

Unit 2 Notes

Class 4

- 2.1 Language of the Road
- 2.2 Speed Requirements
- 2.3 Hazard Recognition

Class 5

- 2.4 Communication
- 2.5 Right-of Way
- 2.6 Backing

Class 6

- 2.7 Parallel Parking
- 2.8 Perception and Effective Searching
- 2.9 Zone Control

Checklist Items to complete:

Read Washington Driver Guide:
Sections 3 & 4. Review the signs
and meanings in the inside covers.

Unit 2 Homework
Signs, Signals & Marking Quiz

Behind-the-Wheel Lesson 2

Home driving practice!!

Self-Reflection Questions

Unit 2: Class 1

2.1 The Language of the Road *WDG: Section 3 and inside covers.*

Signs

Signs have three purposes:

1. **Regulate** traffic, movement, or parking.
2. **Warn** of potential dangers or road conditions.
3. Provide **directions** and information.

REGULATORY SIGNS *WDG: Back inside cover*

| Type | Purpose | Color | Shape |
|-------------------|--|-------------------|-----------------------------------|
| Regulatory | They require or prohibit an action by you. Give commands and set limits. The use of red on signs is limited to stop, yield, and prohibition signs. | Black, white, red | Rectangle, square, special shapes |

WARNING SIGNS *WDG: Front inside cover*

| Type | Purpose | Color | Shape |
|----------------------------------|--|--------|-------------------------------|
| Warning Signs | Warn you to slow down and be prepared to stop if necessary. Warn you of sharp curves, special situations, speed zones, or hazards ahead. | Yellow | Diamond shape, special shapes |
| Construction Signs | Warns you of construction, maintenance, or emergency operations. Warns of reduced speed, detour, slow moving vehicles ahead, and poor and changing road surfaces. Traffic fines double in these zones. | Orange | Diamond, rectangular |
| Incident Management Signs | Incident signs or temporary traffic control signs. Prepare to stop: Roadways are closed or detoured due to a road user incident, natural disaster, hazardous material spill, or other unplanned incident. | Pink | Diamond, rectangular |

GUIDE SIGNS WDG: Back inside cover

| GUIDE SIGNS | PURPOSE | COLOR | SHAPE |
|---------------------------------|---|-------|----------------------------|
| Destination/ Place names | They show directions and distances to various locations. | Green | Rectangular |
| Motorist Services Signs | Show location of various services such as rest areas, gas stations, hospitals, phone. | Blue | Rectangular, square |
| Recreation Signs | Tell you location of recreational areas, points of interest, state parks. | Brown | Rectangular, special shape |

Route Signs

| | | | |
|--------------------------|-------------------------|------------------|--------|
| Interstate | Numbering system | Red, White, Blue | Shield |
| US Highway System | | Black, White | Square |
| State Highway | | Green | Square |

Signals

| | |
|--|---------------------------------|
| Red | Stop |
| <p>If you are turning right, you may turn after coming to a full stop if it is safe and if there is no sign prohibiting the turn at a red light.</p> <p>You may also turn left onto a one-way street with traffic moving left after coming to a full stop if there is no sign prohibiting turns on a red light.</p> | |
| Flashing Red | Treat it like a stop sign. |
| Red Arrow | Don't go in direction of arrow. |
| <p>If you are turning right, you may turn after coming to a full stop if it is safe and if there is no sign prohibiting the turn on a red arrow.</p> <p>You may also turn left onto a one-way street with traffic moving left after coming to a full stop if there is no sign prohibiting turns on a red arrow when it is safe to do so.</p> | |

| | |
|---|---|
| Yellow | Clear the intersection |
| <ul style="list-style-type: none"> The traffic light is about to change to red. You must stop if it is safe to do so. If you are in the intersection when the yellow light comes on, do not stop but continue through the intersection. | |
| Flashing Yellow | Traffic light means slow down and proceed with caution. |
| Yellow Arrow | Means that the protection of a green arrow is ending and if you are turning in the direction of the arrow, you should prepare to stop and give the right-of-way to oncoming traffic before turning. |
| Flashing Yellow Arrow | Means left turns are allowed, but you must yield to oncoming traffic including bicyclists and pedestrians. |

| | |
|--|--|
| Green | Proceed when Clear |
| <ul style="list-style-type: none"> Means you can go through the intersection. You must yield to emergency vehicles and others as required by law. If you are stopped and the light turns green, you must allow crossing traffic to clear the intersection before you go ahead. If you are turning left, you may turn but only when safe to do so. Oncoming traffic has the right-of-way. Be alert for signs that prohibit left turns. | |
| Green Arrow | A green arrow means you can safely turn in the direction of the arrow. |
| <ul style="list-style-type: none"> There should be no oncoming or crossing traffic while the arrow is green. When turning right or left, watch for pedestrians or bicyclists crossing in front of your vehicle. | |

