

Virginia Department of Education

Module Four Transparencies

Basic Maneuvering Tasks: Moderate Risk Driving Environment

Topic 1 -- Risk

Topic 2 -- Space Management System

Topic 3 -- Lane Changes

Topic 4 -- Turnabouts

Topic 5 -- Parking

Provided in cooperation with the Virginia Department of Motor Vehicles

Risk

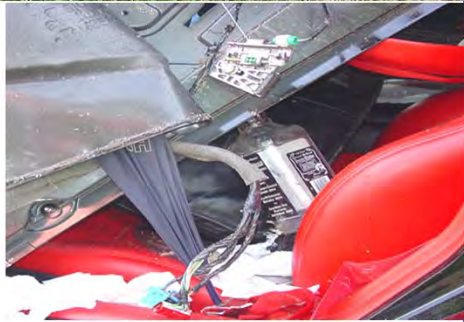


- **Risk** is the **Chance of Injury, Damage, or Loss**
- **Injury, Damage, or Loss Usually Are the Consequences of a Crash**

Every driver accepts a certain level of risk when driving a vehicle.

A driver must manage risk in order to avoid conflict.

Risk Assessment



Unfortunately, drivers often create high risk situations.



Elements of Risk are:

- Risk Assessment
- Risk Acceptance
- Risk Compensation



Risk

Risk Assessment Involves:

- Recognizing increased risk situations
 - Speeding
 - Following Too Closely
 - Failure to Yield
 - Improper Turns
 - DUI
 - Lack of Safety belt use
- Understanding the consequences of increased risk situations
- Considering your options and the consequences of your choices



Risk

Risk Acceptance:

- There is always a certain amount of risk involved in the driving task.
- How much risk is acceptable?
 - Evaluate Consequences of Taking Risks (Penalty, Damage, Injury or Death)



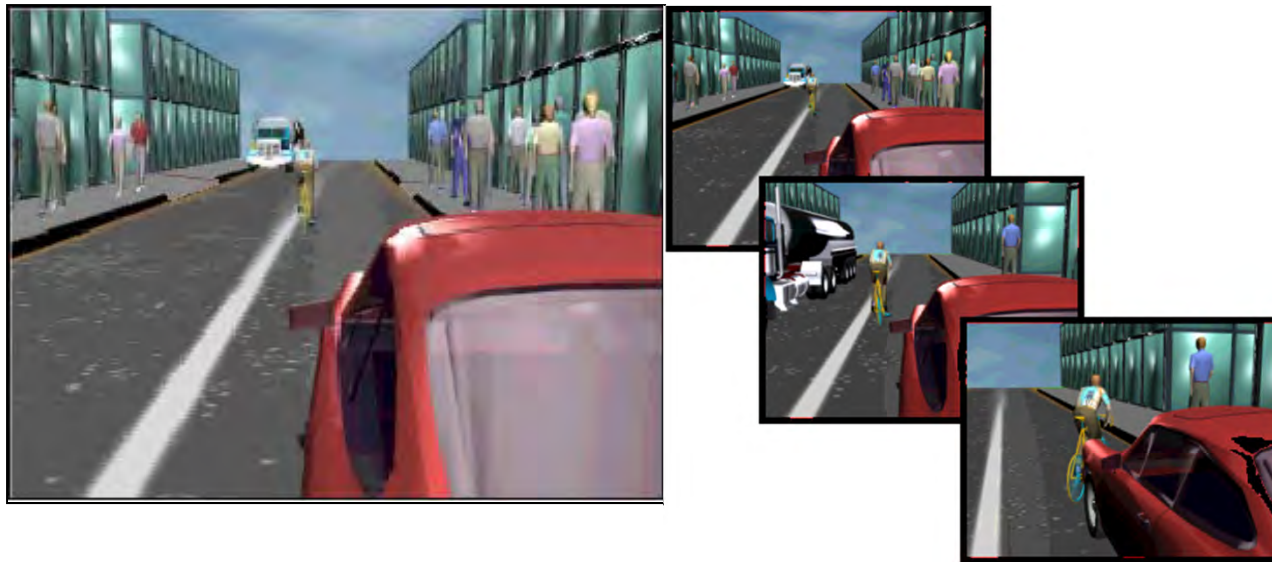
Knowledge can help you reduce risk!

- 📄 Having good seeing habits and your ability to manage space on the roadway are essential ingredients for low-risk driving.
- 📄 To minimize risk, drivers need time, space & visibility to execute a maneuver.

Risk Assessment

Risk Compensation -- Recognizing potential risk or limitations and making appropriate adjustments

Example taken from Module 3 Topic 3 Lesson 1 --- **RECOGNIZING** high risk situations.



- Adjust Speed to Reduce Risk
- Adjust Lane Position to Reduce Risk
- Use Appropriate Communication to Reduce Risk

Reduced Risk Driving

- Three principles for reducing risks
 - Never risk more than you can afford to lose
 - Do not risk large consequences for a small reward
 - Consider the odds and your situation



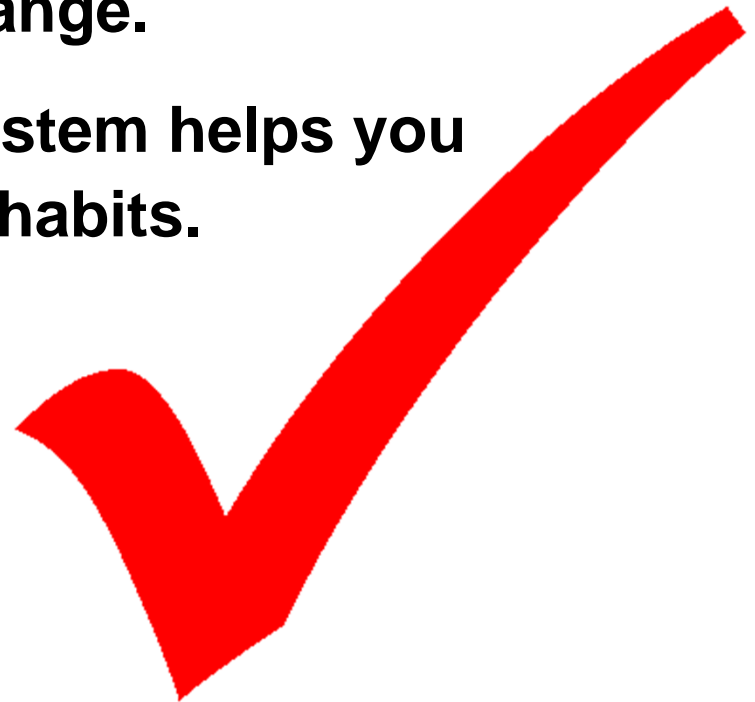
Reducing Driving Risk

- **Good decision-making is essential to reducing driving risks.**
 - **A driver in city traffic makes 50-60 decisions per mile.**
 - **Your hands and feet can only do what your brain tells them to do.**
 - **Developing good procedures for decision making:**
 - **Observation skills**
 - **Experiences**
 - **Developing good habits**



Reducing Driving Risk

- **Work towards developing the best risk-reducing procedures and safe-driving habits.**
 - **Habits are difficult to change.**
 - **A space management system helps you to develop good driving habits.**



Reducing Driving Risk

- **Guided practice is key to developing sound habits and judgments**
 - Get extensive practice on all basic driving procedures
 - Use a space management and targeting system
- **Good habits and judgment often deteriorate over time**
 - Complacency
 - Most novice drivers rate themselves as “good” drivers
 - There may be no negative results from negative behavior



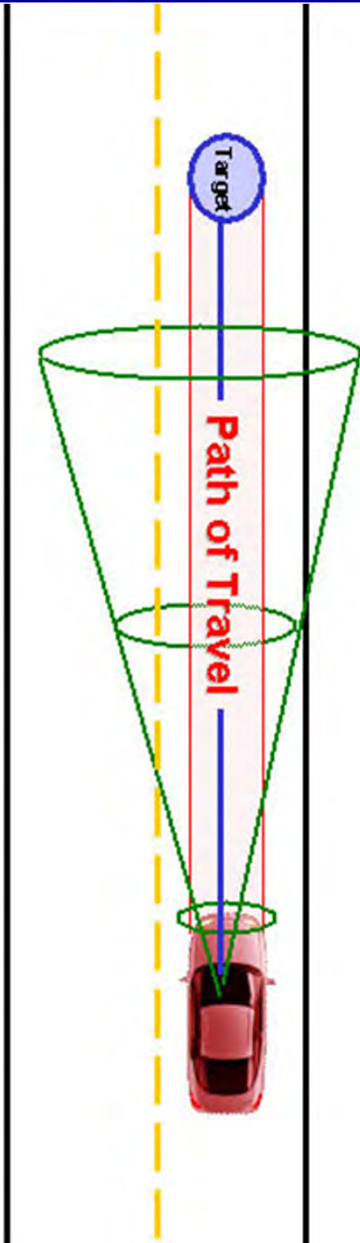
Risk Reduction Goals



- Make every driving sequence an efficient driving sequence.
- Use processing skills to make accurate judgments.
- Develop sound procedures for all maneuvers.



