

Chapter 3

Searching and Yielding

Content Notes

Approximate time required to complete this chapter: Three hours.

Classroom Concepts:

- 3.1 Signs, Signals and Pavement Markings
- 3.2 Search and Identify
- 3.3 Stopping Locations
- 3.4 Entering and Exiting Traffic
- 3.5 Searching and Yielding at Intersections

3.1 – Signs, Signals and Pavement Markings

Drivers can use traffic signs as cues

Drivers can better predict what they will have to do if they recognize the shape of warning signs. Yellow diamond shaped warning signs warn of upcoming danger that might require the driver to stop or slow down. It is a good idea after seeing a warning sign to check the rear-view mirror to be prepared for a stop or slow-down. Also, let the detection of a warning sign serve as a cue to check how your intended path-of-travel is changing.

Background Uniform Vehicle Code

Although each state governs its own traffic, the same basic traffic controls are used throughout the nation. Each state has adopted the standards in the Uniform Vehicle Code and Model Traffic Ordinance.

Three Categories of Traffic Sign Colors and Shapes

Regulatory Signs – Tell a driver what can and cannot be done

- Remind road users of specific rules (obligations, prohibitions, etc.) that apply in each traffic situation where they are posted
- Background colors are red, white, and black
Ex: Stop, Yield, Wrong Way, Do Not Enter, Do Not Pass, Railroad Crossbucks, Speed Limit, One-Way, Lane-use Control, Traffic direction, Prohibitory, Parking + Stopping, Pedestrian, Heavy Vehicle
- Shapes - Octagon, Triangle, Rectangle, Crossbucks

Warning Signs – Warn drivers of possible dangers, but with the exception of construction signs, do not have the force of law

- Draw the attention to immediate danger or upcoming regulatory signs
- Background color is yellow or orange
- Shapes - Diamond, Pennant, Round, Pentagon, Rectangle

The diamond shape indicates that danger is ahead

Ex: School signs, Advance regulatory signs, Advance turn or curve signs, Advance crossing signs, Advance intersection signs, Lane reduction signs, Divided Highway signs, Railroad signs, Converging roadways, Warning - no passing zone- sign, Obstacles in the roadway, Hill signs, Hazardous road sign

Construction Signs – Are special warning signs that draw the attention of road users to road repairs, detours, special road closing for sports events, etc.

- The background color is orange
- The diamond shape indicates that danger is ahead

- Speed, work site limits, conditions in the worksite
- Barricades have orange and white, black, and white, or black and yellow stripes
- Lines alternate, Lines angle down to indicate direction of travel

Guide Signs – Help the driver stay on the correct route and designate services and other interesting information

- Provide information (route markers, directions, destinations, services, points of interest or recreation)
- Background colors are: Blue + Red, White + Black, Green, Blue, and Brown
- Shapes - Rectangle, Shield, Trapezoid, Square
- Guide signs should be used to warn of any turns. If possible, a passenger could watch for guide signs.

Traffic Signals

Traffic signals include those for traffic control, pedestrian direction, and lane-use signals

- Traffic control signal is the red, yellow, and green set of lights found at intersections
- Traffic signals may be horizontal or vertical
- A red light means the driver must stop and is located at the top when mounted vertically or on the left when horizontal
- A steady yellow light warns the driver that a red light will follow and is located in the middle whether mounted vertically or horizontally
- A flashing yellow light indicates to proceed with caution
- A green light allows the driver to go ahead and is at the bottom when mounted vertically and on the right when horizontal
- Arrows within a light direct the driver to do as the arrow indicates
- Traffic signals are positioned above the roadway or on the side of the road
- WARNING: turns on red lights are not universal

Pedestrian signals at intersections are for controlling pedestrian traffic

- Signals will flash “walk” or “don’t walk.” (An auditory signal for the blind may also be present.)