Road Markings

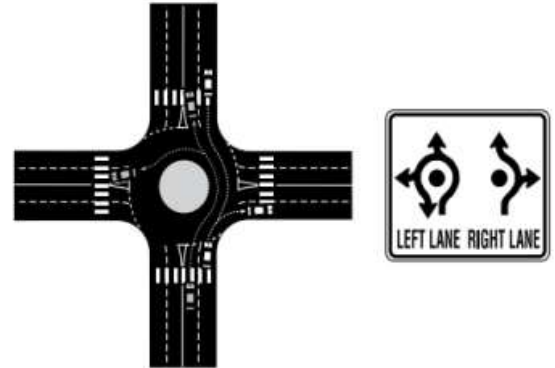
| YELLOW LINE MARKINGS | WHITE LINE MARKINGS |
|--|--|
| <ul style="list-style-type: none"> Mark left edge of the roadway. Separate traffic moving in opposite directions. A dashed yellow line means you can cross it to pass if it is safe. Solid Line on your side - no passing. <p>May cross over double yellow lines when turning left as long as the lines are not more than 18" or wider apart. (median)</p> | <ul style="list-style-type: none"> Should not drive to the right of the edge line. Mark right edge of the roadway. Separate traffic moving in the same direction. Solid white line means you should stay in your lane, generally not to cross. White lines perpendicular on roadway mark: Stop lines & crosswalks. <p>What is the purpose of a stop line? For trucks wide turning radius and for those that cut center line.</p> |
| <p>Two-Way Left Turn Lanes: Reserved for vehicles making left turns in either direction from or into the roadway.</p> <ul style="list-style-type: none"> These lanes cannot be used for passing and cannot be used for travel further than 300 feet. | |

Roundabouts

Approaching vehicles must yield to the traffic in the circle. Always yield to pedestrians and bicyclists who are legally crossing the road. Inside the circle, always drive around the circle to the right.

How to drive in a roundabout:

1. Slow down as you approach the intersection; roundabouts are designed for speeds of 15-20 mph.
2. Enter the roundabout when there is a gap in traffic. Once inside, do not stop. Follow directions on signs or pavement markings about which lane to use.
3. You may exit at any street or continue around if you miss your exit.



2.2 Speed Limits *WDG: Section 4-3*

Speed limits are set for safety. They are the fastest speed allowed in good driving conditions. Speed limits are set based on the type of road, amount of traffic, hidden dangers, and collisions at the location.

- Speed limits don't tell you how fast to drive. They tell you that you cannot go faster than the posted speed limit. The maximum speed is set for ideal conditions like on a clear day.
- Some states also have minimum speed limits.

The basic speed law

You must drive at a speed that is always reasonable and prudent regardless of the posted speed or maximum limit.

- If you drive at a speed that is unsafe for existing conditions in any area, even if you are driving slower than the posted speed, you can be cited for violating the basic rule.

What factors must be taken into consideration when obeying this law?

- Speed in relation to other traffic, surface and width of the road, weather, visibility and hazard at intersections.

Speed Limits: *Unless otherwise posted.*

School Zone:

20 mph

Towns/ Cities

25 mph

County Roads

50 mph

State Highway

60 mph



These speed limits are set for special conditions such as a sharp curve ahead and are often posted below a warning sign that makes you aware of the condition.

Ignoring these signs put you at risk for becoming involved in a preventable collision

2.3 Hazard Recognition

What is a hazard?

1. Anything that blocks your view. Any Line-of-Sight (LOS) Problem.
2. Anything that blocks your path. Any Path-of-Travel (POT) Problem.

| Line-of-Sight Problems | Path-of-Travel Problems |
|--|--|
| They block your ability to get good information about the condition of your intended path. | They block your ability to get good information about the condition of your intended path. |
| <ul style="list-style-type: none"> • Weather Conditions • Curves, hills, intersections • Building, Bridges, Fences • Trees, Bushes, Billboards • Other vehicles | <ul style="list-style-type: none"> • Red Lights, Stop Signs, Yield Signs • Intersections, Narrowing Lanes • Other Traffic • Pedestrians, Animals, Bikes, Motorcycles |

Most crashes involve line-of-sight and/or path-of-travel problems that the driver doesn't FIND or sees so late there's not enough time or space to SOLVE the problem!

