled danger square as if there is a yield sign before the stop sign. **Check both corners** for turning vehicles who may come into your path. Also look for bicyclists and pedestrians.

Habit 7: Prepare to Make a Staggered Stop



Precision Right Turn

Six feet of side space is needed for a right turn.

When the Side Position is 3 feet away, and movement of the car and tires are turned at the Forward Position, the car will end up 3 feet from the entering curb, as illustrated.

This is too shallow of a search.



As a driver, co-driver, or pedestrian, get 30 reps searching 90 degrees to the left and to the right, and check your front zone before entering a danger square.

Target Area.



This is a 90° deep search to the target area.



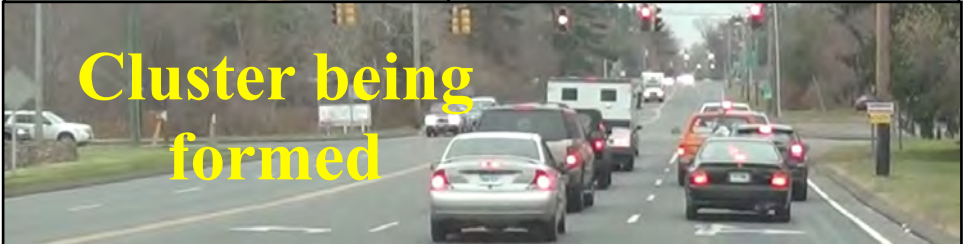
H7: When Stopped Make 90° Deep Search



A "cluster" is a grouping together of vehicles to form a traffic flow.

A "gap" is vacant space between vehicles in the cluster.

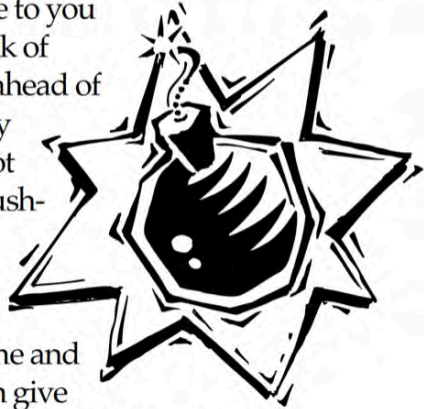
A "hole" is the vacant space between two clusters of traffic



H7: Find Holes and Gaps in Traffic Flows

Why Check Rearview Mirror?

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 want to brake for. You may not be able to stop your car 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.



4 = By Habit 3 = OKAY Without Coaching 2 = Okay With Coaching 1 = More Practice

You are approaching a construction site on the highway. When would you like to know that there is an approaching 18-wheeler closing your rear zone?

AWARE

ACTION

REWARD



When your foot goes to the brake, check rearview mirror.



Habit 8: Foot on Brake — Eyes to Rear

- **Open Rear Zone:**

is when there is 2 seconds or more of space to the rear. And, when there is at least 12 seconds of vision to the rear.

- **Closed Rear Zone:**

is when the vehicle to the rear is less than 2 seconds away.

- **Unstable Rear Zone:**

is when a vehicle is closing in on you at a fast pace.

- **Charger Tailgater Characteristics:**

- Excessive speed on approach
- Competitive
- Wants to pass you
- May force an opportunity to pass.

- **One Pacer Tailgater Characteristics:**

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

- **Habitual Tailgater Characteristics:**

- Consistently tailgates
- Will stay with you as your speed increases

Check Rear Zone

Closed Front Zone. Before, During, After Braking.

Is Rear Zone Open?

Open, Closed, or Unstable?

Tailgater Type

Charger, One Pacer, or Habitual?

When Stopped, Sand Barrels?

Habit 8: Rear Zone Control

• Unstable Rear Zone...

... is when a vehicle is closing in on you at a fast pace.

Unstable rear zones are due to drivers not controlling their front buffer. And, more frequent in recent times than in the past, a large percentage of drivers are distracted by using cell phones — especially while texting. When stopped in traffic keep monitoring the rear zone until at least two vehicles (sand barrels) are stopped to your rear.

• With a Closed A Front Zone

- Reduce speed early
- Tap brakes repeatedly
- Look for escape path
- Increase Tire Concept space
- Stopped in traffic/find Sand Barrels

Reward:

- Get distracted drivers' attention.
- Keep control of your front zone.
- Find an alternate escape path.
- You prevent being victimized.

• Avoid Sudden Hard Braking

1. Use Of Mirrors

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

2. Check Blind Areas

- Convex-Mirror Check
- Head Movement Check

3. Rear Zone LOS-POT Change

- Fast-Closing Vehicles
- LOS Restrictions

4. Awareness Of Rear Condition

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

• Tailgater Types

- Charger
- One Pacer
- Habitual

Habit 8: Rear Zone Control

ACTION**Action to Take to “Avoid False Starts”:**

When the car in front of you moves, avoid reacting to its motion. Evaluate if it is a “go” situation ahead before moving your car.

When the vehicle ahead moves for two or three feet and stops again, remain stopped; this is not a “go” condition. If you were to move, and the driver to your rear – perhaps distracted by texting – reacts to your movement by accelerating, you are very likely to get rear-ended.

Reward for Avoiding False Starts:REWARD

- This habit will help you avoid reacting to a false start when traffic ahead moves prematurely and then suddenly stops.
- Develop the habit of knowing precisely what conditions exist, rather than a knee-jerk reaction to the other car’s movement.
- Avoid being rear-ended.
- Establish your separation space.
- Avoid a surprise by the front vehicle’s sudden braking.
- Puts you in control.
- Eliminate stressful situations.



Habit 9: Avoid False Starts



The question is, "which habit do you want?"



Habit 9: "Stop to See Tires" Gives You Control

1. Adjust Front Closure Rate
2. Become Alert Slower Vehicle
3. Keep 4 Seconds Of Time Space
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 - Adjust Speed
9. Explain Benefits

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.

Strategy of Four Seconds of Separation Space

When traveling behind another vehicle, try to keep three or four-seconds of separation space. This will give you independence from the actions of the vehicles ahead. With space you are in control of situations.

Habit 9: Practice Cultivating Separation Space

Empowerment of 4 Seconds

- Gives you time to become conscious of moments when your closure rate begins to increase.
- 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 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.



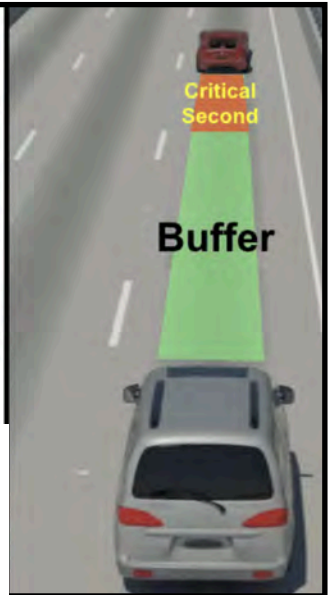
Activity: While walking or while being a Co-Driver, observe how many drivers fail to have 3-4 seconds of separation space, and don't realize they are playing the Driver's Reverse Lottery. Would you play?



If you were to wake up tomorrow morning with one of these habits, which one would you want?

It's **YOUR** Choice!

