

BICYCLING

How to Use Transportation Options in Florida





SafeMobilityFL.com

Bicycling is not only a popular way to exercise but is also a good transportation option for people of all ages. In 2021, People for Bikes reported that in 2020 Americans were riding bicycles at unprecedented levels, as bicycling rates surged across all demographics.

The goal of this booklet is to help you achieve mobility independence by giving you the information you need to be a safer cyclist while guiding you to use your bicycle as a transportation option to get around your community.

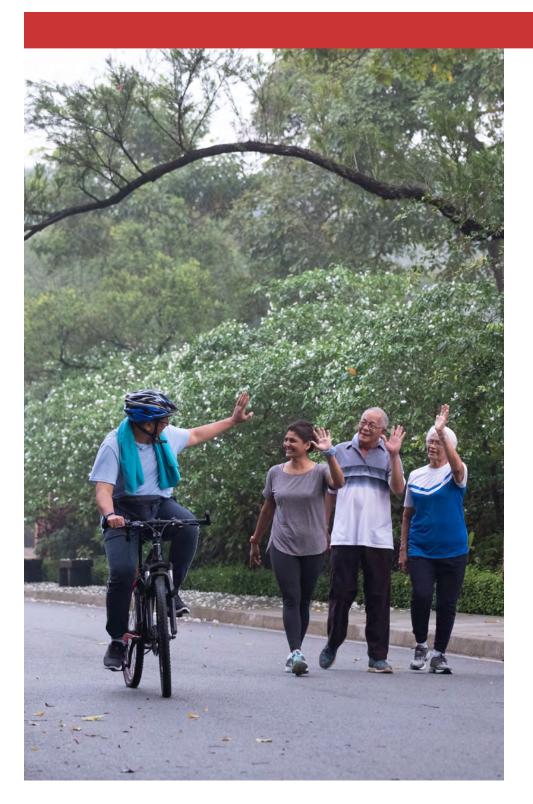


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GETTING READY TO RIDE



Whether going a short distance or for a longer ride, it is important to prepare both you and your bicycle.

- > Before starting a new bicycling routine, it is a good idea to talk with your healthcare provider about any health issues that could limit or prevent you from bicycling.
- You can wear everyday clothes but make sure you dress according to the weather and conditions.
- > Stay hydrated. For longer rides, bring a water bottle and a snack.
- > Wear sunglasses to protect your eyes from sun glare and any debris.
- Consider wearing bicycle gloves since they help distribute pressure across your palms and can help protect your hands from blisters and sun damage.

TIP

When riding in warmer weather, make sure to protect your skin with sunscreen and consider wearing long sleeve shirts and pants made of performance fabric.

TIP

When riding in cooler weather, remember that the wind will make it feel even colder. Wear multiple layers and consider wearing gloves, a scarf, or earmuffs.

- > Tuck in shoelaces to keep them from getting caught in the chain or gears.
- When wearing long pants, make sure to roll up loose pant legs or wear a leg band to keep them from getting caught in the chain or gears.
- Carry identification, money, and a cell phone for emergencies. Even if it is a short ride, it is a good idea to tell someone where you are going.
- Never carry bags in your hands or hanging off your handlebars since that affects the control and balance of your bicycle.
- > Consider having racks, bags, and/or a basket installed on your bicycle. You could also wear a backpack.





BICYCLE SELECTION

There are many different types of bicycles that reflect the different riding styles and needs of bicyclists. If you have not ridden or have been using the same bicycle for many years, it might be helpful to visit a local bicycle shop to learn which type best fits your needs.







Adult tricycles are threewheeled bicvcles, ideal for those with balance issues or other special needs.

Recumbent bicycles are designed to be more comfortable with a lower. reclined seating position.



Step-through bicycles are designed with a low entry frame and an upright seating position, ideal for those with mobility issues.



Hybrid bicycles combine features from both road and mountain bicycles, designed to handle a wide range of riding conditions.

In addition, a local shop can ensure your bicycle is the correct size as well as adjust the seat and handlebars for your comfort and safety. Here are some questions to think about when choosing a bicycle:

- How much can you spend?
- What kind of terrain will you be riding on (flat or hilly)?
- Will you be riding on-road, off-road, or both?
- Do you have any physical limitations? If so, a three wheeled bicycle or recumbent may be more stable and comfortable.
- > Are you able to get on and off a bicycle with ease? There are a variety of low-entry/step-through frames that make getting on and off a bicycle easier.

Electric Bicycles

An electric bicycle (e-bike) may allow you to travel more often and farther than when riding a traditional bicycle. Recent research has found that e-bikes can increase cyclists' confidence and



reduce barriers to cycling such as hills and discomfort from sweat. If physical ability is a concern, an e-bike can be an effective tool to help you ride safely.

Keep in mind that many e-bikes can be more difficult to transport due to the additional weight of the electric motor and battery. Be mindful of your speed as you may need more distance to come to a stop safely. To adjust to these changes before riding your e-bike on the road, allow time for additional practice in a safe area.