When you identify a hazard – Cover the Brake!

Covering the brake

Remove your right foot from the accelerator pedal and hold it over the brake pedal in readiness stop or slow suddenly. If a sudden stop is necessary, it can help shorten your stopping distance. You are ready to react quickly and smoothly.

- Note: Covering the brake is not to be confused with 'riding the brake', where the driver lightly presses the brake pedal unintentionally. Confuses other drivers and adds unnecessary wear to the brakes.



A zone is one of six areas of space around a vehicle that is a width of a lane and extends as far as the driver can see.

- LOS & POT problems can be in any of these zones.
- You must be able to FIND line-of-sight and path-of-travel problems (LOS-POTs) to make the best choices!
- These problems limit your lane position and speed control options.

You must be able to FIND line-of-sight and path-of-travel problems (LOS-POTs) to make the best choices!

- When there are no problems, you have lots of options to choose from.
- When there are problems, your choices are limited.

Unit 2: Class 5

2.4 Driving Communication WDG Section 4-18

Communicating with other drivers means letting them know your intent. That way, you avoid confusion at best, and a collision, at worst.

Driver Communication Options:

Turn signals, brake lights, horn, headlights, lane position, hand signals, reverse lights, 4-way flashers, speed.

Turn Signals

Signal at least 100 feet before you make your move. Use before you change lanes, turn right or left, merge into traffic, or park.

- Signal even when you don't see others around. *It is easy to miss someone who needs to know what you are doing.*
- After turning or changing lanes, make sure your turn signal is off. May think you are turning again and pull into your path.

Use hand signals when other drivers cannot see your signal lights.



Brake Lights

Your brake lights let people know that you are slowing down. Always slow down as early as it is safe to do so.

- If you are going to stop or slow down at a place where another driver does not expect it, tap your brake pedal three or four times quickly to let those behind you know you are about to slow down.

Look for a 2nd Signal.



A 2nd signal confirms the intention of another car like slowing down or starting to turn.

2.5 Right-of-Way WDG Section 3-24

Right-of-Way: Privilege of having the use of that part of the roadway first.

Yield: Let others go before you.

A right of way law does not give anyone the right of way; it only says who must yield. You must do everything you can to prevent a collision regardless of the circumstances. There will be times when you will have to slow or stop your vehicle to let others continue safely, even if they should have yielded to you.

| | | | |
|---|--|---|---|
| Controlled Intersections: Signs and signals assign yielding responsibilities. | | | |
|  | 2-way Intersection Yield to traffic on the cross street. |  | 4-way Intersection Whoever gets there first goes first. Two vehicles arrive at the same time, the vehicle on the right goes first. |
| Uncontrolled Intersection: Yield to those in the intersection and those coming from the right. | | | |
| Do not enter an intersection unless you can get through it without stopping. | | | |

The safety of all roadway users is shared by all. Responsibility is shared by motorists, cyclists, and pedestrians.

Pedestrians

Pedestrians and bicyclists have the right-of-way at crosswalks and intersections, whether the crosswalk is marked or not.

- Under Washington law there is a crosswalk at every intersection.
- Washington's pedestrian laws provide a **Safety Buffer** for pedestrians on the roadway.
- Stop for the pedestrian, who must clear the lane in which the vehicle is traveling or turning and at least the next lane, before you proceed.
- Blind pedestrians have absolute right-of-way. Stop and remain stopped for a blind pedestrian using a white cane or a guide dog until the pedestrian is completely across the roadway.

Bicycles: *WDG Section: 4-33*

Bicyclists have the choice to ride on the roadway, on the shoulder of a road, in a bicycle lane, or on a sidewalk.

- When riding on the road: Bicyclists have the same rights, duties, and responsibilities of a motor vehicle driver.
- When riding on the side of the road or sidewalk: Have all the rights and duties of a pedestrian.
- When passing a bicyclist allow at least 3 feet of space when overtaking or passing a bicycle.
 - When following bicyclists, give them plenty of room and be prepared to stop quickly.
- When riding at night
 - A bicycle must have a red reflector visible for **600 feet** to the rear and a white headlight visible in the front for **500 feet**.