Space Management System

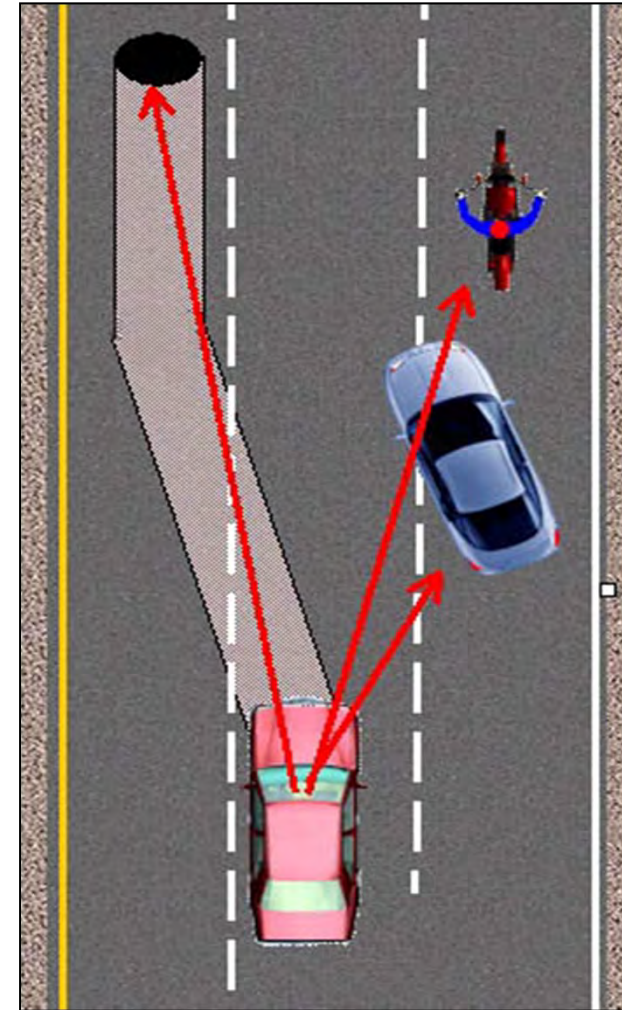


❖ Space Management Steps:

- **Search** – Search the entire scene for anything that might cross your path of travel.
- **Evaluate** -- Give meaning to what you have observed.
 - Determine an alternate path of travel or change in vehicle position.
 - Determine proper speed.
- **Execute** -- Carry out any alternative action needed to minimize risk.
- **In Time...**

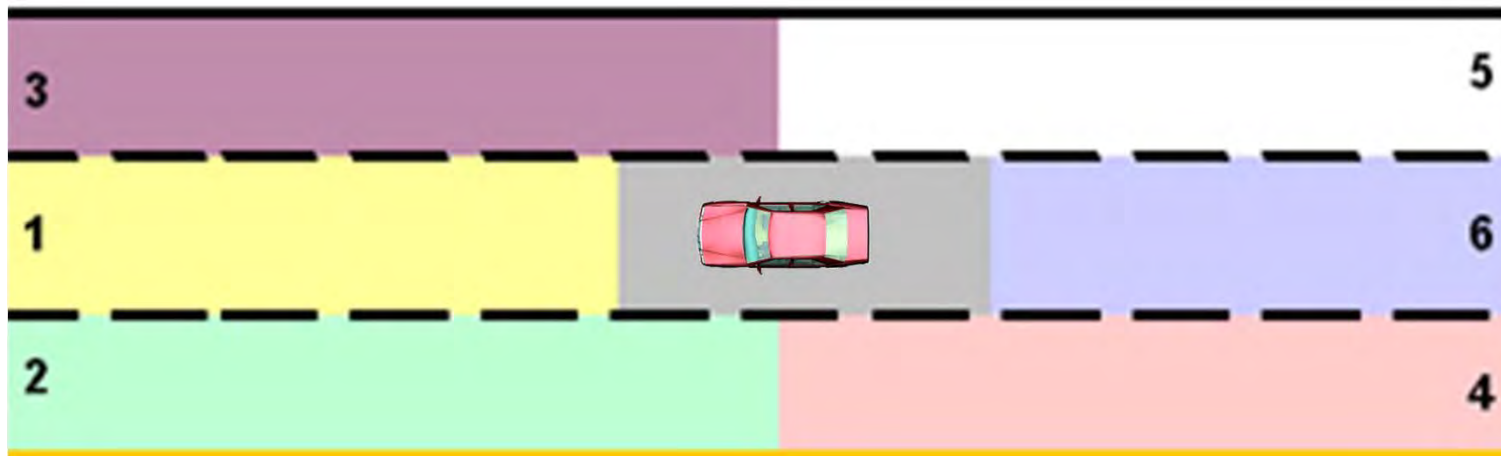
System Components

- **Recognize Changes in the Line of Sight or Path of Travel**
 - **To Reduce Risk**
 - Adjust Speed
 - Adjust Lane Position



Vehicle Operating Space

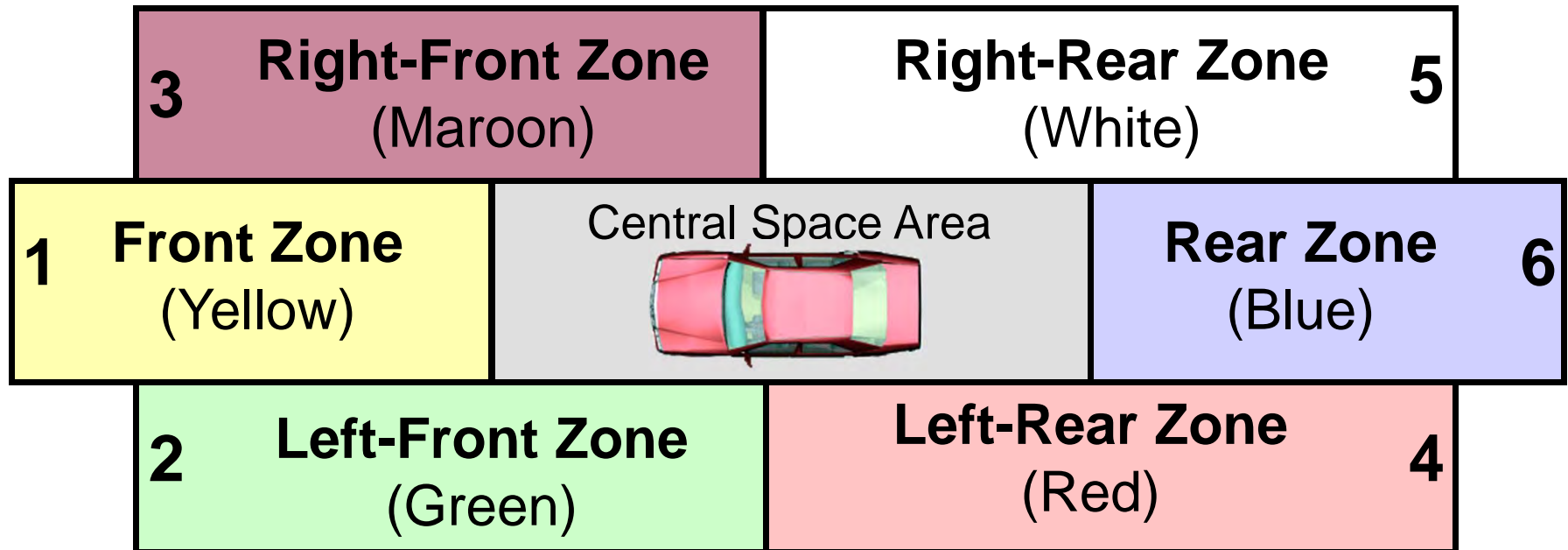
There are seven basic areas of operating space for a vehicle. Six of the space areas (zones) are around your vehicle, and the seventh, or central space, is the space your vehicle occupies.



Vehicle Operating Zones

Vehicle Operating Space

To assist you in learning zones and their purposes we have colored and numbered each for easy identification.

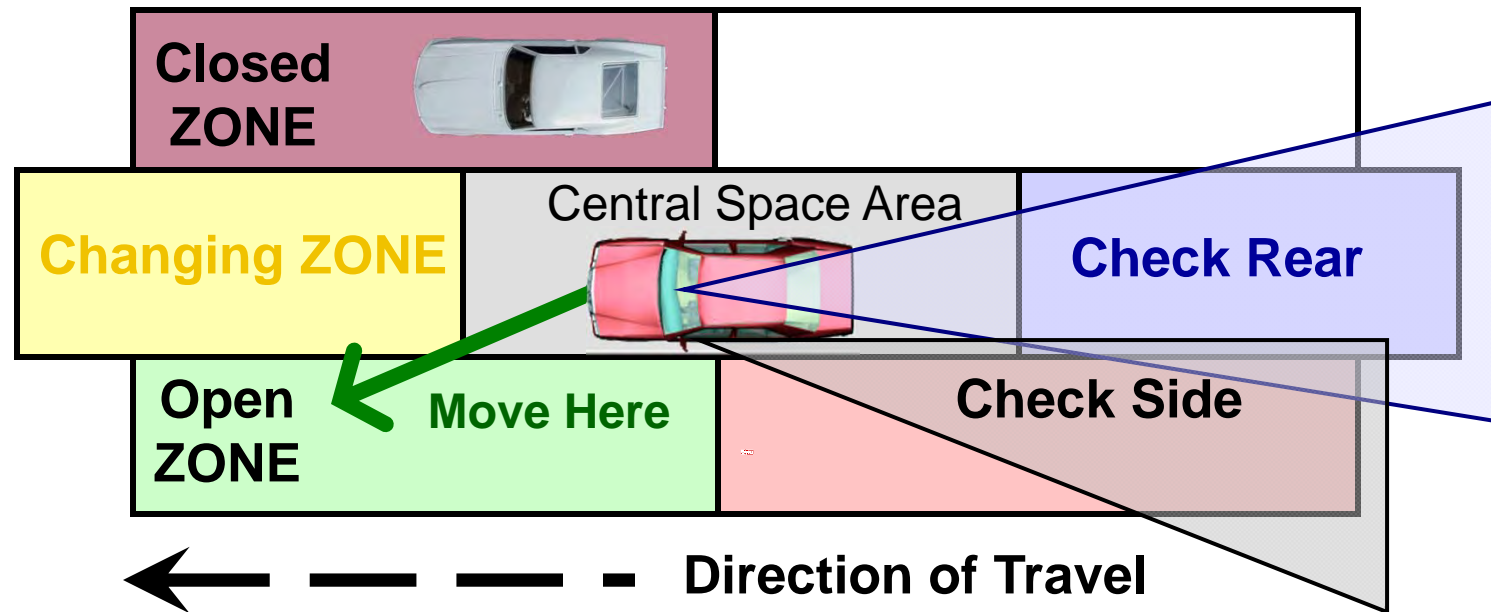


← — — — — **Direction of Travel**

A zone refers to one of the six spaces around your vehicle. It is the width of a traffic lane and extends as far as you can see. A zone has three characteristics, it can be **OPEN**, **CLOSED** or **CHANGING**.