Lane-use signals help to move cars over a roadway more efficiently

- An arrow in the signal means the lane of traffic is open
- A yellow X in the signal indicates the traffic lane will soon close
- A red X in the signal indicates the lane is closed to traffic

Crossing gate at railroad crossings

- Red flashing lights, bells, fail-safe railroad gates

Pavement Markings

Pavement markings regulate, warn, and guide drivers. Lane lines, arrows, and lettering are painted on the roadway surface. Pavement markings are present in locations where pedestrians or drivers need special directions. These markings can be in the form of words, symbols, or lines.

- Some pavement markings accompany signs
- Pedestrian crosswalks are lines painted across the roadway

Solid yellow center lines separate traffic moving in opposite directions. Keep to the right of this line. Do not cross unless turning left on or off the roadway.

Broken yellow line separates traffic going in opposite directions. Both directions may cross this line. Passing permitted on a two-lane highway in either direction.

Double solid yellow lines separate traffic going in opposite directions. Keep to the right. Crossing is prohibited in both directions. Passing is prohibited in both directions. Left turns from roadway permitted.

Solid yellow line with a broken yellow line - passing is prohibited on the solid yellow side. Traffic with the broken line may pass.

Yellow dots separate traffic going in opposite directions as lane guide markers. Keep to the right of this line.

Double broken yellow lines are reversible lane lines.

Solid white line - Do not cross. It is usually a fog line along the right side of the roadway, marking the edge of the travel portion of a roadway. Stay to the left of this line.

Broken white lines separate traffic going in the same direction. You may cross this line.

White dots lane markers help with lane designation and direction when turning.

Double solid white lines separate traffic going in the same direction. Both lanes of traffic cannot cross.

White barrier line - Treat this line as if it were a concrete barrier. This line is twice as wide as a normal lane line. Do not cross.

One or two-way streets - One-way streets are usually marked with arrows mounted on corner posts. If overhead signals are in use, the markings are usually located near the overhead signals.

Reversible Lanes - During rush hour in some large cities, additional lanes are designated for traffic traveling into or out of the city. Identified as reversible lanes, they are marked with special double-yellow broken lane line markers. In addition, signs at the side of the road and overhead signals identify which lanes can be used.

Two-way left turn lanes are marked with solid and broken yellow lines on both sides of the lane and white turn arrows that indicate that drivers traveling in either direction can use the lane. Two-way left turn lanes are designated for vehicles preparing to make left turns. (See ORS 811.346 Misuse of special left turn lane)

Lane markings on expressways mean the same as they do on any other roadway. The solid yellow line should always be to the driver's left side. Broken white lines separate lanes of travel going in the same direction. Solid white lines mark the right edge of the roadway or entrance and exit lanes. High occupancy vehicle (HOV) or special vehicle lanes are marked with a white diamond and have restrictions on the number of passengers in any vehicle traveling in this lane.

Review Sign Shapes

Drivers can better predict what they will have to do if they recognize the shape of warning signs. Yellow diamond shaped warning signs warn of upcoming danger that might require the driver to stop or slow down. It is a good idea after seeing a warning sign to check the rear-view mirror to be prepared for a stop or slow-down. Also, let the detection of a warning sign serve as a cue to check how your intended path-of-travel is likely to be altered.

Responding to Stop Signs and Yield Signs

The major objective of erecting a stop sign at an intersection is to organize an efficient way for cars to occupy space within the intersection without conflicting with each other. Therefore, by making a stop, a driver will have enough time to make a good search of the intersection and have sufficient time when other vehicles and pedestrians are present to determine who should be granted the right of way. When a stop sign is displayed, rather than a yield sign, it tells the driver that the design of the intersection, the volume of traffic, or the speed of traffic is such that a stop sign will give the driver a better opportunity to enter the intersection in a safe manner.

To make a legal stop at a stop sign controlled intersection is one aspect of what the stop sign means. The other aspect is to be certain that you grant the right of way to other traffic. To be able to grant the right of way requires effective searching techniques. Effectively searching an intersection requires the driver to properly position the vehicle at a point where a search of 90 degrees to the left and 90 degrees to the right will give a deep search (to the target area) to detect any fast-approaching vehicles. In addition to searching 90 degrees to the left and right, we should also always search to the front.