“Good habits are cultivated, bad habits are caught by chance.”
Frederik R. Mottola



Habit 9: 4-Seconds Separation to Control YOUR Buffer

While Acquiring the Habit, Stay Out of the Inside Lane

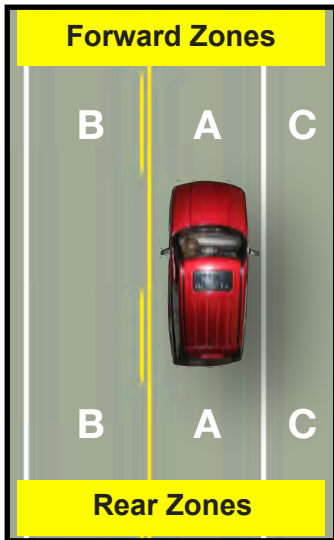
While acquiring the four-second habit, avoid traveling in the inside lanes (fast lanes) of interstate highways. The most aggressive drivers will usually be found there. The far left lane is the “never satisfied lane.”

It doesn't matter what speed you are traveling; there will always be a vehicle on your tail wanting you to go faster. The fact is, you cannot go any faster than the vehicle in front of you without passing it.

**Some of the GIFTS You
Receive are Listed Here.**

- **Allows you to be in Control.**
- Prevents you from being exposed to “critical seconds.”
- Provides time to convert from the unconscious state of awareness to being consciously aware of a closure rate.
- Gives you time to become conscious of moments when your closure rate becomes too fast.
- Allows time for your eyes to 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 vehicles ahead.
- Removes the stress that occurs when you are surprised by sudden braking actions of vehicles ahead.
- Makes you more conscious of the disadvantages of not having space.

Habit 9: Separation Space Puts YOU in CONTROL



1. Identify LOS-POT Change

2. Respond To A-Front-Zone Change



• Check Rear Zone

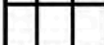
• Apply Speed Control Option



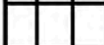
• Keep Same Speed



• Decelerate



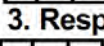
• Off-Gas, Cover Brake



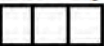
• Off-Gas, Apply Brake



• Increase Speed



3. Respond To B/C Front Zone Change



• Check Opposite Zones



• Apply Speed Control Option



• Apply Lane Position

Habit 6: **Using Zone Control Management**



Find two or three opportunities to be courteous each day!



1. Look for those who want to enter your POT.
2. See if they have a clear path to enter.
3. Check rear zone for traffic present, or not.
4. Reduce speed to open up your gap.
5. Flash headlights to communicate. Don't wave them on.



Habit 10: Empower Yourself — Be Courteous

16: Communications

1. Effective Use of:

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

2. Time Communications

- Send Messages
- Receive Message

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

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!

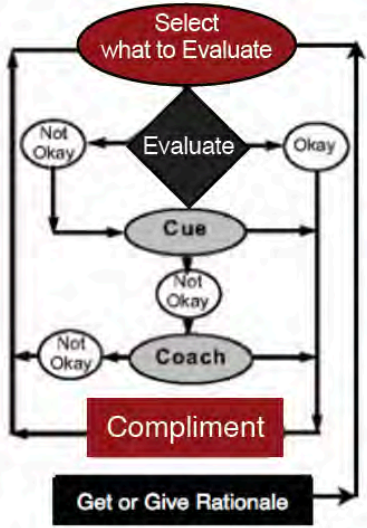
Habit 10: Communication Options

Practicing the Zone Control Strategies ...

- Find Critical Seconds
- Control Situations
- No Surprises
- Responsible
- Courteous
- Stress-free
- Enjoyable
- Efficient
- Smooth
- Safe
- No Road Rage



...Rewards YOU with these Behaviors!



Evaluate

- Select the most important behaviors to evaluate for the situation.

Compliment

- Give praise for a single behavior when it is performed correctly.

Cue

- Give the trainee a short and timely reminder of what behavior to perform.

Coach

- Identify single behaviors that the trainee is in need of coaching to achieve success.

Rationale

- Ask the trainee to explain why an action should be developed into habit.

For Coaches: Use of the ECCCR Process

Detailed guidance for conducting in-car sessions is located on this Driving MIND eCoach of Family Wellness Training located in the “**Parent/Mentor**” Branch. The first five in-car lessons are only to be conducted in a parking lot. Listed here are some reminders for you to conduct successful practice sessions. Give your teen only the practice that is described in each lesson and behaviors from previous lessons.

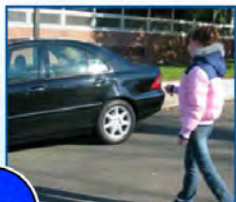
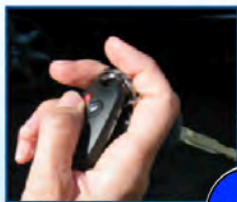


- Ask the teens to demonstrate each action that is listed on the In-car Guides. They should have learned and practiced the actions by using the Stylus Cars Model Roadways.
- You can follow the ECCCR Process to have the teen succeed.
- If you should need to disengage the car’s acceleration power **in an extreme emergency situation** (i.e. if the teen gets into a panic situation and the foot freezes onto the accelerator pedal), shift into neutral. Practice doing this in the parking lot during session one.
- What works for most cars is: Place your left hand on top of the shifter—whether the shift is on the column or in the console—as shown in the photos. With your palm open (very important not to close your fist!) and facing down, push forward toward the dashboard. The shift will automatically go into the neutral position. Practice this process several times until you feel confident that the shift will stop in the neutral position.

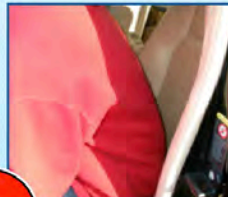
Ten Lessons In-Car Guides



This section is for **Driver Wellness Coaches** and for **Parents/Mentors'** use. Step-by-step directions on how to use the ECCCR Process is provided in the **Parent/Mentor Branch** located on *The Driving MIND eCoach*.



AWARE



ACTION

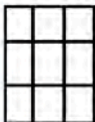


REWARD



Windows Up - No Guillotines!

While Approaching The Car



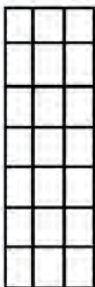
1. Have Keys In Hand
2. Look Under the Car
3. Look At and Around the Car

Before Opening The Door



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

After Entering The Car



1. Adjust Head Restraint
2. Push Buttock into Seat
3. Adjust Seat - Hand Position
4. Safety Belts on All
5. Adjust Mirrors
6. Turn Headlights On
7. Keep Windows Closed

For Coach: With engine running and car in park, have teen demonstrate:

Orientation to Controls -Shift In "P"



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

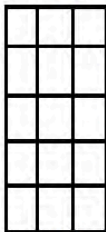
Guide 1: Ready to Drive & Orientation to Vehicle

Only have teens perform this In-Car Session after they have completed the eCoach activities, passed the required exiting quizzes, and demonstrated successful PEP practice using the water bottle to make smooth stops to earn the Session Key to drive.



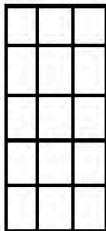
Coach's Note: This practice should only take place in a parking lot. All Guide 3 actions are to be performed successfully three times. When the action is correct, give positive feedback instantly. When the action is incorrect, you can have the teen stop the car, let the teen know what the correct action is and have him repeat the action. This method is training the brain, making certain each action is clearly understood and is able to be correctly performed.