Managing Zones

Evaluating Your Alternatives



OPEN — a zone that has no restrictions to the line of sight or path of travel.

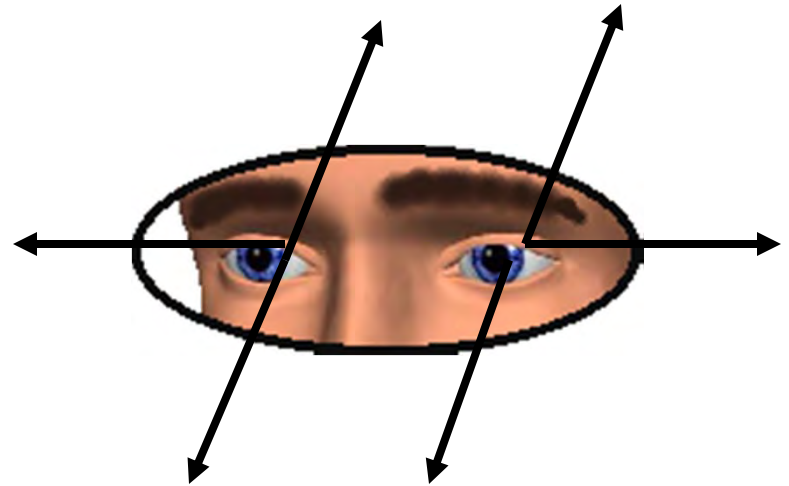
CLOSED — a zone not available for the vehicle's path of travel or an area that has a restriction to the driver's line of sight.

CHANGING — an open zone that may change to a closed zone.

Space Management Basics

Searching :

- **Where** to Look
- **What** to Look for
- **How** to Evaluate



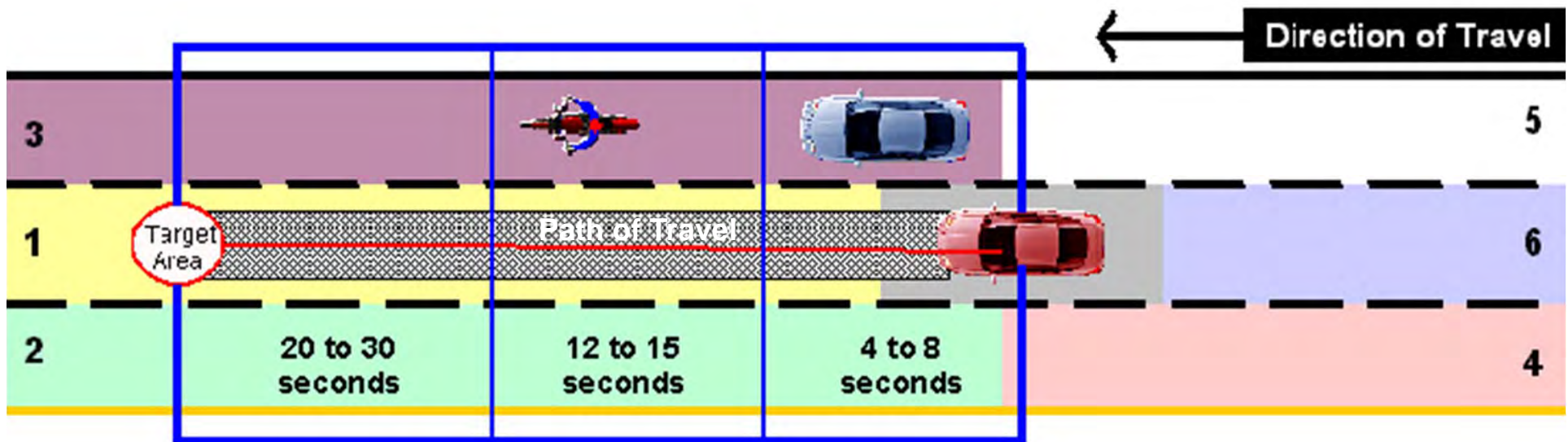
Evaluating Conditions:

- **Risk Potential** of a Closed or Changing Areas
Versus
- **Risk Potential** of Alternative Areas

Space Management Basics

Where to look

The area outlined in blue represents your field of vision extending from **THE DRIVER** to the intended target area.

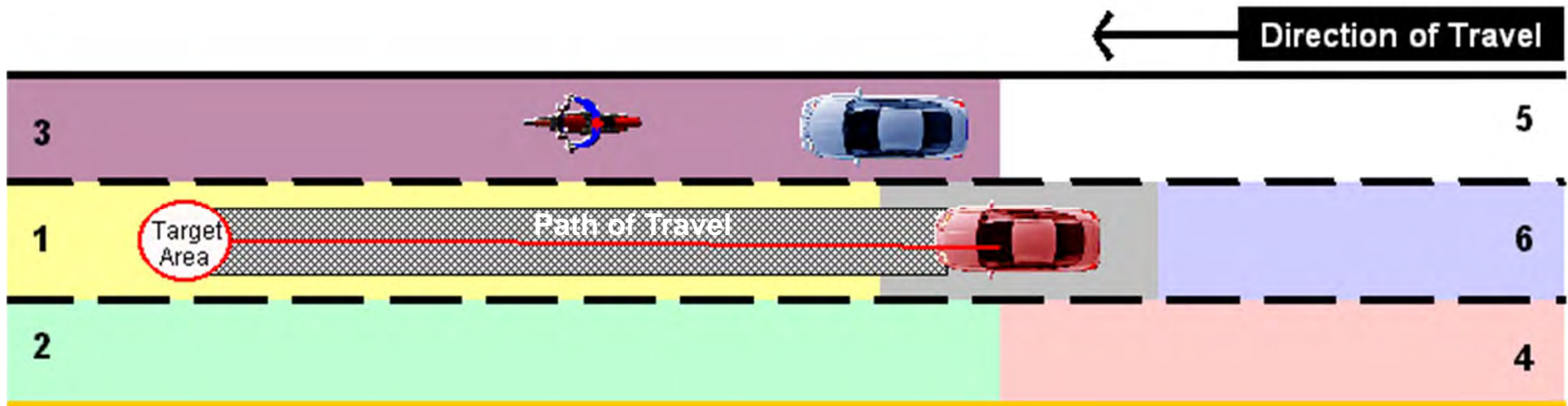


Proper search and actions consists of the:

- 4 to 8-second range — **Immediate Action Required**
- 12 to 15-second range — **Allows for Escape Routes**
- 20 to 30 second range to the target area — **Safe and open path of travel**

Space Management Basics

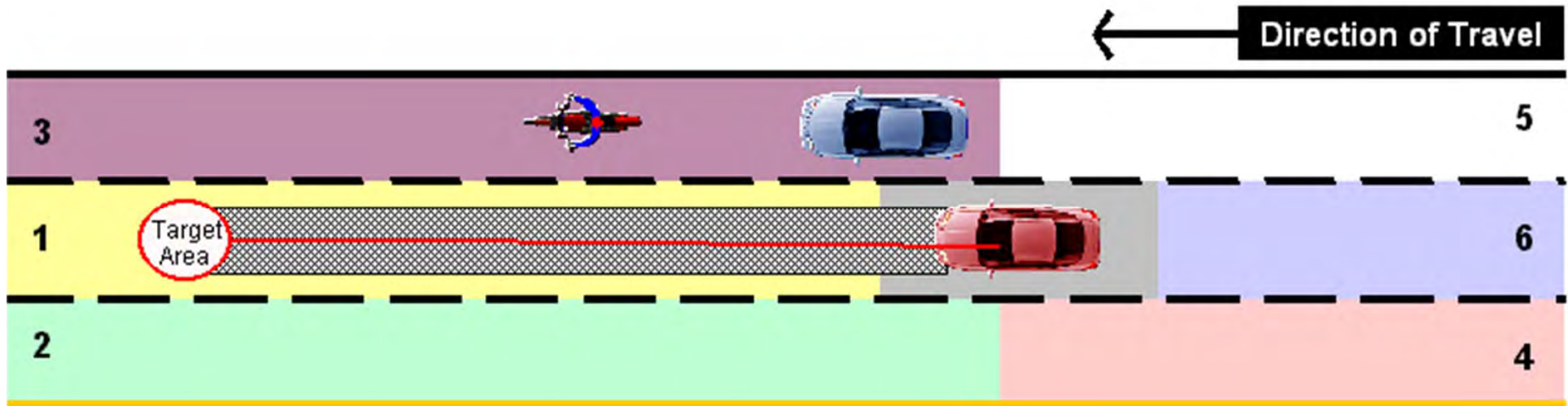
What to Look for



A driver must constantly search for potential risks and determine consequences.