The legal stop position is where the front of the car is even with the stop line. If there is no stop line or a marked crosswalk, stop before entering the crosswalk. If there is no stop line and no crosswalk, (marked or implied) you must stop before entering the roadway, before the curb line. Wherever you stop, it must be a stop. The real purpose of a stop sign is to be certain that the intersection is clear before you move into it. Therefore, your search of the intersection must check effectively the left, front and right.

Responding to Traffic Signal Lights and the Point of No Return

When approaching a green light, be prepared for the light to change to yellow. The point of no return is the point at which you are not able to stop without entering the intersection.

Red Light and Right Turn on Red

When you see a red light, reduce your speed to time your arrival into an open zone with a green light. When making a right turn on a red light, make a legal stop and check the intersection.

Yellow Changing Lights

The purpose of a yellow light is to warn drivers that a red light is coming and to allow time to clear the intersection of traffic. By knowing where your point of no return is, you will see the light changing and be able to make your best decision.

Green Light, Search Intersection

Do not expect that a green light will prevent other drivers from coming into your path. Always search the left, front, and right before entering an intersection.

Green Arrow to the Right

You are allowed to turn right at a red light. You must yield to pedestrians and other traffic.

Green Arrow to the Left

Oncoming traffic should yield the right of way to you.

Green Arrow Pointing Up

You are allowed to drive in that lane.

Yellow Arrow

Means that a change in the flow of traffic is about to take place.

Red Arrow

A red arrow means you cannot go in that direction. However, when making a right turn on a red traffic light with a red arrow, a turn on red is permitted unless a sign is posted prohibiting the turn.

Significance of flashing traffic lights

Emphasize that a flashing traffic light is used to give an early warning of a potentially dangerous intersection. The decision to spend thousands of dollars to install flashing lights are generally made only after there have been a number of collisions at that location. When you do see a flashing yellow or red light at an intersection become extra alert for problems.

A flashing red light has the same meaning as a stop sign.

A flashing yellow light means that you should be aware of potential problems.

Right of Way Laws

Explain that the law does not allow drivers to take the right of way. Instead, it indicates when they must yield and give the right of way to others.

You must yield:

- To pedestrians giving intent to cross or in a crosswalk
- To oncoming traffic when turning left
- When entering a main road from a side road
- To traffic on your right
- To emergency vehicles
- To all traffic and pedestrians when backing
- To school buses when red lights are flashing on either side of roadway unless on opposite side of roadway separated by a median or other barrier

Review significance of solid yellow lines

Explain that a solid yellow line indicates there are blockages against crossing it. The most common restriction is that a driver is not allowed to cross the solid yellow line to pass a moving vehicle. If there is an obstacle, such as a stopped vehicle blocking a driver's path of travel, it is permissible to cross the yellow line if it can be done safely.

Review importance of yellow pavement markings

Explain that understanding that yellow pavement markings mean there is two-way traffic can be vital information when driving in unfamiliar areas. For example, this knowledge could prevent a driver from making a turn into the wrong lane of a one-way street. Being that yellow pavement markings separate opposing traffic flows, by seeing the yellow pavement markings, a driver knows that the car should be positioned to the right of that line.

Review yielding when making a right-turn-on-red

Explain that the driver must assume primary responsibility for yielding when making a right-turn-on-red. All pedestrians must be clear of the intersection before the turn is made. Stress the difficulty of checking at the same time for traffic from left and for pedestrians from the right.

Review pavement markings and signs

Explain that although there are white arrows painted on the pavement at intersections to indicate lanes for going straight or for turning, they often cannot be seen early enough for drivers to make lane selection decisions. To help give drivers advance notification of the lane usage, there are white rectangular signs mounted at curbside to show how the lanes should be used. These signs can be seen from a greater distance than the pavement marking

3.2 - Search and Identify

Introduction to Line-of-Sight or Path-of-Travel

Any condition that blocks your view is a vision restriction. They always limit your ability to ~~get good~~ gather information about the condition of your intended path. Path restrictions temporarily or permanently prevent you from occupying space. And some things block your path and your view!

