

Bicyclist's Safety Principles & Practices to Avoid from Oregon DOT

This booklet was prepared to help adult bicyclists and parents of younger bicyclists understand how to ride safely and legally on the streets, roads and highways of Oregon. This manual condenses and paraphrases language in the Oregon Revised Statutes. It also provides safety advice not included in the law. This manual is not a proper legal authority to cite and should not be relied upon in a court of law. Traffic regulations in cities, towns and counties may go beyond state laws, as long as they do not conflict with state law.

For a complete copy of the statutes relating to bicycling, please consult the Oregon DOT. The statutes relating to bicycling are found in Chapter 814 of the Oregon Revised Statutes.

Congratulations!

Bicycling is an inexpensive and efficient form of transportation for short trips around town. By riding a bicycle, you are helping everyone by reducing traffic congestion, wear and tear on our roads and the need for more roads and parking. You are keeping the air clean and neighborhoods quiet, while saving petroleum. You are improving your own health and well-being through regular exercise.

You have a right to ride your bicycle on Oregon's roads, streets and highways. Some basic safety principles will help you enjoy a safe ride.

The four basic principles

Most bicycling injuries do not involve a crash with a motor vehicle. Bicyclists are more likely to fall or hit fixed objects such as a mailbox or a parked car. To avoid these crashes, follow **principle #1: maintain control of your bicycle**. Never ride while under the influence of alcohol or drugs. DUI laws apply when you're riding a bicycle.

Most crashes with motor vehicles happen at road intersections and driveways, where bicyclists and motorists cross paths. To avoid these crashes, follow **principle #2: ride on the right, with traffic, in a predictable manner**.

When motorists and bicyclists collide, the fault is about evenly split between them. Even if you ride responsibly, some motorists may not see you. So remember **principle #3: be visible and ride alertly**.

Finally, **principle #4: protect yourself**: wear a helmet to reduce the risk of head injury in the event of a crash.

PRINCIPLE #1: MAINTAIN CONTROL OF YOUR BICYCLE

There are many things you can do to control your bicycle, even in an emergency.

First, make sure your bike is the right size and adjusted to fit you properly. The right size bicycle is easier to control and more comfortable, causing less fatigue. Your local bike shop can help you choose the right size bicycle for you.

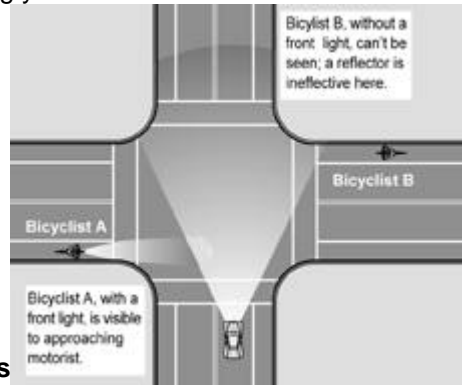
Make sure your bike is in good working order. You should inspect it regularly. Here are some important parts to check:

Brakes must be powerful enough to let you easily bring your bicycle to a stop. You should be able to easily reach the brake levers.

Tires should be in good condition and inflated to their recommended pressure.

Luggage racks and **saddle bags** let you carry a load while keeping your hands on the handlebars for steering and braking.

Lights are required by law when riding after dark. You or your bicycle must have a white light visible at least 500 feet to the front, and a red light or reflector visible at least 600 feet to the rear. These are the minimum requirements. More powerful lights will make you more visible to others, and help you see road hazards. A rear light is more visible than a reflector. Front white reflectors are not visible to motorists entering from a side street and do not meet legal lighting requirements.



Effectiveness of bike lights

Fenders keep you dry and clean. They also prevent lights and reflectors from getting dirty in wet weather.



Mountain bikes and hybrids are easier to control than many older bikes. They are well-suited for city riding thanks to their upright sitting position, modern gear shifters and brakes, rugged construction and maneuverability.

To improve your riding skills, practice in an area away from cars. Learn to ride while looking ahead, to the sides and over your shoulder (this is needed to check for traffic before turning). Avoid distractions such as listening to a personal stereo while riding.