Space Management Basics

How to Evaluate



- ⌞ Will the motorcyclist enter your path of travel?
- ⌞ How can the driver of the red vehicle reduce risks?

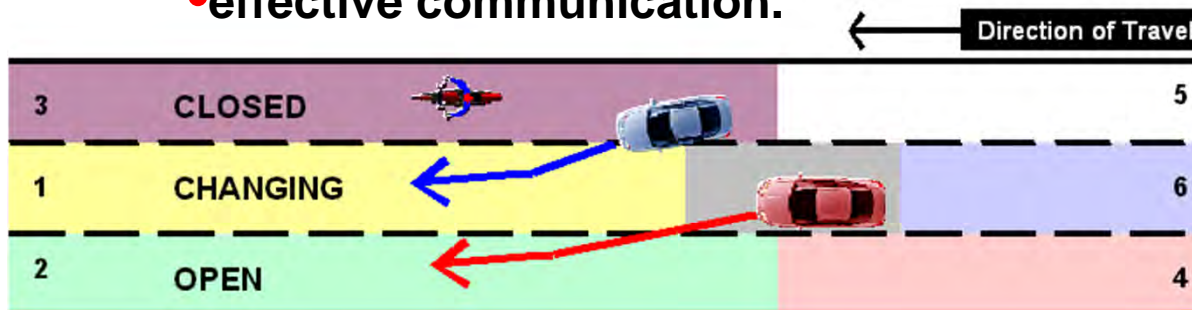
Space Management Basics

Executing Decisions:

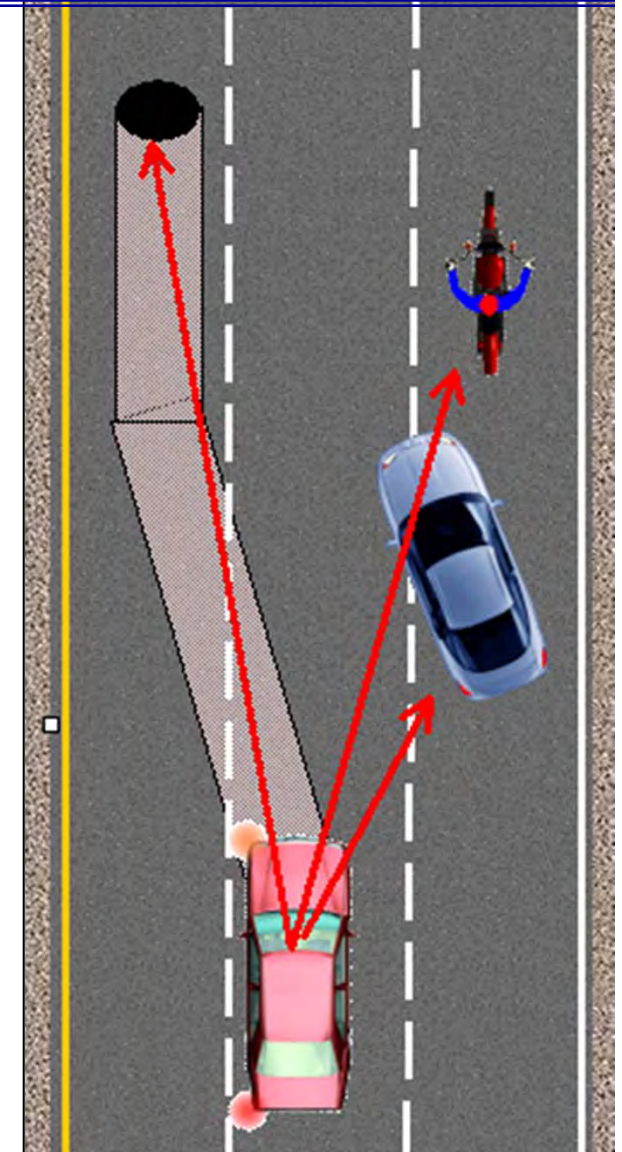
- Change speed while maintaining vehicle balance
- Change position while maintaining vehicle balance

Risk Reduction:

- Control the Target Area, Line of Sight and Path of Travel by:
 - speed changes;
 - position changes; and
 - effective communication.



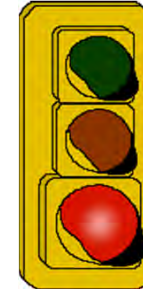
What is the best decision and action for the driver of the RED car?



Space Management Basics

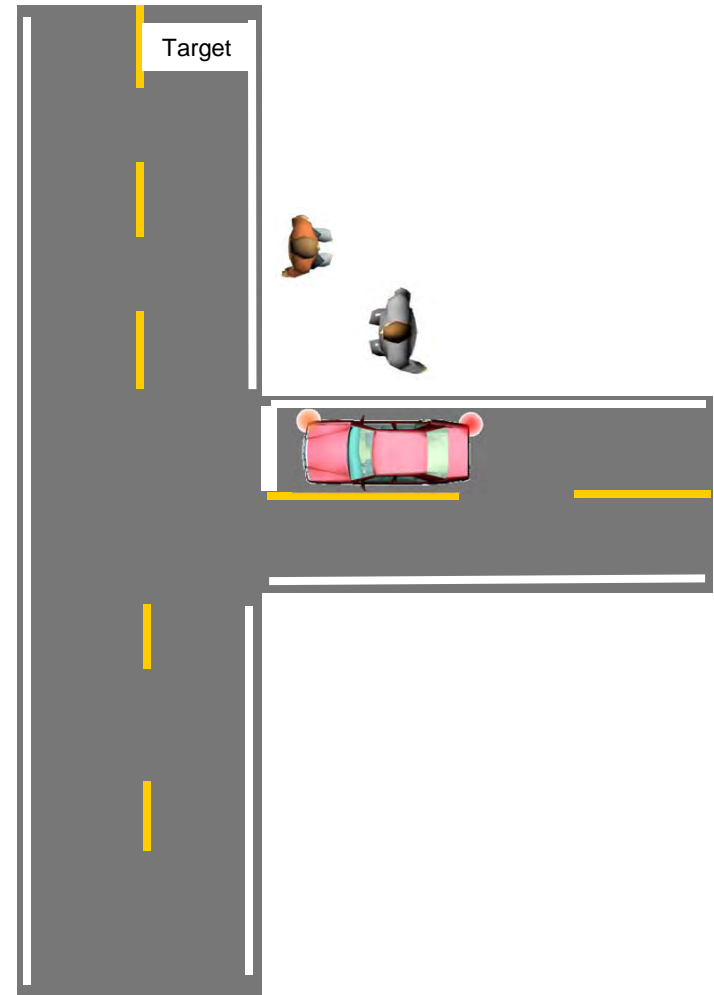
Open, Closed, or Changing Zones

- A **red** traffic signal is ...
- A parked car to your right is ...
- A bicyclist to your right is ...
- A vehicle in your left mirror blind area is ...
- A motorcycle in your right mirror blind area is ...
- A large truck following closely behind is ...



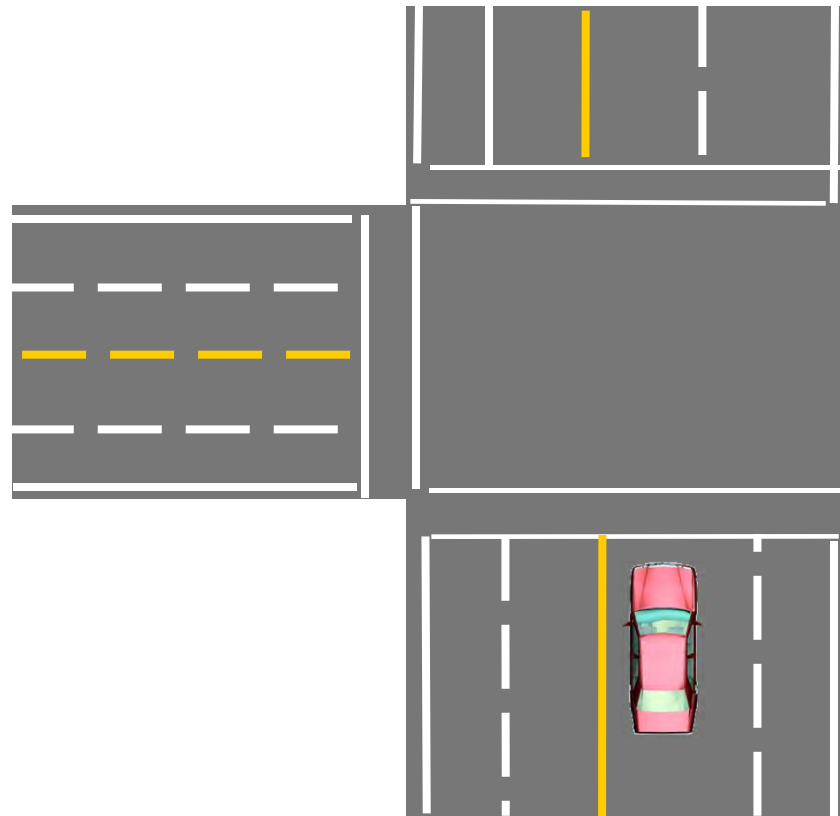
Turning at Intersections

- **Right Turn**
 - Approach to Intersection
 - Communication
 - Target Areas
 - Path of Travel
 - Line of Sight
 - Speed Adjustment
 - Lane Position
 - Turning Reference Point
 - Courtesy Considerations