Emergency Vehicles

- Pull over to the right side of the road. If you are in an intersection, drive through it before you pull over.
- If the light is red, stay where you are.
- When following emergency vehicles – Police vehicles, ambulances, and fire trucks need more room to operate. Do not follow closer than **500 feet** to a fire truck.

Transit Vehicles

You must yield to a transit vehicle? When they are signaling to return to the roadway.

School Bus

You must stop for a school bus that stops with its red lights flashing.

- You are not required to stop if the school bus is traveling in the **opposite direction** AND
 - Has three or marked traffic lanes **or**
 - Is separated by a median or is separated by a physical barrier.

2.6 Backing WDG Section: 4-13

Backing presents more risk than moving forward. Why?

Vision: The vehicle blind area is much larger to the rear. Harder to visually monitor what is happening on both sides of the car.

Control: The vehicle is much harder to steer while you are backing. The vehicle is much harder to steer while you are backing.

1. Back tires don't turn, requires more space to move.
2. You are required to yield to other vehicles and pedestrians while backing.

It is required to yield to other vehicles and pedestrians when backing. The event of a collision, the driver who is backing is at fault.

- You must stop before backing across a sidewalk or into a street. Look left, right, and yield to any pedestrians, bicyclists, or vehicles.

Reducing risk while backing: Get the best possible vision and control when backing!

1. Check for traffic, pedestrians, and objects around your car.

- Do a 360 search.
- Check your mirrors and rear-view camera too (if you have one).

2. Communication: Use your hazard flashers.

3. Position yourself in the seat for the best vision and best control.

- Place your left hand in the 12 o'clock position on the steering wheel.
- Drape your right arm on the back of the seat.
- Left foot on dead pedal. Twist hips so you can look directly through the rear window.

Twisting around to look out the back window may not be the most comfortable position when seated in the car. We don't back too often or for that long. "Most collisions happen because the driver fails to see what is happening!"

4. When moving in reverse, most of your vision should be directed out the rear window.

- Target out the rear window like when moving forward.
- Keep your head on a swivel. Make quick glances to the front, both sides, and mirrors until you stop the vehicle.

5. Keep it slow.

- Unless necessary, stay off the gas!!
- Keep your foot on the brake pedal and adjust pressure to control speed. Move at an inching or walking pace.

Stop before sidewalks or entering the road. Yield. Look for pedestrians and traffic.

- If you have line-of-sight blockage... creep back until you can see. Stop again to check traffic.



Rear Reference Point: Stop before line/ curb.

You can find the rear reference point a couple different ways.

- Curb appears to be in the middle of the back door.
- Lean forward, look over your left shoulder. The curb will appear in the corner of the window.
- Side mirror: Curb will appear behind your rear tire.

Backing turns

Backing onto the roadway:

- Back around the corner close enough to the edge of the road so you don't disrupt traffic flow.
- Stay within 18 inches of the curb or edge of the road.

Pivot Point: Curb lines up with the corner of the rear window post. This is where you will begin turning the wheel.

- ✓ Trust your spot: The body of the vehicle blocks your view of the ground around you. A good pivot-point will keep you close.



Before turning the wheel, check the front swing of the vehicle, so you do not strike anything.

Control your speed! Move at an inching pace.

Fully turn the wheel.

- Palming the wheel: Press your palm against the top of the steering wheel. Pull the steering wheel down and around.

Straightening the wheel

- When the wheel is fully turned in either direction, counter-steer back to the top of the steering wheel twice. When you are almost parallel with the roadway, start to straighten the wheel.
- Left hand in the 12 o'clock position and target out the rear window.

U-turn and Y-turn

Can be done where signs permit it or where it can be done safely and without interfering with other traffic. SMOG.

Illegal when the turn cannot be made safely or anywhere a sign prohibits it.

- Illegal on hills, curve or when vehicle cannot be seen by the driver approaching from either direction within five hundred feet.