Acceleration Control



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

Braking Control



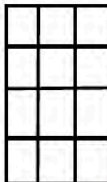
1. Feel Braking Point
2. Constant Pressure
3. Normal Smooth Stop
4. Hard Smooth Stop
5. ABS Braking

Placing The Car In Motion



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

Inching & Creeping The Car



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

Guide 3: Moving and Stopping Smoothly

Take the Self-Challenge

1. Position the car in the center of the parking lot on target for the East target.
2. What is the definition of a “target”?
3. Which vision, central or fringe, do we see the alignment of the steering wheel to the target with?
4. Move the car off target into a NE heading.
 - 4a. Where will the driver’s body and eyes be pointing to now?
 - 4b. Where does the driver need to look to get the car back on target?
 - 4c. Move the car back onto the East target.
5. Make a left turn to the West target and demonstrate:
 - a. How to turn your head on target.
 - b. Stop at the transition peg for making a left turn.

Cover Answer with a Credit Card

After response, slide the card down to reveal the answer. Replace card. Repeat for each challenge.

1. **The car** should be aligned with the “target.”
2. **The target** should be a stationary object (something that cannot move) in the center of your intended driving path.
3. **See the target** aligned with the steering wheel with fringe vision.
 - 4a. **They** should be aligned with the target.
 - 4b. **The car** will go where the eyes are looking. When you look at a target (or anything else that you may get distracted looking at) the car will tend to go in that direction. Targets keeps the car straight in its path.
 - 4c. **The car** should point towards East Target.
 - 5a. **Turn your** head in the direction you want to go, before turning the steering wheel.
 - 5b. **The Tpeg** for a left turn is the driver’s side windshield post in alignment with the target. (Co-Driver’s left turn Tpeg is the rearview mirror).

**Drivers should be capable of demonstrating these actions
as if they were driving the Skid Monster.**

101

Pedestrian Awareness Skills
Passenger Awareness Skills
Approaching the Vehicle
Detect/Correct Drowsiness
Use of Safety Belts
Co-Driver Skills to Learn
Use of SAMatrix
Central Vision to Target
Find Critical Seconds
Use of B-A-C Zones
Evaluate Future Window
Detect/Correct Off Target

Use of Fringe Vision
Evaluate Present Windows
Find LOS-POT Blockage
Know “Go” or “Slow”
Evaluate Separation Space
Control of Rear Zone
Use of Outside Mirrors
Aware of LP1, LP2, LP3
Staggered Stop Position
Safety Stop Position
Forward Positions
Side Positions for Turns

Communication Options
45° and 90° Search
Locate Gap, Hole, Cluster
Search Left, Front, Right
Turn Head to Target Area
Evaluate Path-Of-Travel
Accelerate at Tpeg
BTW in a Parking Lot
Driver Readiness Skills
Inching /Creeping Speed
Smooth Movement
Normal Smooth Stop



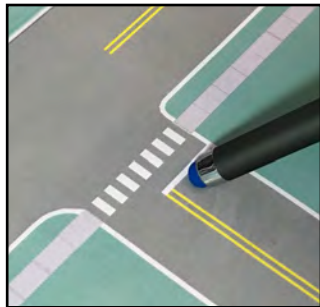
**Successful performance
of Phase 1 earns the
Co-Driver License and
the Bronze Metal
for Drivers.**



Phase 1: Actions Drivers Should Demonstrate

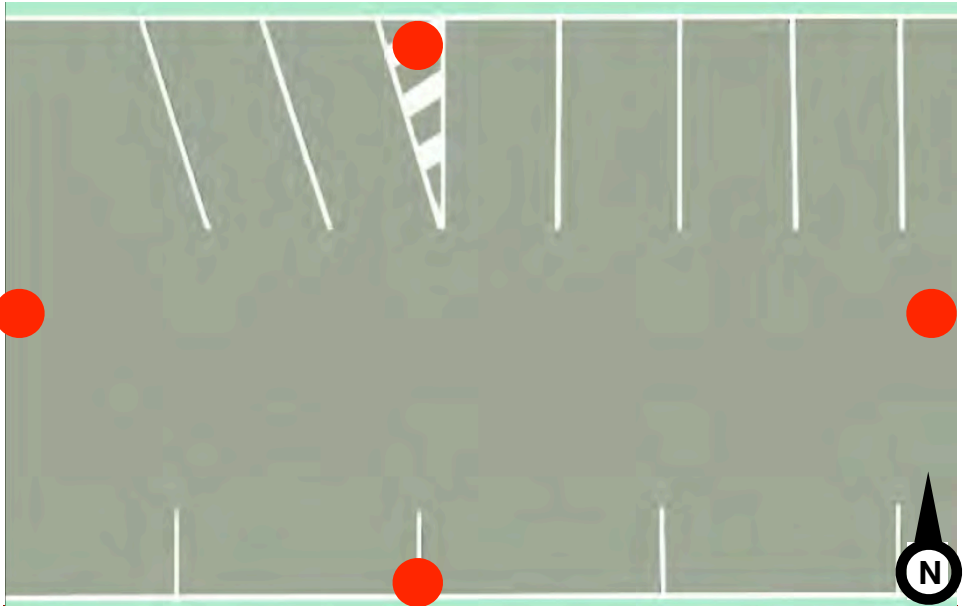
The best way to learn the Zone Control language is by using it. The “Stylus” Car Model Roadways gives you an opportunity to learn and use the language of Zone Control. **Place the Stylus where the front of the vehicle would be positioned.** Do each activity as often as necessary to have complete understanding of the actions taken.

Previously, we used Matchbox vehicles and “Chip Cars” to move on the model roadways, but now to do activities on a mobile device, we will use the “Stylus Car.”



You will learn more usage of the Model Roadways from the Driving MIND eCoach.

Model Roadway: Using a “Stylus” Car



Roadway 1: Parking Lot Targeting Practice

1. Selection of Target

The target should be a stationary object in the center of your intended driving path.

2. Use of Central Vision

Central vision is a narrow 3-5 degree cone of clear visibility which allows us to make identifications. See the target to the environment with your central vision.

3. Use of 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. However, we cannot make identifications of details with the fringe vision. What we can do is keep track of an object with our fringe vision, after we identify it with the central vision. See the target to the steering wheel with your fringe vision.

4. Aiming for Targets

Aiming for targets will help keep the car straight in its travel path, will help to make accurate turns, and will help to get the eyes ahead of the vehicle. The use of targets is an important skill necessary to avoid and recover from a skid situation.

5. Looking Into Turns

Develop the habit of turning your head in the direction of intended movement before turning the steering wheel.

6. Steering Wheel

Use the techniques that were practiced in your PEP activities.

7. Steering Wheel

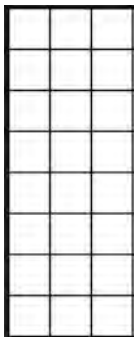
Recovery at Tpeg

Accelerating at the Tpeg helps to manage the traction envelope and it gets the car perfectly aligned to the target.

Release grip from the steering wheel precisely when accelerating.

Keep the palms in contact with the wheel.