Turning at Intersections

- **Left Turn**
 - Approach to Intersection
 - Communication
 - Target Areas
 - Path of Travel
 - Line of Sight
 - Speed Adjustment
 - Lane Position
 - Turning Reference Point
 - Courtesy Considerations

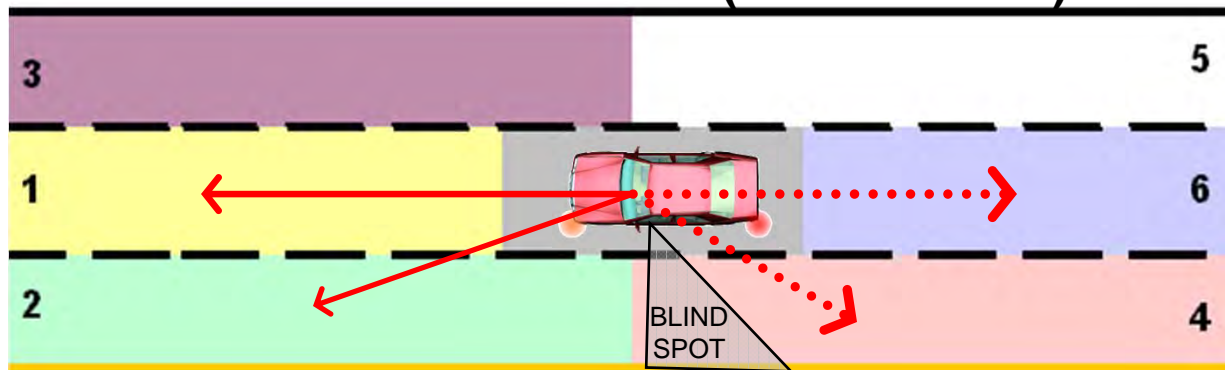


Lane Changes

- Traffic Check
- Effective Communication
- Appropriate Gap
- Reduced-Risk Decision
- Courtesy Considerations
- Steering Input
- Lane Position
- Recheck Traffic
- Establish Space

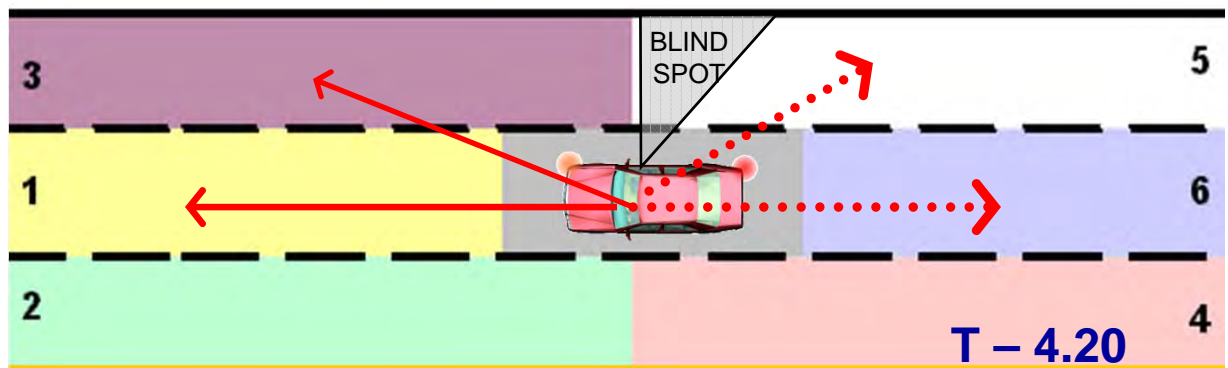
Visual checks for lane change to the **LEFT**.

- check zones ahead (**zones 1 and 2**)
- check zones to the rear (**zones 4 and 6**)



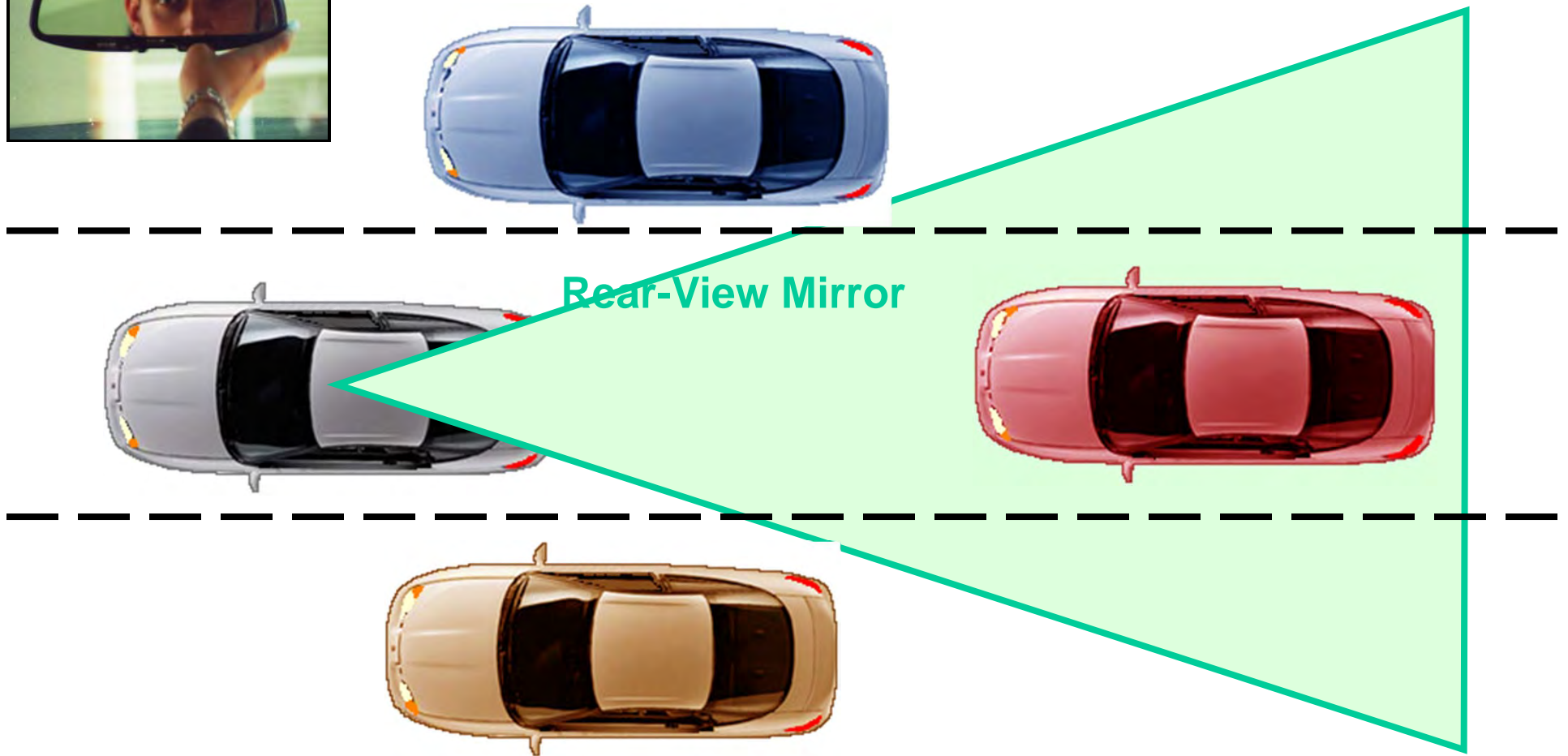
Visual checks for lane change to the **RIGHT**.

- check zones ahead (**zones 1 and 3**)
- check zones to the rear (**zones 5 and 6**)