Search – Identify – Manage (SIM)

Search – Identify – Manage (SIM) is the space management process used to gather information and respond to restrictions. SIM is used continuously from the approach to your vehicle until you park and walk away.

- Search- Search to the target area for any restrictions
- Identify- Identify the solutions needed to manage restrictions and start to apply them
- Manage- Manage your space by re-evaluating and adjusting your solutions before reaching the point of no return

Before entering any space, you must know if it is available.

Correct searching patterns allow you to gather information prior to occupying a space. Gather all the information available before putting your car in motion

Turn your head and look before moving. Ensure that your path is clear.

MSMOG- Blind Spot Check Process

- Mirror
- Signal
- Mirror
- Over the Shoulder
- Go

Searching Intersections

45° search- used when a stop is not required. Search 45° to the left, front and right

90° search- used when a stop is required. Search 90° to the left, front and 90° to the right as far as you can see down the roadway

3.3 - Stopping Locations

Stopping Locations

There are three legal stop locations.

First is the **stop line**.

Second is the **crosswalk or implied crosswalk** (an implied crosswalk is where a path or sidewalk lead up to the edge of the roadway, but there is no painted crosswalk on the road). Third is the **curb line**.

You can also make a **Staggered Stop**, which is 15 feet back from any of the above stopping locations.

This gives large vehicles room to make their turns. To locate this position, use your forward reference point.

When you are the first car approaching an intersection, there are three possible stop positions.

1. **Staggered Stop** refers to stopping or preparing to stop, at a point where you can see the stop line to the front of your car. This will place your car approximately 15 feet, or one car length before the line.
2. **Legal Stop** is at the stop line, crosswalk, or implied crosswalk (pedestrian crossing or sidewalk)
3. **Safety Stop** is at the curb line to best see traffic.

3.4 - Entering and Exiting Traffic

The learner will be able to describe the steps needed to enter traffic smoothly and safely from a stopped position.

Before Entering Traffic Flow

Evaluate Intended Path to Enter: Search to your target area to see if the path you intend to enter will be open. This evaluation is helpful for knowing if your path of travel is available and determining how much acceleration should take place.

Mirrors - Blind Spot Check: Search the inside mirror and the outside mirror on the side that you will be entering. Then make an over-the-shoulder check or use a convex mirror mounted on the outside mirror before moving to a new side position.

Locate Gap to Enter: When you do see cars that are preventing you from entering the traffic flow, look beyond the vehicles you are waiting for to locate a suitable gap in the traffic flow. The gap in traffic is the space between vehicles within a traffic cluster. When traffic bunches up at red lights, clusters of traffic form. When the light changes to green, it is common for traffic to move together in a cluster.

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

Avoid Hesitation: Once you're certain of a safe gap, go for it.

Look to Target Area: Look to your target to focus your concentration on the path you are ready to enter.

Side Position - Reference Point: Select the proper and legal lane to enter the traffic flow. Then, use the reference point to enter in Lane Position 2 if entering from the right to left (pulling away from curbside). When entering a traffic flow to the right, enter in Lane Position 3. Use lower fringe vision to see the reference points.

Steering Technique: Use pull-push steering. Entering from right to left, you should begin with your left hand at the 8 position and your right hand at the 4 position. Move the steering wheel as little as possible.

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

After Entering Traffic Flow

Cancel Signal: Since you may not have turned the steering wheel enough to allow the signal to cancel automatically, you may have to turn it off manually.

Accurate Tracking Path: Make the car go where you want it to go.

Re-evaluate Rear : Get a rear space update for the new traffic flow you just entered.

Look for new restrictions: Evaluate your new target area and the targeting path you will occupy.