For Coach: This practice should only take place in a parking lot after Guide 3's actions are performed successfully three times. The major objective is to have the teen be capable of using vision to the target to steer the car. Have the teen evaluate an open POT (Path-Of-Travel) before the car is placed in motion. To begin, have her identify a target at a 90° angle for a left and a right turn. Have her stop at the transition peg to verify that the Tpeg is being seen correctly. Then, have her make turns using light acceleration to begin the turn. At the Tpeg acceleration should be notably increased.



1. Selection of Target
2. Central Vision to Target
3. Fringe Vision to Wheel
4. Aiming for Targets
5. Looking into Turns
6. Use of Steering Wheel
7. Recovery at Tpeg
8. Smooth Use of Pedals

Place a piece of tape of contrasting color on the steering wheel at the 12 o'clock position. The tape increases the effectiveness of fringe vision to see the car when it is on or off target.

Guide 4: On Target - Off Target

1. Line-Of-Vision Blind Area

With the vehicle stopped and secured, place an object on the ground approximately 12-15 feet in front of the front bumper. Get into the driver's seat and notice if you can see the object at ground level. If not, reposition it to where the part touching the ground is visible to you from the driver's seat. All the space from the front bumper of the car to the box is your line-of-vision blind area.

2. Right Side Limitation

Park 3-6 inches away from a line, that is located to the right of the vehicle. Use the center of the hood, or some part on the windshield, as a reference. See the outside and inside views.

3. Left Side Limitation

Park 3-6 inches away from a line that is located to the left of the vehicle. The line should appear approximately one foot in from the edge of the left fender. See the outside and inside views.

4. Front Even With Curb line

Stop the front bumper of the vehicle 3-6 inches away from a curb line. The curb line will appear to run under the outside mirror on the passenger's side and even with the dashboard. See the outside and inside views.

Left Turn References

Forward Position

The forward position, where steering should begin, is when you are able to see to the target area without your line-of-vision cutting across the curb line.

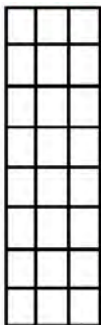
Side Position

The side position for a left turn is the same as the "left side limitation".

Right Turn References

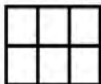
Side Position

The side position should be 3 feet away. The curb will appear in the middle of the right half of the vehicle.



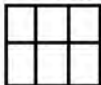
1. Line-Of-Vision Blind Spot
2. Right Side Limitation
3. Left Side Limitation
4. Front Even With Curb line
5. Rear Even With Line
6. Lane Position #2 (LP2)
7. Lane Position #3 (LP3)
8. Lane Position #1 (LP1)

Right Turn References



1. Side Position
2. Forward Position

Left Turn References



1. Side Position
2. Forward Position

Front Even With Curb Line is shown here. This is the **Safety Stop** position and the **Forward Position** reference point for making a right turn. Notice the curb line positioned under the mirror.



Practice in a Parking Lot. View all the reference points from the driver's seat and from the co-driver's seat. And, get the outside view.

Guide 5: Reference Point Discoveries

Take the Self-Challenge

1a. Position the front bumper even with the curb line. Use a pencil or pen (without marking the car or roadway) to point to where on the car the driver would see the curb line.

1b. Explain why this is a good position for searching intersections.

2a. What is the advantage to using lane positions?

2b. Position the car heading East in LP2. Are you able to explain the LP2 reference point?

2c. Position the car heading East in LP3. Are you able to explain the LP3 reference point?

2d. Position the car heading East in LP1. Are you able to explain the LP1 reference point?

3a. Place the car at the stop line. Demonstrate the right turn side position.

3b. Demonstrate the right turn forward position and explain what should take place at that point.

Cover Answer with a Credit Card

1a. When the front bumper of the vehicle is stopped even with a curb line, the curb line will appear to meet the outside mirror on the passenger's side.

1b. You are able to see beyond a LOS-POT blockage to search 90° deep to the target area.

2a. With the use of lane positions, you are able to use the total width of a travel lane giving you 6 feet of empty space to avoid a crash.

2b. LP2 is 3-6 inches away from left lane line.

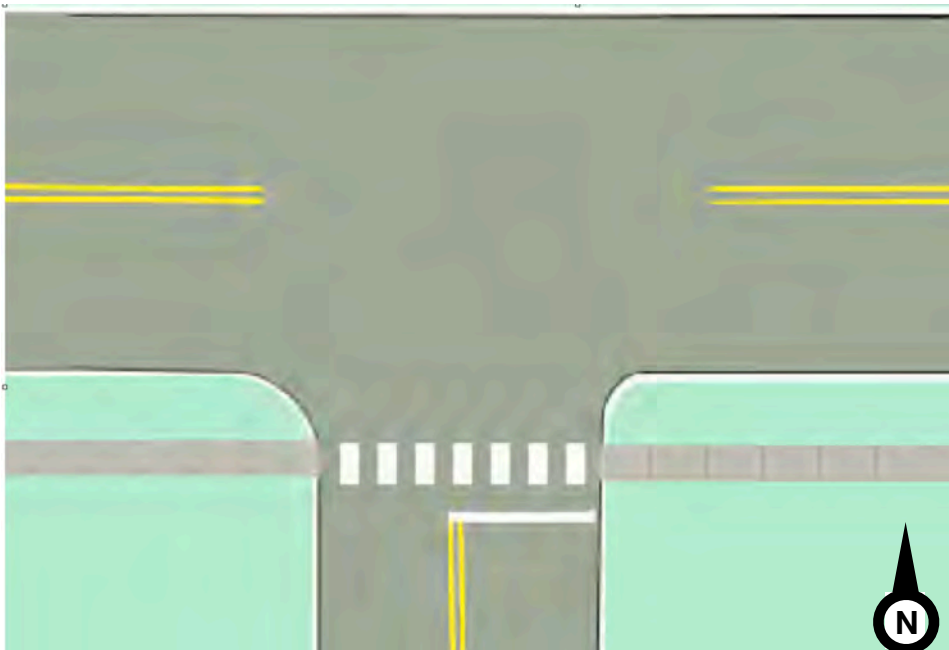
2c. LP3 The car is 3-6 inches away from the right lane line.

2d. LP1 The left and the right side reference points will be equally away from their lines.

3a. Side Position-Right Turn is 3 feet away from curb, which appears in middle of the right half of the vehicle.

3b. Forward Position-Right Turns

The forward position will be when the front bumper is even with the curb line. Steering should begin at the forward reference.



Roadway 2: Reference Points for Precision Turns

Use of Reference Points

Reference points serve as a guide to overcome the optical illusion a driver encounters.

Side Position RP for Turns

For right turns, 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 is 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 who may enter your path.

Make Legal and Smooth Stops

The legal stop is to come to a complete stop before going past the stop line. For smooth stops release slight braking pressure during the last two seconds to release pitch forces.

Search Intersection: L, F, R

Search the left, the front, and the right zones for a safe gap or hole to enter.