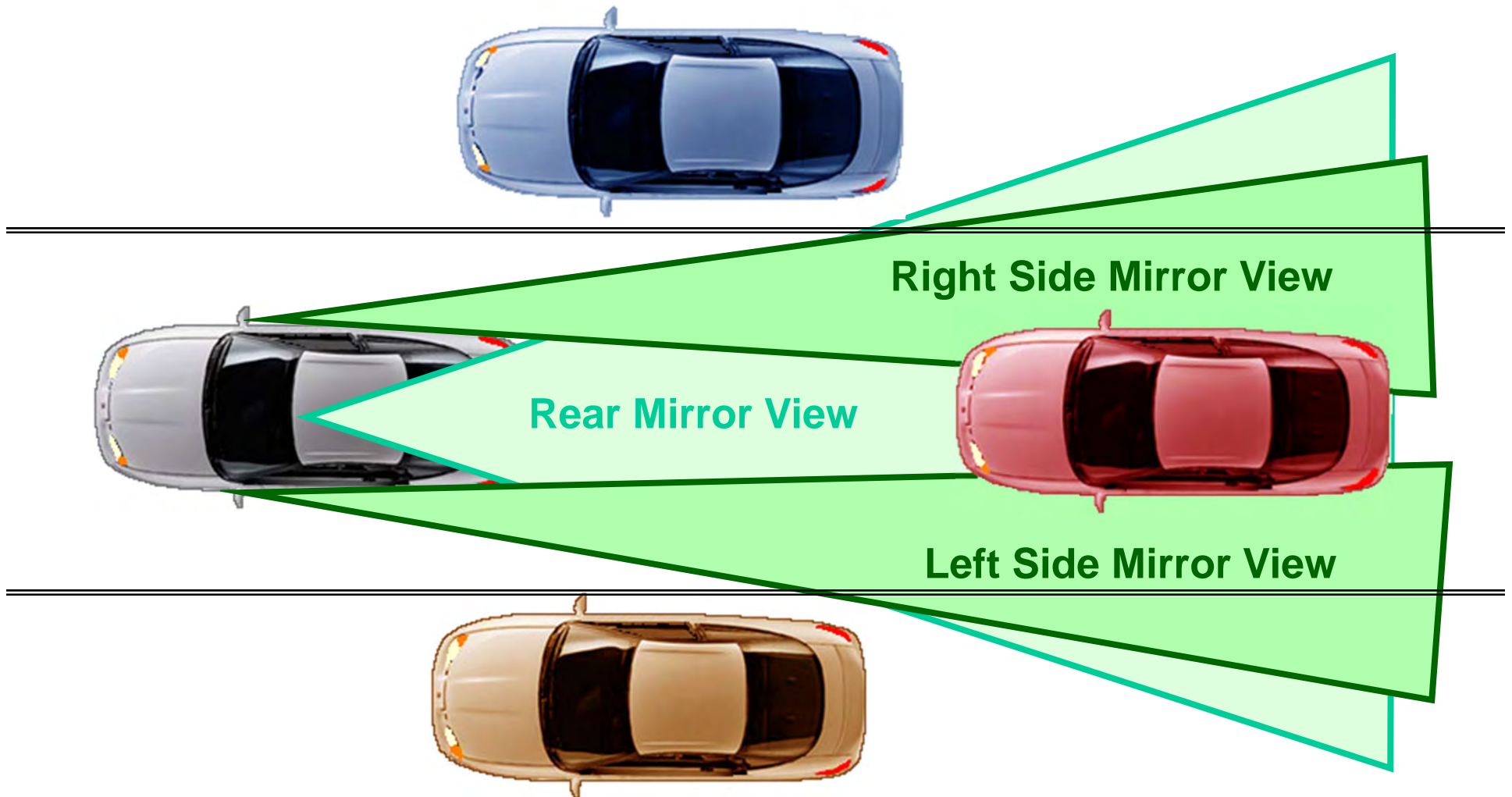


Rear-View Mirror Setting

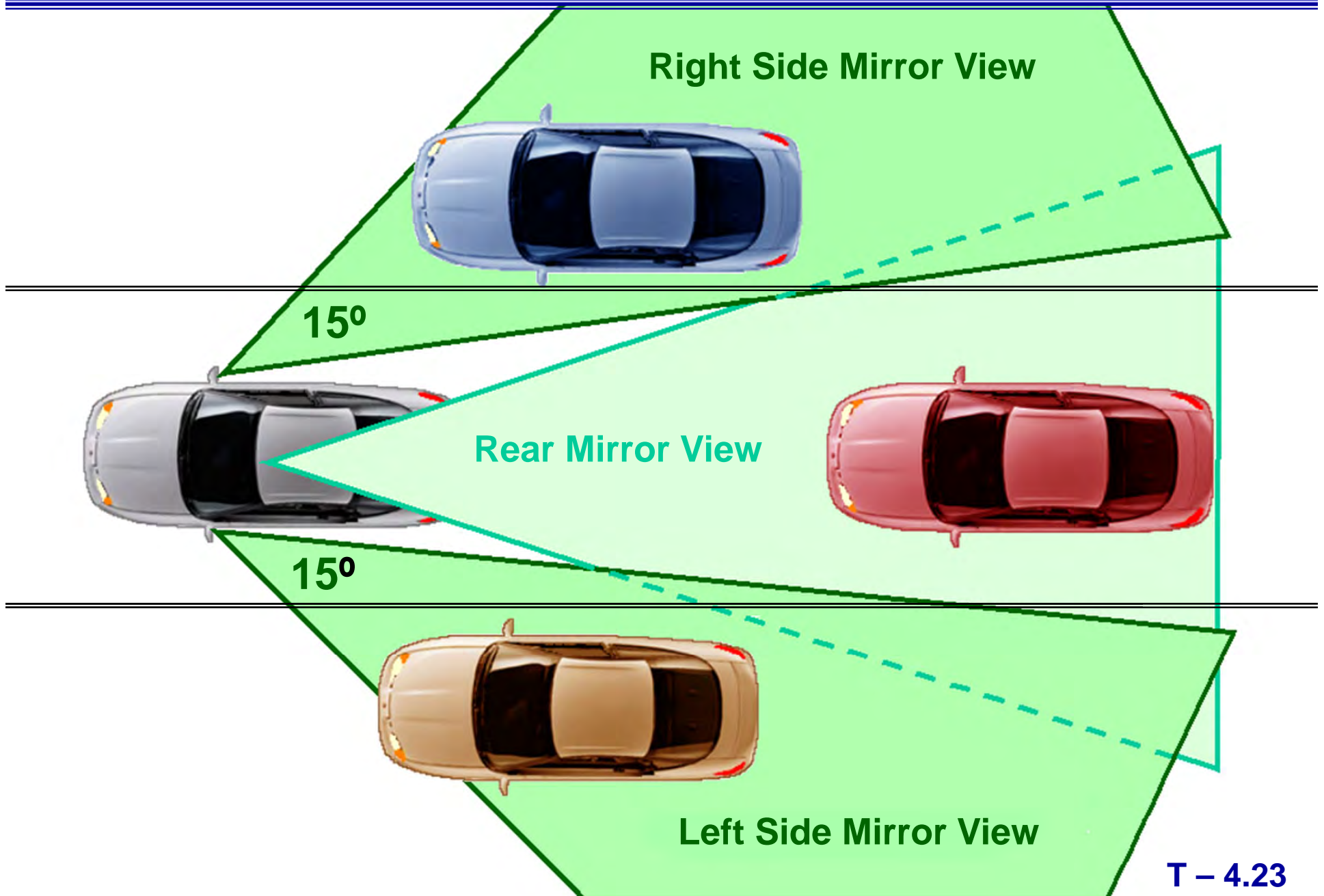
Traditional and Contemporary (BGE) Mirror Setting



Traditional Mirror Settings



Contemporary (BGE) Mirror Settings



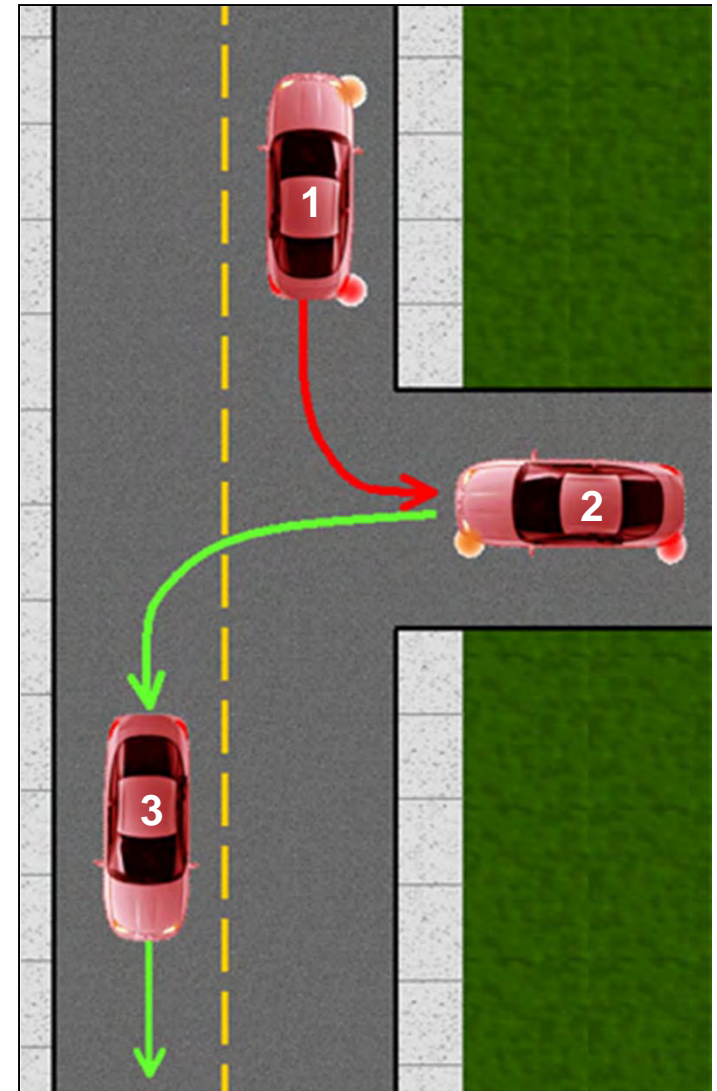
Turning Around

Two-Point Turns

- Approach
- Communication
- Target Areas
- Path of Travel
- Line of Sight
- Reference Points
- Speed Control
- Lane Position
- Courtesy Considerations

Back into driveway on right side

- Check traffic flow.
- Signal and position the vehicle 2-3 feet from curb.
- Drive beyond the driveway and stop.
- Shift to Reverse, monitor intended path of travel.
- Back slowly, turning steering wheel rapidly to the right as you enter driveway.
- Straighten wheels, centering car in driveway and stop with the wheels straight.
- Signal left and exit driveway when the way is clear.