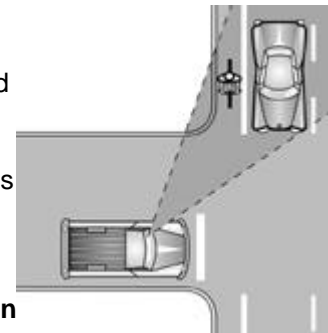
This cyclist has lights, fender, luggage rack and helmet

Principle #2: Ride With Traffic

In Oregon, a bicycle is a vehicle by law. When riding your bike on a road, you have the same rights and duties as other road users. With a few exceptions, the rules of the road for drivers apply to you. Consult the Oregon Driver's Manual to become familiar with these rules.

The most important rule to remember is **ride on the right, in the same direction as the traffic next to you. It's the law.** This way you will be seen by others. When drivers enter a road, change or cross lanes, they know where to look for possible conflicts. If you are riding with traffic, you are more visible and drivers will more likely yield to you.

When riding in a bike lane, you are still required to ride in the same direction as the traffic next to you. Riding with traffic also shows you are responsible and will help you gain the respect of other road users.



Ride with traffic to be seen

How far to the right you should ride

Riding on the right doesn't mean hugging the curb or edge of the road. This may not be the best place to

ride. For example, if you hit the curb, you could lose your balance and fall into traffic. Other times when you shouldn't ride too far to the right include:

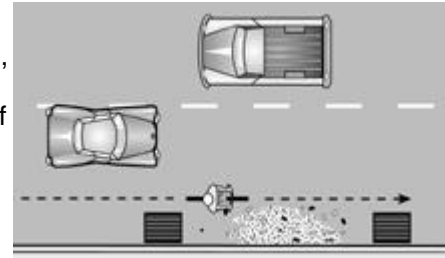
- When avoiding parked cars or surface hazards;
- When a lane is too narrow for a bicycle and vehicle to travel safely side by side;
- When making a left turn;
- When you're passing another bicycle or car;
- On a one-way street, you may ride on the left as long as you are riding with traffic.
- To avoid conflicts with right-turning cars.

The above exceptions also apply to riding in a bike lane.

Road surface hazards

Keep an eye on the road ahead. Avoid running over potholes, gravel, broken glass, drainage grates or other unsafe road conditions. But first look over your shoulder to avoid swerving suddenly into traffic. If necessary, signal before moving over.

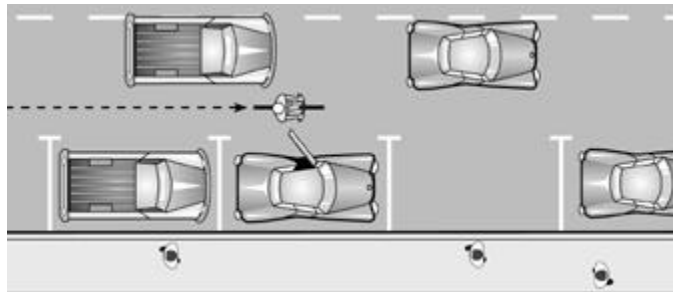
To make riding safer for you and other bicyclists, report unsafe road conditions to local authorities as soon as possible.



Avoid Road Hazards

Parked cars

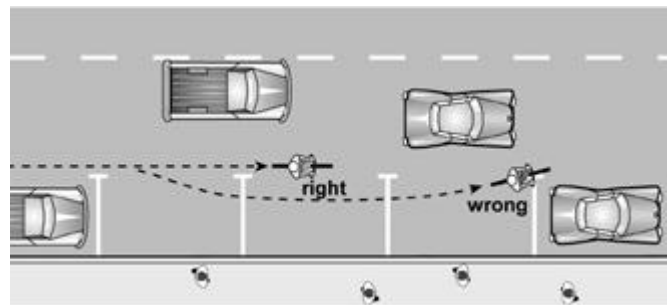
Ride far enough away from parked cars so you don't risk being hit by an open car door.



Avoid open car doors

Ride in a straight line

This will make you more visible to motorists. Don't weave in and out of parked cars you may disappear from motorists' sight and get squeezed when you need to merge back into traffic.



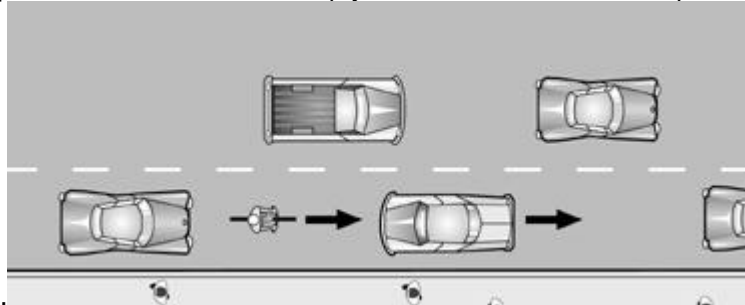
Don't weave in and out of parked cars

Riding side by side

You and a companion may ride side by side on the road, but only if you don't impede other traffic. If traffic doesn't have enough room to pass you safely, ride single file.