Look into Turn Before Steering

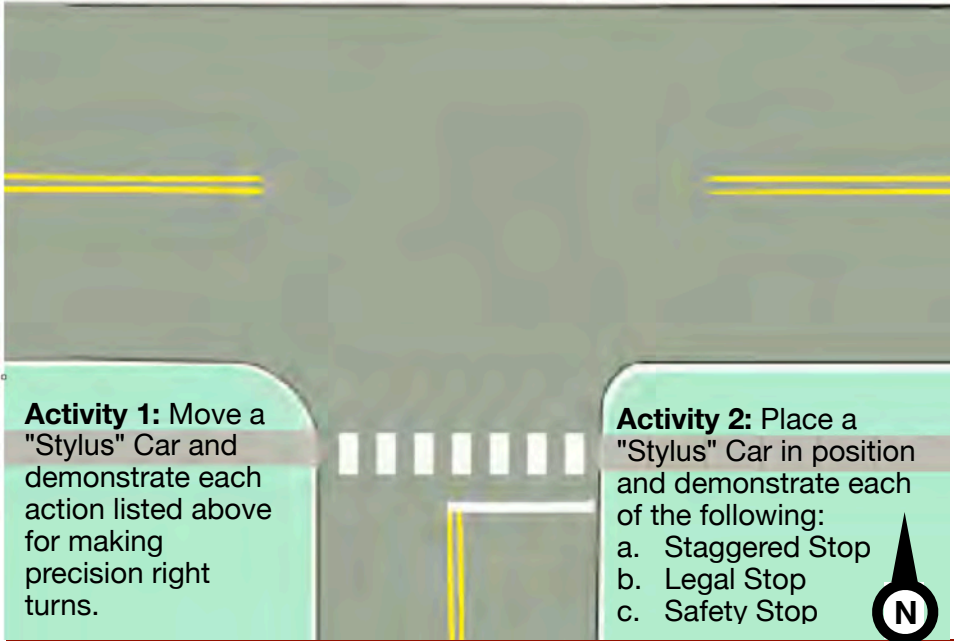
Turn your head to see your target before you turn the steering wheel.

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 at the Tpeg.

Use of Transition Pegs (Tpeg)

For right turns, the Tpeg is when the rearview mirror appears aligned with the target. For left turns, the Tpeg is the driver's side windshield post aligned with the target.



Activity 1: Move a "Stylus" Car and demonstrate each action listed above for making precision right turns.

Activity 2: Place a "Stylus" Car in position and demonstrate each of the following:

- Staggered Stop
- Legal Stop
- Safety Stop

Roadway 2: T-Intersection Precision Turns

Select Gap From Curbside

1. Evaluate Path to Enter

Search to the target area to see if the path you intend to enter will be open. Know if your path of travel is available but also to determine how much acceleration should take place.

2. Mirrors - Blind Spot Check

Search the inside mirror and the outside mirror on the side that you will be entering; then make a head movement check or use a convex mirror to check the blind area before moving.

4. Use Of Signals

Signal at least 5 seconds before entering. Be aware of situations when you should wait before putting your signal light on.

While Entering Traffic Flow

1. Avoid Hesitation

Once you're certain of a safe gap or hole, go for it.

2. Look to Target Area

Look to your target area to focus concentration on the path you will enter.

While Entering Traffic Flow

3. Side Position Reference Point

Select the proper and legal lane to enter; Then, enter into lane position two if entering from the right side to left. This will leave an escape path for other traffic.

4. Steering Technique

Use Hand-to-hand steering. Move the steering wheel as little as possible.

5. Speed Control

Accelerate smoothly with a steady increase in pedal pressure until operating at proper speed.

After Entering

1. Cancel Signal

You may not have turned the wheel enough to allow the signal to cancel automatically. If so, turn it off manually.

2 Accurate Tracking Path

Make the car go where you want it to go.

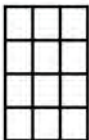
3. Re-evaluate Rear Zone

Get a rear zone update for the new traffic flow you just entered.

4. Look For New LOS-POTs

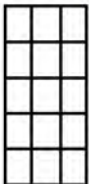
Evaluate your new target area and the targeting path you will occupy.

Select Gap From Curbside



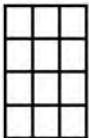
1. Evaluate Path to Enter
2. Mirror - Blind Spot Check
3. Locate Gap or Hole to Enter
4. Use of Signals

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

Searching Before Entering

1. Search Intersection Left, Front, Right

When you are stopped before entering an intersection, such as when you have a stop sign, search at a 90 degree angle to the left and right as well as checking the front zone. See deep into the intersection for approaching traffic. Seeing deep into the intersection is to look as far down the road to the left and right to where your target area would be if you were to make a left or right turn.

2. Front Bumper Even With Curb

To effectively search at a 90 degree angle, your vehicle should be stopped with the front bumper even with the curb line. From this position you are able to best see deep into the intersection.

3. Locate Gap or Hole to Enter

Guide 6A: Entering & Crossing Traffic

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

Coach's Note

This practice should only take place in a parking lot. By using a parking lot, you are able to have the teen perform one action at a time. When the action is correct, you can give positive feedback instantly. When the action is incorrect, you can have the teen stop the car, let the teen know what the correct action is and have him go back to step one. This method is training the brain, making certain each action is clearly understood and is able to be correctly performed. See info on use of the ECCCR process.

Don't practice the pink highlighted boxes at this time.

1. Use Of Signals

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

3. Side Position - Reference Pt.

Select the proper and legal lane to begin your turn. Then, use the reference point to get 3-6 inches from center of the road for left turns, and 3 feet from the curb for right turns.

7. Select Target

Before turning, pick a target that will be in the center of your travel path.

8. 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.

9. Select Gap/ Get Commitment

Be certain how you are reading others' actions.

2. Look Into Turns, Targeting

Turn your head to see your target before you turn the steering wheel.

3. Accelerate at Tpeg

When the car is at the Tpeg it is 30-degrees away from being on-target. Accelerating at the Tpeg helps to manage the traction envelope and gets the car perfectly aligned to the target.

4. Release Pressure on Wheel

At the exact same time when at the Tpeg, release grip from the steering wheel. Keep the palms in contact with the wheel.

Check Rearview Mirror as soon as car is on target to practice developing it into habit.

Guide 6B: Making Precision Turns



Use of Transition Pegs

Use a transition peg for recovery of the steering wheel. While making a right turn, loosen grip on wheel and accelerate when the rearview mirror appears aligned with the target. For a left turn, loosen grip on the wheel and accelerate when 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.

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 L-F-R for Gap or Hole
9. Get Commitment

During Turn

1. Avoid Hesitation
2. Look Into Turns, Target
3. Speed and Steering Control
4. Accelerate at Transition Peg
5. Controlled On Target Accuracy

After Turn

1. Precision Turn Results
2. Re-evaluate Rear Zone
3. Evaluate A-Zone LOS-POTs

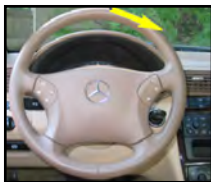
For Teen Driver: Begin by pretending you are in the Skid Monster and you will be making a left turn to a designated stopping point. At the Tpeg you are to accelerate and recover the steering wheel to the straight position. You only need a slight increase in acceleration at the Tpeg. Bring the car to a smooth stop with the front even with the simulated curb line. If an action is not performed correctly, you will start the procedure over from the beginning,

For Driver Ed students in the backseat: You are to take turns being the "Coach." State to the driver each action that is to be performed. Give feedback if it was done correctly, or not.