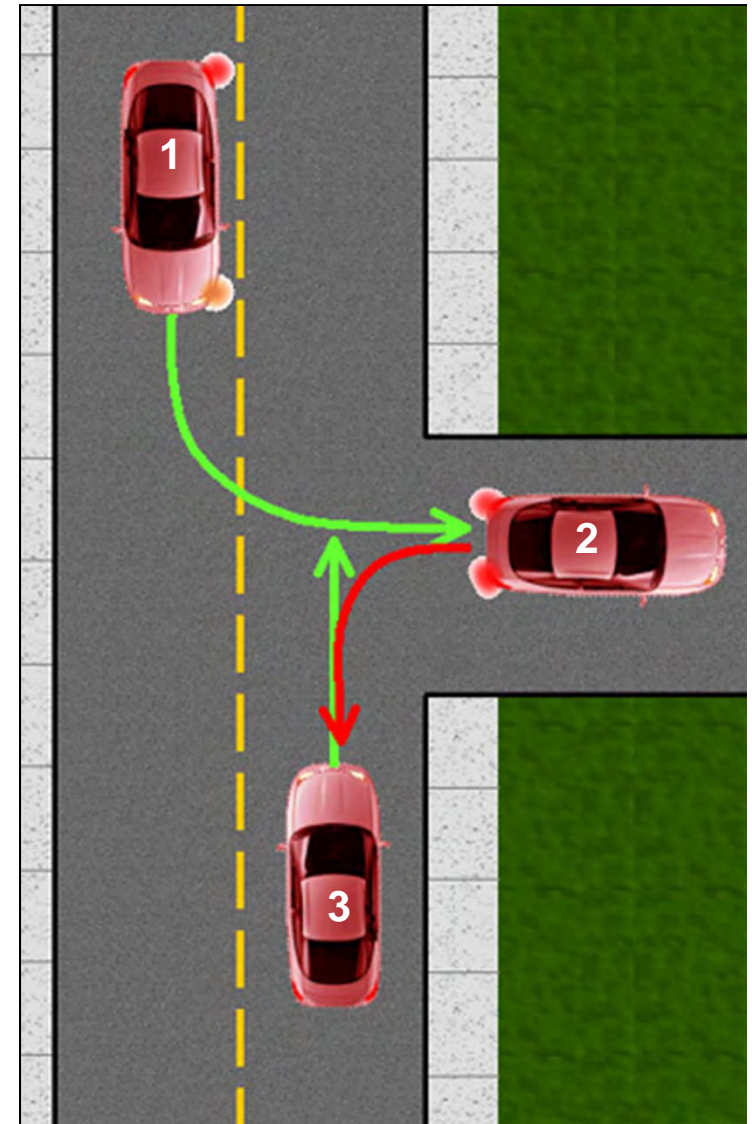
Turning Around

Two-Point Turns

- Approach
- Communication
- Target Areas
- Path of Travel
- Line of Sight
- Reference Points
- Speed Control
- Lane Position
- Courtesy Considerations

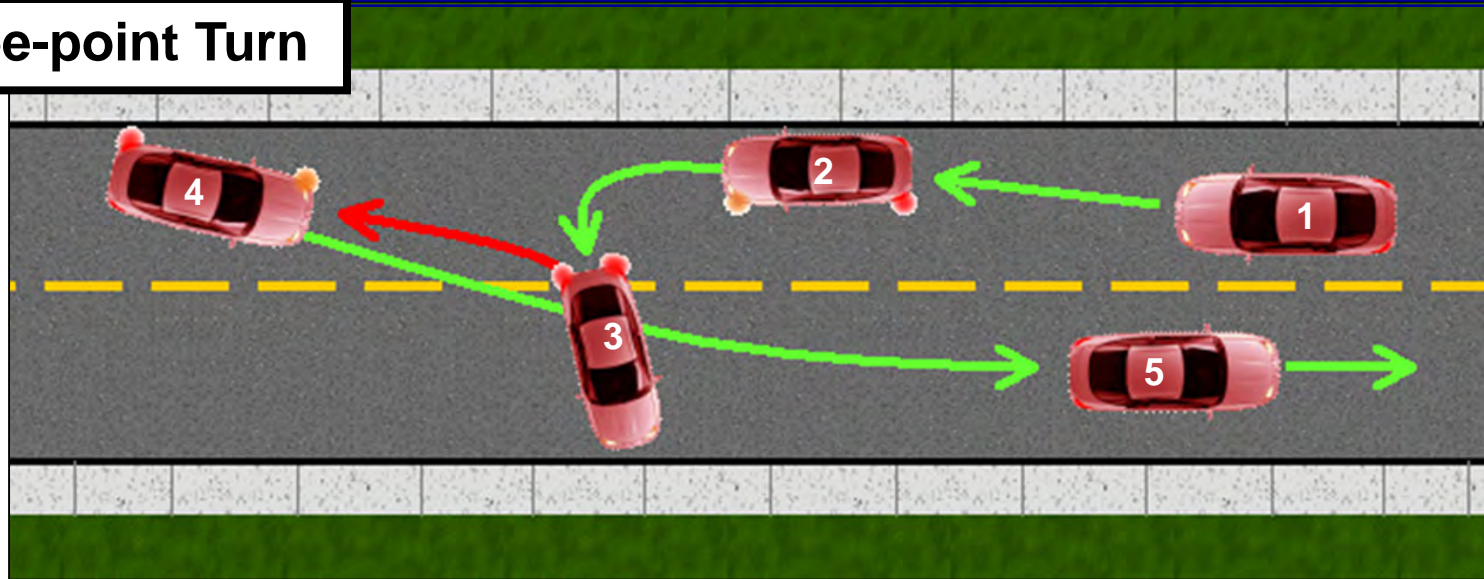
Pull into driveway on left side

- Check traffic flow.
- Signal and position your vehicle 3-6 inches from center yellow line.
- When traffic is clear, pull into the driveway and stop.
- Shift to Reverse, monitor intended path.
- Back slowly, turning steering wheel rapidly to the right as you exit driveway.
- Straighten wheels, centering car in proper lane.
- Shift into Drive. Check traffic and accelerate to normal speed.



Turning Around

Three-point Turn

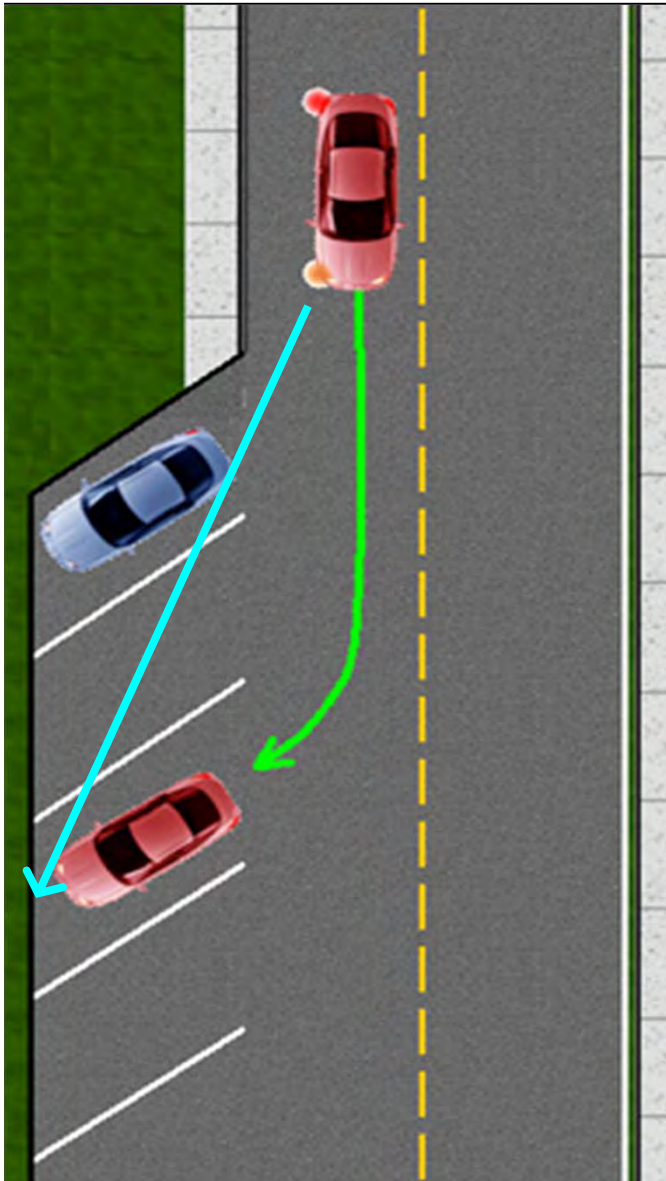


- Approach
- Communication
- Target Areas
- Path of Travel
- Line of Sight
- References
- Speed Control
- Lane Position
- Courtesy Considerations

NOTE: The safest way to change direction is to drive around the block!