When you should take a lane

If there is no shoulder or bike lane, and the travel lane is narrow, ride closer to the center of the lane. This will prevent motorists from passing you when there isn't room. You should also take the lane when you're traveling at the same speed as traffic. This will keep you out of motorists' blind spots and reduce conflicts



with right-turning traffic.

Occupy more of the travel lane if it is narrow or if traffic is moving slowly

Obey traffic signs & signals

Stop at STOP signs and red lights. Rushing through a yellow light may not leave you enough time to make it across the intersection before the light changes.

Useful tip: *Downshift before stopping at an intersection. This will help you cross the street more easily when you start again.*

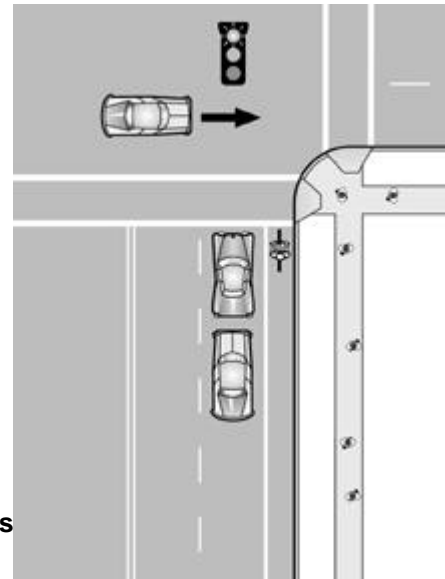
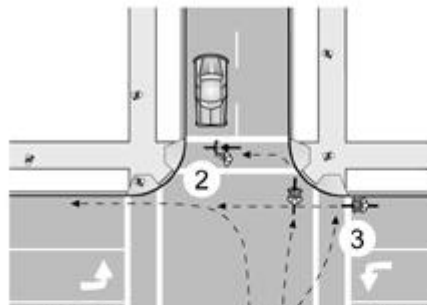
Making a left turn

There are several ways to make a left turn on a bicycle:

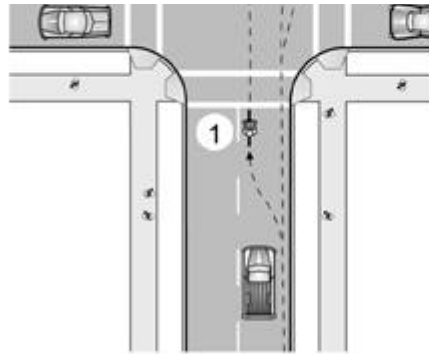
Stop at red lights and stop signs

As a vehicle. As you approach the intersection, look over your left shoulder for traffic and, when clear, signal your turn (see page 9), move over to the left side of the lane (on a two-lane road), or into the left lane or the center-turn lane (1). You should be positioned so cars going straight through can't pass you on the left. Yield to on-coming cars before turning. If you are riding in a bike lane, or on a road with several lanes, you need to look and signal each time you change lanes. **Never make a left turn from the right side of the road, even if you're in a bike lane.**

"Box-style." Proceed straight through the intersection on the right. Then stop, and either cross as a pedestrian in the crosswalk



(2), or make a 90 degree left turn and proceed as if you were coming from the right (3). If there is a signal, wait for the green or WALK signal before crossing. Yield to pedestrians in crosswalk.