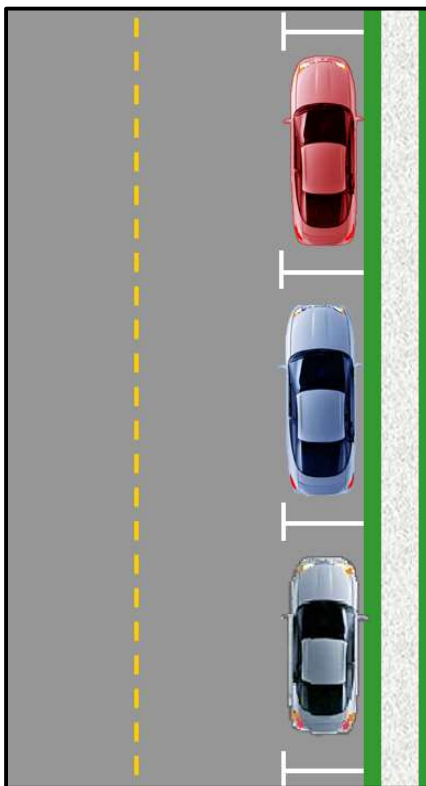
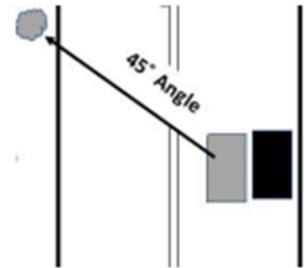
Unit 2: Class 6

2.7 Parallel Parking

Making a good habit of setting up your parallel park correctly will take much of the stress out of the maneuver.

The “Parallel Set Up”

1. **Communicate:** Signal
2. **Speed adjustment:** Approach the space slowly so your signal is not misinterpreted for a right turn.
3. **Position:** 3-4 feet away from the vehicle.
4. **Reverse:** Reverse lights let others know what your plan is.
5. **Check rear position:** You should see the end of the vehicle. Back up if you can't.



The Maneuver

- Find a 45° target Look for a landmark next to the left corner post of the windshield.
- Check for traffic. Look for vehicles passing you - check left front swing.
- Vision directed BACK!! Look over your right shoulder looking out the rear windows of the vehicle.
- Decrease brake pressure move at an inching pace.
- Turn wheel rapidly and fully right. Line up with your 45°.
- At 45°, straighten the wheel.
- Backing straight targeting the rear corner of the space.
- Backing straight until you see the rear corner of the front vehicle forward of your right corner post of the windshield.
- Counter-steer: While moving slowly, turn the wheel fully left. Stop when close to rear vehicle.
- Center the vehicle.

Leaving the Space

Shift to reverse, look out the rear window and back up. Give yourself space.

Get your nose out.

- Creep forward and start turning wheel rapidly and fully left. Stop when the corner of your right headlight lines up with the rear left taillight of the vehicle.

2.8 Perception & Effective Searching

For effective vision, the eyes and mind must work together.

The mind tells the eyes what they are looking at.

- If the eyes are not looking at the right place at the right time, what the mind knows is never put to action.

On the other hand, the eyes could look at something without the mind understanding what is being seen.

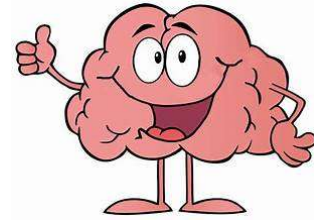
Accurate Perception Requires You

- Know where to look and what to look for.
- See problems/hazards as closed zones.
- Use organized searching patterns.
- Know how to measure space in time.

Searching Zones

A zone is one of six areas of space around a vehicle that is a width of a lane and extends as far as the driver can see. To drive defensively, drivers must find potential hazards in any of these zones.

By dividing this space into different zones, you can easily search these areas by developing a searching pattern.



Orderly Search Pattern

1. Look at your target area.
 - Separate each search you make away from the target area with a look to the target area.
 - Search at ½ second intervals - ½ second fixation in each area
2. Look at your front, left front, and right front zones 15 seconds ahead. Make sure you look for possible problem areas such as intersections or driveways.
3. Check your rear zones.
4. Check your front zone 4-6 seconds ahead for any immediate problems.
5. Check your speed.
6. Repeat

If we fixate on something too long, we tend to miss important information.

Zone Conditions

Closed Zone: There is a LOS-POT restriction.

A **closed zone** is not available to you because:

- Your path of travel is obstructed due to some condition. (*Red light, bicyclist, construction, etc.*)
- There is a restriction to the drivers view. (*Bushes, parked vehicles, curves, etc.*)

A closed zone indicates that you need to find an alternate path of travel.

Open Zone:

An **open zone** is a space that you can drive without:

- a restriction to your **line of sight (LOS)** or to your intended **path of travel (POT)**.