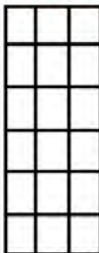
Guide 6B: Precision Turns in a Parking Lot

Turning the Wheel when Backing

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



11A: Backing Introduction



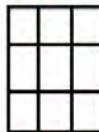
1. Foot On Brake, Shift to "R"
2. Target Usage
3. Turn Wheel, Top Down
4. Look Over Right Shoulder
5. Use All Mirrors
6. Check Front Swing

Reference Point Usage



1. Back To A Line
2. Discover Pivot Point

11C: Three-Point Turnabout



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

Guide 11AC: Backing Intro — Turnabouts

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

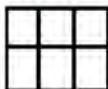


The diagram shows the car at the **Side and Forward Position**, ready to turn the steering wheel.

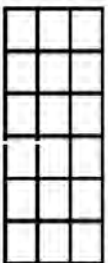


15: Forward & Angle Parking

1. Before Parking

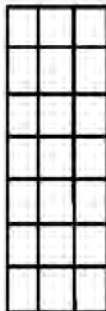


- Check Rear Zone
- Check Parking Space



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

Awareness and Control of Rear Zone

- **Open Rear Zone** No one closer than two-seconds, and at least 12-seconds sightline.
- **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 seen at 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

Three ways to compensate for the mirror’s blind areas are by: convex mirror checks, over-the-shoulder checks, moving the head forward while checking the outside mirrors.

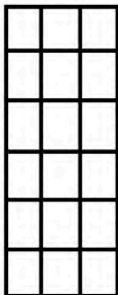
Recognize Rear Zone Conditions

- **Open Rear Zone** no one closer than two-seconds, and at least 12 seconds 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.

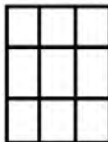
1-6. Approaching Danger Squares



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
6. Point-Of-No-Return

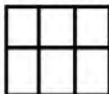
Search the left, front, and right zones of intersections before entering. The sequence of searching the three zones will vary according to LOS conditions. When there is a LOS blockage, your final search should be in that direction before entering the intersection. With turns, always make your last search in the direction you are turning.

7. Stopping: No Car In Front



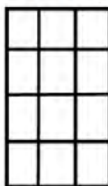
- Staggered Stop
- Legal Stop
- Safety Stop

8. Stopping: Car In Front



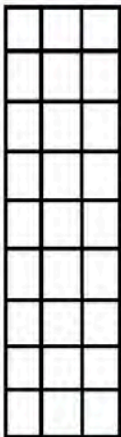
- See Rear Tires
- **Avoid False Starts**

9. Stopped In Traffic



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

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

See 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?

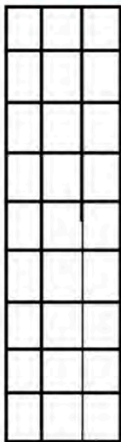
Red Lights is a Closed Zone

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

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.

G20: Timing Traffic Lights — 4 Left Turn Checks



1. See Roundabout In Target Area
2. Decide which exit to take
3. Yield to left, enter to right
4. Be alert to others entering
5. For multiple lanes, enter inside
6. To exit, lane change to outside
7. Use signal light
8. Use outside mirror
9. Look into exiting path

Demonstrate

Use a pen with the point retracted to show the movement of your car. Enter the roundabout three times from the South.

Make an exit at each of the exits.

Move the pen and explain how you would perform each of steps 2-9 if you were the driver.

Coach's Note

Ask the teen to Demonstrate and Explain the performance of each action, one at a time. Have her move into each position as the action is explained.

3. Mirror Checks: look for where the opening will be.

4. Signal: hold signal level rather than click it on.

5. Move from LP1 to LP2 to get the best mirror view.

6. Check Blind Spot: Demonstrate both, over the shoulder (which will be required for licensing exam) and use the head forward and eyes rolled rearward.

9. Move to LP3 if gap or hole is open.

10. Release Signal

Additional Checks:

11. Rearview Mirror Check should be made. On the highway you would look for fast approaching vehicles.

12. Best lane position: in the parking lot we use LP1.

For driver ed classes with teens in the backseat. Have teens in the backseat read the action for the driver to perform and state after each action how the action would be rated. When not performed okay, have the teen start the lane change over from the beginning.

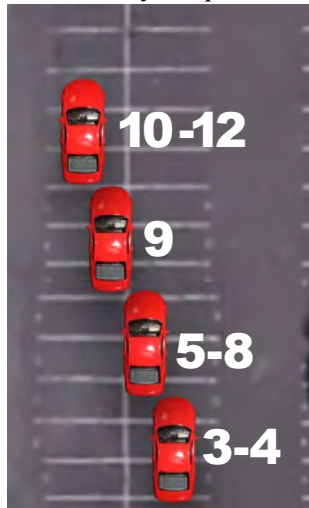


Roadway 3: Four-Lane Roadway

This practice should only take place after the teen has successfully performed precision lane changes using the Model Roadway Chip Cars.

			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

Use the spaces in a parking lot as if they are travel lanes. Practice each action of a precision lane change. **Speed only need be 5mph.**



G22: Lane Change Practice In a Parking Lot

1. Side Position

Get 2-3 feet from the parked cars. Look for cars that may back into your car.

2. Forward Position

As the driver of the car, your body will appear to be aligned in the center of the space. In a van, align your body with the second line of the space (a).

3. Select 45-Degree Target

Use the outside edge of the driver's side mirror to align your vision to a stationary object. Put left signal light on.

4. Creep and Turn Wheel Fast

Check for traffic. Aim for the target.

5. Use The Least Forward Movement

Try to move the car as little as possible to get on target. This will prevent cars from driving to the rear of your car while you are attempting to back up.

6. Line Up Car With Space

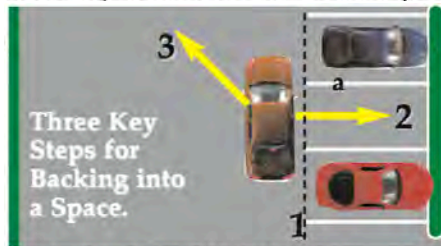
Before straightening the tires, look over your right shoulder, or check the convex mirror, for alignment to the space.

7. Shift To Reverse

Shift to reverse after the back of the vehicle is aligned to the space and the tires are straight.

8. Back To Rear Pivot Point

This is when the corner of the parked car is in your rear window's blind spot



9. Inch and Turn Wheel Fast

Once the car is at the pivot point, move the car inch by inch and quickly turn the wheel fully to the right.

10. Get Car Straight In Space

Observe when car is straight in the space.