Crossing Traffic Flow at Intersections

Crossing intersections can be one of the most dangerous maneuvers a driver will perform. There are more crashes at intersections than at any other location. The major behavior to emphasize is effective searching of the intersection to the left, front, and right. Effective intersection searching will occur during several lessons.

Hill Parking

- Choose a legal space and signal
- Check your rearview mirror and **Blind Spot** to the side you are planning to park
- Apply the brake and approach parallel to and 6 – 12 inches from the curb
- Make a smooth stop and shift to “Neutral”

- Turn the wheels in the proper direction
 1. Facing **up hill with curb, turn the wheels left** towards the roadway. This allows the back of the front tire to rest against the curb rather than rolling into or out of the roadway
 2. Facing **down hill with curb, turn wheel right** away from the roadway. This allows the front tire to rest against the curb rather than rolling into or out of the roadway.
 3. Where there is **no curb, turn the wheels right** away from the roadway. This allows the vehicle if it should roll when unattended, to roll away from the roadway rather than into the path of traffic.
- Secure the vehicle by setting the parking brake and shifting to “Park” to ensure it does not roll when unattended.

3.5 - Searching and Yielding at Intersections

Intersections:

An intersection is a place where two or more roads come together. Intersections can be controlled by signs, signals, or markings. They are designed to manage traffic flow and assign yielding responsibilities

Types of Intersections

Controlled: An intersection with either a traffic signal or a sign, directing yielding responsibility

Uncontrolled: An intersection that has no signs or signals to regulate traffic

Searching Intersections

45° search- used when a stop is not required. Search 45° to the left, front and right

90° search- used when a stop is required. Search 90° to the left, front and 90° to the right as far as you can see down the roadway

Intersections Controlled by Traffic Signals

Before entering a signalized intersection, check again for oncoming vehicles signaling a left turn, pedestrians in the crosswalk, bicyclists, and cross traffic to make sure that cross traffic is stopped before moving. Whether first in line or in a line of vehicles, develop the habit of checking traffic and counting to three before moving. This provides some protection against drivers who fail to stop for the red signal or drivers ahead who suddenly brake to stop. If turning right, yield right-of-way to pedestrians in the crosswalk. Where there is more than one right turn lane, exit and enter the corresponding lane and be alert for drivers crossing or drifting into your lane while making the turn. Remember that when turning right on red, you must first stop and yield right-of-way to any vehicles, bicycles, or pedestrians in your path-of-travel. While many signalized intersections of multi-lane streets and faster moving traffic provide special left turn lanes and/or delayed or advanced left turn signal lights, such protection is not always available. When such protection is not provided, the risk associated with a left turn can increase sharply.

Yielding the Right of Way

Yielding simply means you must slow or, if necessary, stop your vehicle to allow another vehicle or pedestrian to continue safely.

A right-of-way law does not give anyone the right of way; it only says who must yield. Stop signs, yield signs, and traffic lights control traffic at busy intersections. They tell drivers who may go without stopping or who must stop and yield right of way to other drivers, bicyclists, or pedestrians.

There will be many times when you will need to yield or slow down so another vehicle can proceed safely.

You must look and yield the right of way to any vehicle in, or approaching, the intersection at the same time from your right where there are no signs or signals.

Some important rules and guidelines about right of way are covered in the Oregon Vehicle Code:

- Failure of driver entering a roadway to yield right of way ORS 811.280
- At uncontrolled intersections ORS 811.275
- Acceleration or merge lanes ORS 811.285
- Obstructing cross traffic ORS 811.290

Other Yielding Situations to Know and Remember-

To blind persons: They may be carrying a white cane or be accompanied by a service animal.

At any intersection: Yield to any traffic that is already in the intersection.

To prevent a collision: If someone doesn't yield to you when they should, yield to them and be courteous about it.

At a roundabout: You're required to yield to any traffic already in the roundabout and pedestrians.

To emergency vehicles: When you hear the siren of an approaching ambulance, fire truck, or police car, prepare to pull to the right edge of the roadway and allow them to pass. If you're stopped when they are approaching and you are unable to move, just stay put.