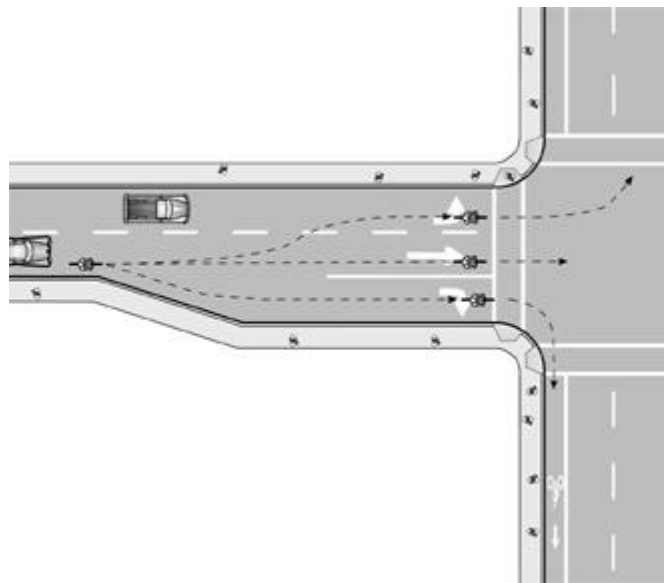


How to make a left turn

Turn lanes

When you approach an intersection with several lanes, choose the one with the arrow pointing where you want to go. You may get cut off by turning cars if you're in the wrong lane. If there is a straight through bike lane, use it only if you're going straight ahead.

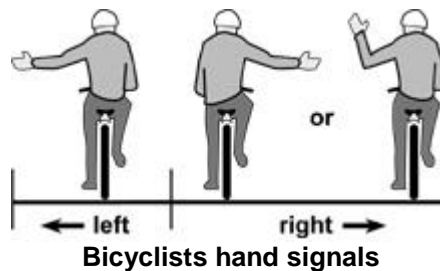
If you can't make it across traffic to the correct lane, use the crosswalk instead.



Choose the correct lane

Use hand signals when turning

Signal before making a turn to warn traffic behind you. To signal a left turn, look behind you, then hold your left arm out. To signal a right turn, either hold your right arm out, or hold your left arm up, with bent elbow. You don't have to keep your arm out through the turn - you may need both hands on the handlebar to keep control of your bicycle.



Passing other vehicles

Pass on the left. Only pass a vehicle on the right if it is signaling a left turn, or if you are in a dedicated travel lane, including a bike lane.

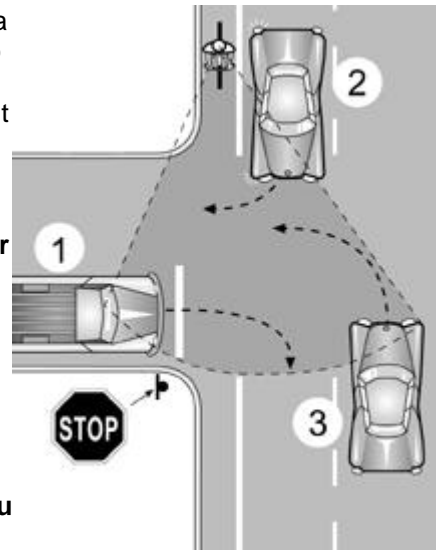
You may pass on the right in a bike lane, but do so cautiously. Some drivers may want to turn right at the next driveway or street. They may not see you if they aren't looking your way. Ride at a reasonable speed, and scan carefully for right-turning cars (see drawing below). If a car ahead of you is signaling a right turn, do not pass on the right.

PRINCIPLE #3: Be Visible & Ride Alertly

Even if you obey all traffic laws, there's always a risk of being hit by a motorist who isn't obeying the laws, or who simply didn't see you. So **ride cautiously**, because cars waiting at stop signs, at driveways or parking spaces may suddenly pull out in front of you **(1)**. Also look out for cars that have just passed you and may turn right **(2)**, and cars across the street that may turn left in front of you **(3)**.

Try to establish eye contact and be prepared to stop suddenly or to take other evasive action.

You can also increase your visibility by **using lights and reflectors at night** (see [Principle 1](#)) and wearing light or bright colored clothes. Red isn't a good color for evening riding, because red looks black in the fading light. Yellow and lime green are very effective.



Scan the Road Around You

PRINCIPLE #4: Protect Yourself

Even the most careful riders can fall or get hit by a car. To protect your most valuable asset, your brain, **wear a helmet**. A properly worn bicycle helmet can reduce the severity of brain injuries by up to 85%.

In Oregon, all bicycle riders and passengers under sixteen years old must wear a helmet while riding on a public way. Helmets must be approved by either ANSI (American National Standards Institute) or the Snell Memorial Foundation.

Proper fit is important. For more information, the "Get Head Smart" brochure is available from the BICYCLE SAFETY COORDINATOR (see address below).

Traffic Safety Section
Mill Creek Office Park
555 13th Street NE
Salem, OR 97310
Phone: (503) 986-4190

If you do crash, inspect your helmet; if there are any signs of damage, it may no longer protect you replace it immediately.