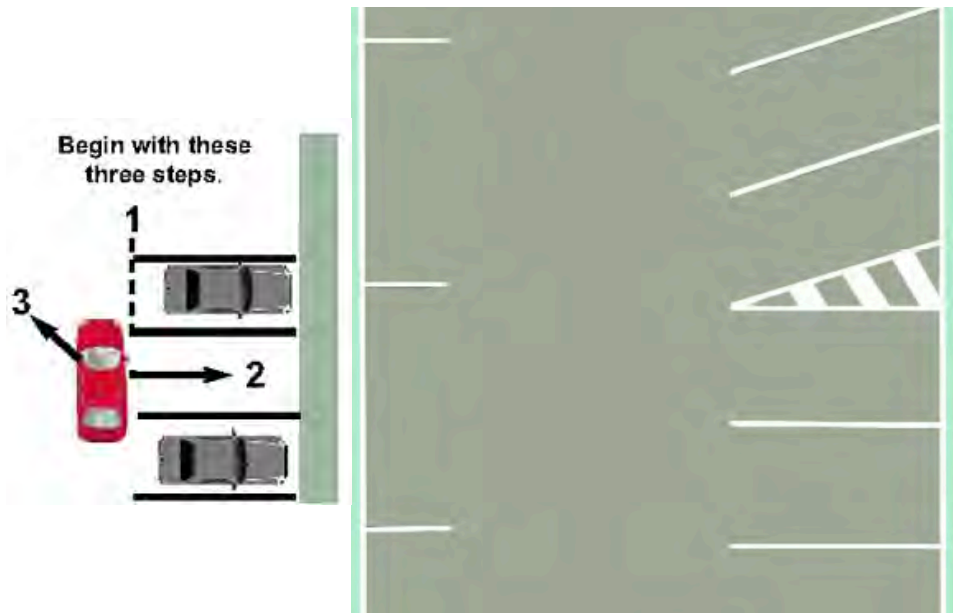
11. Inch, Straighten Tires

Inch the car slowly back while you quickly straighten the tires.

12. Back To Rear Reference Point

Check your rear reference point by glancing over your left shoulder. You should see the rear line appear in the middle of your rear-side window (see illustration below).

13. Apply parking brake.



Roadway 1: Practice Angle and Perpendicular Parking

Driver Ed Class: Students in the backseat should take turns being the “coach.” Ask the driver to perform each action — one at a time. Give feedback as to “okay,” or not.

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

1. Rear Zone Control, Signal

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

2. Speed Control

Avoid making fast stops.

3. Locate Parking Space

Search for an available and acceptable parking space.

4. Side Position - 3 Feet from parked cars

Use reference point to ground level.

5. Stop Even With Space

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

6. Go Forward

Pull forward beyond the pivot point.

7. Back to Rear Pivot Point

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

8. Check Left-Front Corner Swing

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

9. Creeping Speed, Turn Wheel Fully to the right (toward curb)**10. Move Car to 45-degree Angle**

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

11. Creep and Time Turning to Clear Front Car

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

12. Straighten Tires, Center Car

Straighten tires to center car.

13. Downgrade/Upgrade Parking

Parking on a downgrade turn tires fully toward the sidewalk. On an upgrade with a curb, turn tire fully to towards the street. Upgrades without a curb, fully to sidewalk.



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

Coach's Note

Have the teen perform one action at a time. When the action is correct, you can give positive feedback instantly. When the action is incorrect, you can have the teen stop the car, let the teen know what the correct action is and have her go back to step one. This method is training the brain, making certain each action is clearly understood and is able to be correctly performed. See info on use of the ECCCR process.

Guide 30: Parallel Parking

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 sunglasses 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 temperatures and early morning dew can result in "black ice" on freezing road surface.
- 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, and when there are no oncoming cars.
- 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.

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

Coach's Note

First, have the teen explain the actions to you while being a Co-Driver.

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

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

32B: Passing

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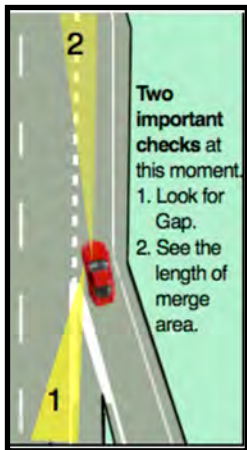
1. Why Pass? - Risk vs. Gain
2. Keep At Least 3 Seconds
3. Select Best Passing Location
4. Mirrors - Head Checks - Signal
5. Check Front and Side
6. Avoid Hesitation
7. Accelerate Smoothly
8. Keep Searching
9. See Headlight
10. Return to Lane, Cancel Signal

Common Error: Finding a safe and beneficial passing location and opportunity. During an actual passing situation, the teen will not accelerate quickly or adequately, which can result in a prolonged exposure. Use the simulated pass situation with the "red truck" on all types of roads.



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

Guide 32B: Passing (The “Pretend” Red Truck)



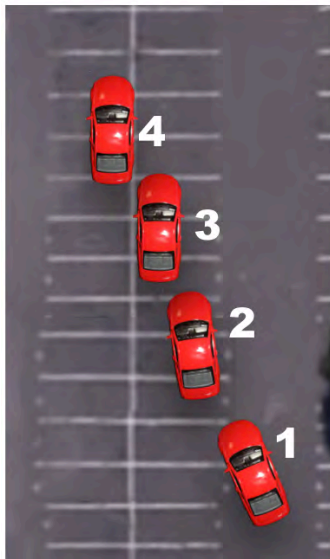
1. Position the car at a 30° angle to represent being on the Entrance Ramp.

2. Enter Acceleration Lane.

3. Move to LP2.

4. Enter Freeway in LP3. and increase speed.

5. Speed only need be 10-15mph, if the parking lot is large enough, if not 5mph will be used.



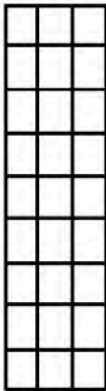
G34: Practice Reps for Entering Freeways

Coach's Note

Practice entry to a freeway in a parking lot should have taken place before doing this activity. Find a rural roadway where it is safe to pull onto the side of the road as illustrated.

For driver ed classes, students in the backseat can become “Co-Drivers” and expected to explain or demonstrate why the actions that the driver is performing is a good action. Ask the driver or the backseat “co-drivers” to explain each of steps 1 to 5. Then, have the driver perform steps 6 to 9.

6. “Move into **LP2 of the Acceleration Lane**. Demonstrate use of signal lights.” For simulated practice you will use the right side of the lane as if it is the acceleration lane.
7. “Evaluate your POT to the target area, **if clear, accelerate briskly**. Get speed up to the speed limit quickly without any jerky motion.”
8. “Demonstrate **entry into LP3** of the highway.” For simulated practice you are up to highway speed, move to the left of the lane to represent moving into the highway’s travel lane.”
- 9 “**Why are mirrors** checked now?”



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



Practice Entering Freeways on a Rural Highway

Entering a freeway is similar to making a lane change except there is one huge distinction — the closure rate of cars on the freeway is faster than the closure rate while making a lane change. Novice drivers are not accustomed to the rapid increase in speed necessary to go from the entrance speed of 20-30 mph or slower to freeway travel speed of 55-65 mph or faster. This activity provides teens with the opportunity to evaluate the rear zone, the POT, and accelerate for best speed control.

Guide 34: Rural Highway Freeway Practice

1. Check The Rear Zone

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

2. Keep 4 Seconds of Space

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

3. On Ramp, Outside Mirror

Avoid going fast on the ramp to prevent stopping while in the acceleration lane.

4. Search For Gap To Enter

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

5. See Length of Merge Lane

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

6. Find Gap, Signal Light On

7. Accelerate Briskly to Blend In

Once a gap is found, accelerate rapidly.