Unstable Zone:

An **unstable/changing zone** is when the driving situation changes from an open zone to a closed zone.

Changing conditions can include: Traffic controls, vehicles moving into your lane, intersections width, weather conditions.

Three Searching Ranges



Target Area Range

- **FIND** conditions of your destination.

15 Second Range

- **SOLVE** problems 15 seconds away.

4 Second Danger Zone

- **CONTROL** that space before you enter it.

Measuring Space in Time

Your ability to measure space in seconds will help you:

- **FIND** accurate information early.
- **SOLVE** problems from farther away.
- **CONTROL** your approach to intersections, curves, stopped traffic, and traffic controls.
- Judge safe gaps and time turns.
- Create open space when following others.
- Get control when being followed.

How do you know how many seconds you are looking ahead?

1. Guess where you think 15 seconds ahead is.
2. Pick out a marker such as a road sign, mailbox, or telephone pole and then spacing counting: one-one-thousand, two-one thousand, three-one-thousand, four-one-thousand etc. until you reach the marker.
3. Taking a guess, before you count, helps you develop the ability to make accurate assessments of the space your vehicle will travel in seconds.

2.9 Zone Control

Target Area Range

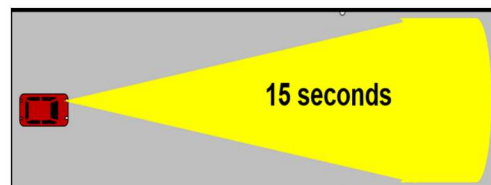
- **FIND** the conditions of your destination.

The 15 Second Range

- **SOLVE** problems 15 seconds away.

When you see a zone change:

- **Check Other Zones**



Check opposite zone for an open zone.

Escape path: An open zone you can steer into if a potential problem develops into a threatening situation.

On multiple lane roadways

- Check opposite side and rear.

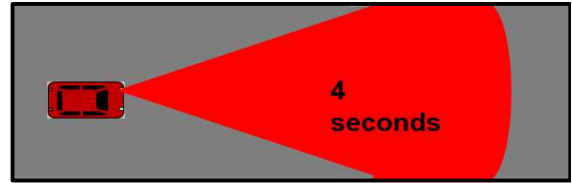
Check Left-Front-Right at every intersection.

| Control Options | | |
|---|---|--|
| <p>Speed Control</p> <ul style="list-style-type: none"> • Accelerate • Maintain Speed • Decelerate • Use brakes. • Cover the brake. | <p>Lane Position</p> <p>A diagram showing five cars in a lane, labeled LP1 through LP5 from top to bottom. LP1 is in the center, LP2 and LP3 are side-by-side in the middle, and LP4 and LP5 are side-by-side at the bottom.</p> | <p>Communication</p> <ul style="list-style-type: none"> • Turn signal • Brake lights • Horn • Hand signals • Headlights • Hazards Lights • Speed • Reverse lights |

Four Second Danger Zone

The space you will be travel in the next 4 seconds.

- The final update on how you are controlling your path of travel.



Rear Zone Control *WDG Section 4-27*

Open

- ✓ No vehicles following closer than 4 seconds.
- ✓ No line-of-sight problems within 15 seconds.

Closed

- ✓ Any vehicle following closer than 4 seconds,
- ✓ Any vehicle blocking your view to the rear or occupying your blind spot.

Unstable/ Changing

- ✓ Any vehicle closing in on your position, a worsening condition.



When Do I Check the Mirrors?

We check our mirrors anytime speed or position adjustment is needed.

- After seeing any closed or unstable zone condition in the front zones
- Before and after braking
- Before and after performing any lateral maneuver
- Before backing.
- Before and after turning
- While stopped.

Mirror checks can answer three questions:

1. Are there any vehicles present? If yes...
2. What is the location?
3. What is the size and relative speed of the vehicle(s).

Checking the rearview mirror before braking

- When you see your stopping situation ahead, check the rearview mirror.
- If a vehicle is following close, we will want to start slowing sooner to avoid surprising them...and avoid a rear-end collision.

How to Practice Commentary Driving

- Start with OK speed and lane position.
- **FIND** one line-of-sight and/or path-of-travel problem and state the zone condition.
- **SOLVE** – State conditions of related zones and then state the best speed, lane position & what communication (when driving no need to state this step, just do it)