Angle Parking

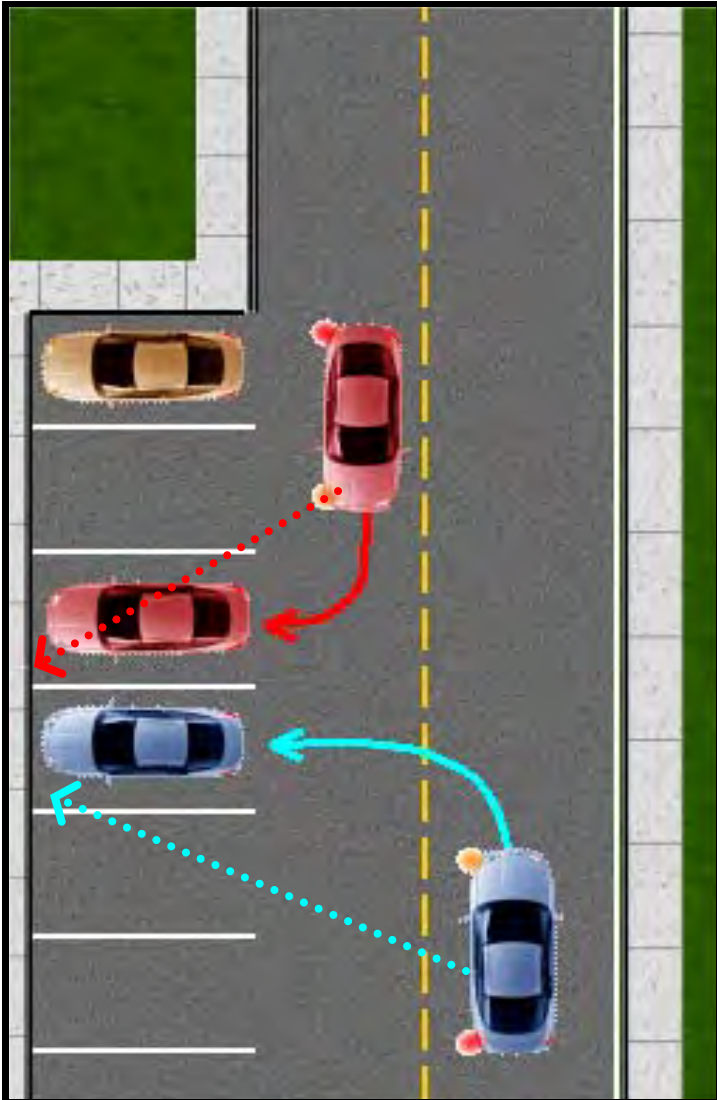
Parking at a 30 Degree Angle to the Curb



- ✓ Signal intention and position vehicle 3-5 feet from the space in which the vehicle is to be parked.
- ✓ Move forward until the steering wheel is aligned with the first pavement line.
- ✓ Visually target the middle of the parking space and turn the wheel sharply at a slow, controlled speed.
- ✓ Steer toward the target in the center of the space to straighten the wheels and stop when the front bumper is 3-6 inches from the curb.

Perpendicular Parking

Parking at a 90 Degree Angle to the Curb

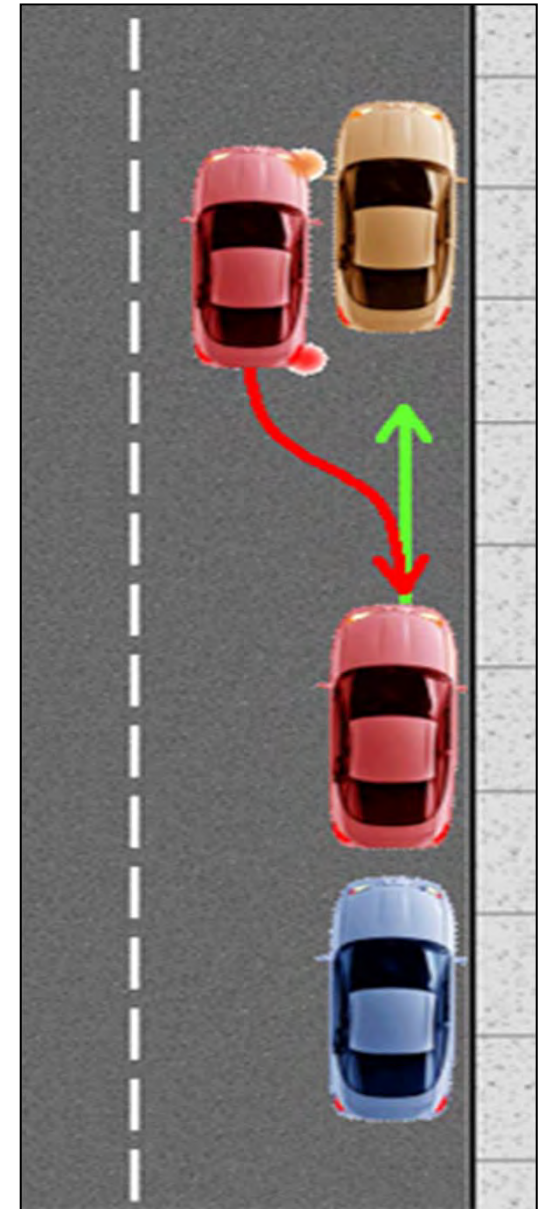


- ✓ Signal intention and position the vehicle 5 – 6 feet away from the space.
- ✓ Move forward until the driver's body is aligned with the first pavement line.
- ✓ Visually target the center of the parking space and turn the wheel rapidly while controlling speed.
- ✓ Steer towards the target and straighten the wheels.
- ✓ Position the front bumper 3 – 6 inches from the curb.

Parallel Parking

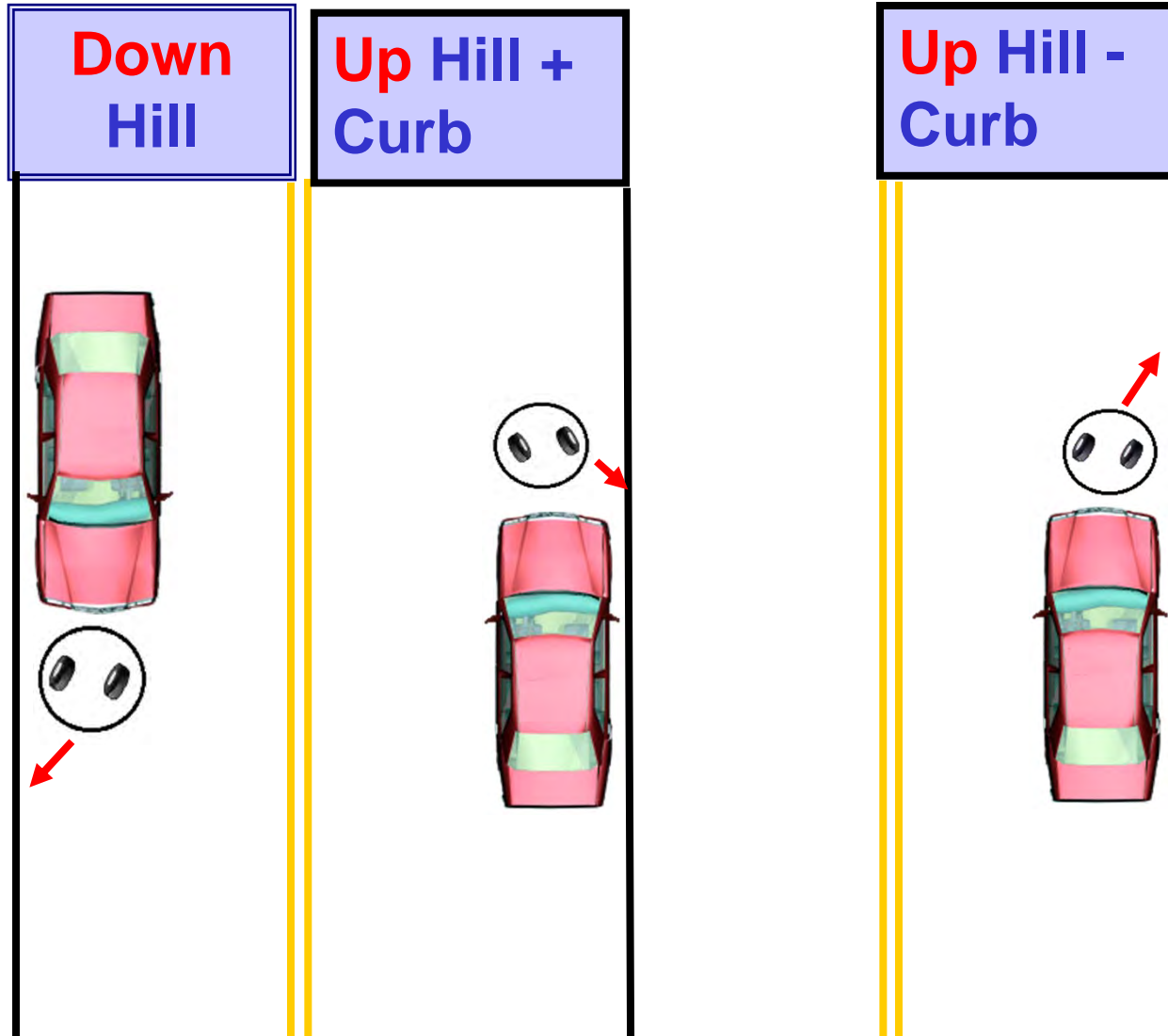
Parking Parallel to the Curb

- ✓ Select a space that is at least five feet longer than your vehicle. Flash your brake lights and put on your turn signal as you approach the space.
- ✓ Monitor the traffic to the rear.
- ✓ Place your vehicle 2 – 3 feet from the vehicle you want to park behind with back bumpers even.
- ✓ Put your vehicle in Reverse. Back slowly and turn the steering wheel sharply.
- ✓ Stop when your steering wheel is aligned with the back bumper of the front vehicle.
- ✓ Continue backing slowly while steering sharply in the opposite direction. Use quick glances to the front and rear.
- ✓ Center the vehicle in the space. Wheels should be 6 – 12 inches from the curb.



Hill Parking

When parking on a hill, you need to take special precautions to ensure your vehicle will not roll into the street and into traffic.



- Approach
- Communication
- Target Areas
- Path of Travel
- Line of Sight
- Speed Adjustment
- Lane Position
- Reference Points
- Courtesy Considerations