8. LP2 to LP3 for Precision Entry

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

9. Mirror Checks

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

10. Adjust Speed to Traffic Flow

Coach's Note: Practicing entry to a freeway can take place in a parking lot. The opportunity to get onto a Freeway (Interstate Highway, Limited Access Highway) is most often a distance away for teens to get adequate repetitions. You can have teens practice in a parking lot after they have demonstrated mental practice successfully by using the Model Roadway Chip Cars. With the Chip Cars they practice using the language of actions that are listed here — explaining each action as it would take place in the car.

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. Read the overhead signs.

2. Get Rear Zone Status

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

3. Communicate

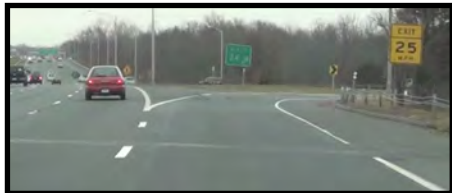
Use of signal lights and/or a tap on the brake pedal can alert rear traffic that you're exiting.

4. Change Lanes If Necessary

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

5. Test Brakes Before Exit

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



6. Controlled Braking on Exit Ramp

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

7. Chevron Signs Provide Extra Warning

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

For newly licensed teens and for parents teaching teens to drive, have a Driver Wellness Coach evaluate your teen's Zone Control Actions. Or, visit a Roadway User Evaluation Center when available. Go to NIDB.org for information. For pre-licensed teens, you can learn these actions while being a co-driver. Challenge yourself and be able to demonstrate them.

Phase 1 Actions into habits
Precision Turns
Perfect Timing at Tpeg
Backing Use of Mirrors
Use of Outside Mirrors
Use of Back-up Camera
Actions as a Pedestrian
Stop to See Tires
Correct Off-Target Skids
Benefits of Safety Belts

Precision Lane Change
Forward & Angle Parking
Turnabouts
Cover Brake at LOS-POTs
Know when not to Signal
Effective Communications
Use of 15-Second Search
4-Second Danger Zone
2-Second PONR
Control Critical Second

Time Arrival to Open Zone
Search for Escape Path
Know Best Speed Control
Rear Zone Control
Open, Closed, Unstable
Charger, Pacer, Habitual
Identify "Sand Barrels"
Backing Into Space
Entering Roundabouts
Timing Traffic Lights



Successful performance of these actions earns the Zone Control Silver Metal.

Phase 2: Evaluation 2 Months After Phase One

INDEX: Zone Control Strategies

01. Establish Co-Driver Readiness

1. Be mentally and physically fit as a Co-Driver.
2. Know how to detect and correct drowsiness.
3. Evaluate vehicle's surroundings on approach.
4. Control door swing; butt-in seating position.
5. Safety belts on; head restraints up; doors locked.
6. Windows up; driver always has headlights on.

02. See Clear Path Before Moving

1. Search to Target Area for clear Path-Of-Travel (POT); identify Line-Of-Sight (LOS) blockages.
2. Turn head, evaluate POT before tires are turned.
3. Use Central vision to search Future Window.
4. Use Fringe vision to monitor Present Window.

03. Keep the Car in Balance

1. Know how to make smooth and effective acceleration and braking actions.
2. Know transition pegs for vehicle balance.
3. Identify and know correction of off-target skids.
4. Know how to control "Slide Space."

04. Know how to Use Reference Points

1. Know within 3-6 inches where the front, rear and sides of the car is positioned to the roadway.
2. Know where the car's sides and front are in relation to intersection curb lines.
3. Know Lane Positions LP1, LP2, LP3, LP4, LP5.

05. Use SAM for Zone Control Search

1. Search SAM's (Matrix) A Window to the Target Area for open or closed zones.
2. Evaluate whether condition is a "go" or "slow."
3. FIND LOS-POT (Line-Of-Sight, Path-Of-Travel) blockage critical seconds.
4. Search other zones for additional information.
5. Search other zones for an escape path.

**Mastering these Strategies
into HABITS can
Prevent Most Crashes!**

06. Mastering Zone Control Awareness

1. Be able to SOLVE LOS-POT critical seconds.
2. Be able to know a “Go” or “Slow” condition.
3. Know the best: speed control, lane positioning, and communication option for situations.
4. Be able to CONTROL the 4-sec. danger zone.
5. Know how to control the Point-Of-No-Return.
6. Read Cues of Traffic Sign, Pavement Markings

07. Know how to Control the Intersection

1. FIND LOS-POT blockage and CONTROL it.
2. When moving: LOS-POT 45-degree search.
3. When stopped: 90-degree search to target area.
4. Know staggered, legal, safety stop positions.
5. Search for open gap or hole in traffic flow.
6. Before entering, find open left, front, right zones.
7. Know how to time arrival into an open zone.
8. When first at green light, look for pedestrians and red light runners.

Teens can Learn these Strategies as Co-Drivers — BEFORE Driving!

08. Evaluate Rear-Zone-Control Conditions

1. When driver brakes, check the Co-Driver Mirror for open, closed, unstable rear zone.
2. Identify tailgater: charger, one pacer, habitual.
3. When stopped, monitor rear until “sand barrels.”
4. Before moves to LP4 or LP5, check B or C rear.

09. Know how to Control Separation Space

1. For stopped or slowing cars, close in gradually.
2. When moving at same speed as vehicles ahead, control front buffer with 4-seconds separation.
3. See rear tires of stopped cars touching the road.
4. When the car in front moves, see if it’s a “go” before moving to avoid making false starts.

10. Interact Courteously With Others

1. Learn to send and receive communications in a timely and positive manner.
2. Empower yourself, reduce stress, be in control by being courteous.
3. Be courteous to at least one person each day.
4. Avoid competitive, aggressive, interactions.

For newly licensed teens and for parents teaching teens to drive, have a Driver Wellness Coach evaluate your teen's Zone Control Strategies. Or, visit a **Roadway User Evaluation Center** when available. Go to NIDB.org for information. Strategies **all drivers** should perform.

Phase 2 Actions into habits
 Being a Positive Influence
 Prevent Friends Speeding
 Three Stages of Skids
 Control of Secondary Skids
 Pitch, Roll, Yaw Effects
 Skills to Avoid Rollovers
 Prevent Lane Departures
 Off-Road Downslopes
 Evasive Steering Control

How to Avoid Distractions
 Prevent Head-on Crashes
 Approaching Curves
 Control Slide Space
 Searching into Curves
 Use of Navigation System
 Expert Parallel Parking
 Separation Space Habit
 Control Closure Rate
 Timing Side Zones

Hill Stops and Starts
 Night Driving Problems
 Being Passed
 Passing Control
 Entering Freeways
 Joining Gaps and Holes
 Approach to Merge Areas
 Control of B and C Zones
 Precision Lane Changes
 Exiting Freeways



**Successful Performance of
 Phase 3 earns the
 Expert GOLD Metal!**



Phase 3: Evaluation 2 Months After Phase Two

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- 7 - 4-Second Danger Zone
- 8 - Zigzagers, Cars in LP2
- 9 - SAM, Go or Slow
- 10 - Speed Choices
- 11 - Six Searching Locations
- 12 - Pedestrian Awareness
- 14 - Crossing with Walk light
- 16 - Stop to See Tires
- 18 - Search to Target Area
- 20 - Separation Space
- 22 - Reference Pts Parking lot
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- 26 - Skid Control in a Chair
- 28 - Windows Up Guillotines
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- 91 - Communication Options