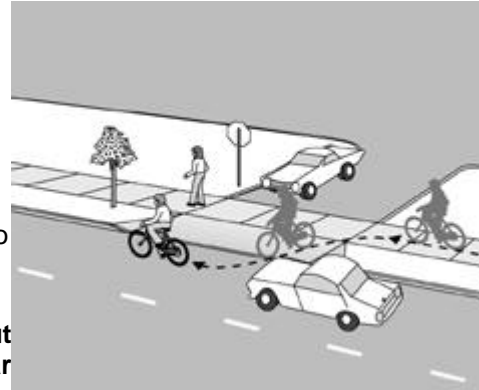
Practices to Avoid

Now that you know what to do, you should also know what to avoid. The following behaviors cause crashes and create an image of bicyclists as irresponsible and foolish:

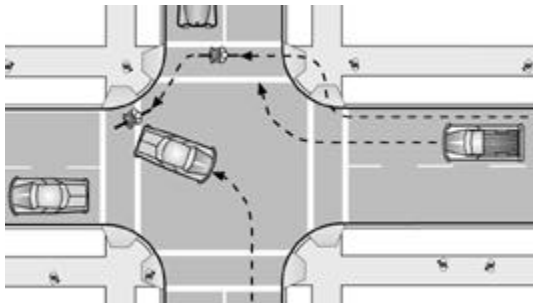
Don't dart out suddenly onto the roadway

When entering the road from a driveway, always yield to traffic. It is dangerous to alternate between the sidewalk and road, by hopping the curb or using driveway cuts. If you ride on the sidewalk, motorists may not see you, and may not have time to react and give you space if you suddenly enter the road.

At intersections, stay on the road. Don't ride in the crosswalk and suddenly reappear on the road again. A driver, thinking there is no one there, may lose sight of you, turn the corner and hit you.



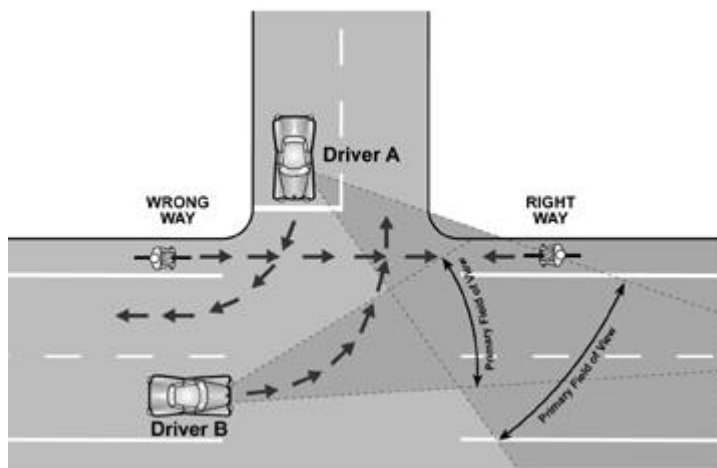
Darting out onto the road can put you in the path of a moving car



Alternating between riding on the road and riding in a crosswalk is confusing to drivers.

Never ride against traffic

Wrong-way riding is against the law. It's one of the leading causes of crashes, accounting for 15% to 20% of all crashes with cars. Riding against traffic is often based on the fear of traffic hitting you from behind, and a sense that looking at on-coming traffic will prevent crashes. In reality, bicyclists are rarely hit from behind.



Hazards of wrong-way riding: Driver A is looking for traffic on the left; driver B is looking for traffic ahead; in both cases, a wrong-way bicyclist is not in the driver's main field of vision.

The biggest danger of riding the wrong way is at intersections: you may not be seen by drivers entering, crossing or leaving the roadway. They are expecting traffic coming from the other direction, not a wrong-way cyclist.

Another danger of wrong-way riding is the speed of cars coming at you:

- If you're riding the wrong way at 15 MPH, then a car going 35 MPH is coming towards you at 50 MPH, leaving little reaction time.
- If you are riding the right way at 15 MPH, and a car gaining on you is going 35 MPH, then the difference is only 20 MPH, giving the driver more time to react.

You also risk a head-on collision with cyclists riding in the proper direction.

The problem is made worse when riding the wrong way on one-way streets: you can't see signs and traffic signals.

Oregon DOT