FINDING THE RIGHT FIT

A bicycle that fits properly is very important to your overall comfort and safety. While adjustments can be made to the seat height and handlebars on most bicycles, the size of the frame cannot be adjusted. There are no exact rules as to what bicycle size to choose based on your height. However, a general rule is that when you stand over the frame, there should be:

- One to two inches between you and the frame of a road or hybrid bicycle.
- > Three to four inches between you and the frame of a mountain bike.
- > A slight bend in your knees with the pedal pushed down when seated and your feet flat on the ground if on a cruiser or step-through/low-entry frame.

Once you choose the proper size frame, you can adjust the seat and handlebars for comfort. For beginners, lower the seat so you can touch the ground with feet flat when seated. As you become more comfortable on the bicycle, raise the seat so that you have only a slight knee bend when the pedal is pushed all the way down (6 o'clock position). As mentioned before, a bicycle shop can help you make sure you and your bicycle fit properly.

DID YOU KNOW?

Bicycle helmets can range from under \$20 to around \$300, but each helmet must pass the same safety standards of the Consumer Product Safety Commission (CPSC). Always look for the CPSC sticker when purchasing a new helmet.

HELMETS

No matter how far you ride, it is important to always wear a bicycle helmet. Wearing a helmet can significantly reduce the severity of a head injury in the event of a crash.

Bicycle helmets come in various sizes and styles. Taking the time to properly fit your helmet is important for both comfort and safety.



When properly fit and tightly fastened, a bicycle helmet should:

- Sit level on your head, and not over your eyebrows or far back showing your forehead. There should be one to two fingers of space between your eyebrows and the helmet.
- > The side straps should form a "V" under your ears.
- The center buckle under your chin should be secured and snug so that no more than two fingers fit between your chin and the strap.
- Check the fit. Make sure the helmet does not move when nodding or shaking your head.
- Any helmet involved in a crash, or impact, must be replaced and not used again.



Can you
place just
two fingers
between your
eyebrows
and your
helmet?



Do the straps join in a "V" just below the ears?



Can you
fit just two
fingers
between the
helmet strap
and your
chin?

SAFE RIDING TIPS



Whether you are a first-time rider or getting back on the bicycle, learn how to safely include bicycling as a mode of transportation with these safe riding tips.

Always be predictable:

- > Ride with the flow of traffic and in a straight line. Do not weave through the road or in-between cars.
- > Use hand signals and look behind you for traffic before changing lanes or turning.
- Make your intentions clear by making eye contact with motorists.

Always be visible:

- > Ride where others can see you.
- > Wear bright colors and/or reflective clothing/vest to be more visible.
- > Use lights during the day, and lights and reflectors at night.

Always be aware:

> Pay attention to your surroundings, stay alert, and ride defensively.

- Always look ahead for potential hazards including road debris, potholes, parked or turning cars, and respond accordingly.
- > Even if you are doing everything right, you cannot control your surroundings.

RIDING WITH OTHERS

Whether it is your family, friends, or a group/club, riding with others might be easier, more enjoyable, and even safer, but it takes practice to safely ride together.

- > You may ride side-by-side, in a single lane, when not impeding traffic. Consider riding single-file if traffic backs up and the lane has the space for traffic to pass you safely; otherwise, find a safe space for the group to pull over to allow traffic to pass.
- > Do not overlap your front wheel with the rear wheel of someone bicycling in front of you. A small turn could cause both of you to crash.
- Communicate with drivers as well as other bicyclists when you are slowing, stopping, or turning.
- Consider joining a group or club to meet other bicyclists. Many clubs have regular rides for all skill levels, so you can pick a group that is right for you.





PLACES TO RIDE

There are many different places for you to ride your bicycle, including in the roadway, on shared-use paths, on sidewalks, or in other places where cars are not allowed. There is no guarantee that any place is safer to ride than another, so it is important that you feel comfortable, confident, and safe wherever you ride.

Sidewalks

Some bicyclists ride on the sidewalk because they feel it is safer. However, there are still risks that you should be aware of and know how to manage:

- > Watch for pedestrians and others, slow down, and yield to them. Give a clear, audible signal when passing (usually on the left).
- Sidewalks are not designed for most bicycle speeds. It is important to adjust your speed to manage turns, ride safely around others, and be able to react at driveways, side streets, and intersections.
- > Use caution at driveways and intersections. Assume drivers do not see you, especially if you are riding against the direction of traffic.



Shared Use Bike Paths and Trails

- > Be considerate and know the rules of each path.
- > Give pedestrians a clear audible signal when passing.
- > Stay to the right unless passing.
- > Move out of the path if you need to stop.
- Be especially careful at intersections and driveways by following stop and yield signs and be prepared to stop in case a driver does not see you.
- Check with your local government for e-bike restrictions, if any.





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Roadway

As a bicyclist, you have the same right to use the roadway as any motorist, but it is important to learn how to safely share the road.

Bike Lane, Wide Curb Lane, and Paved Shoulders

Bike lanes provide a dedicated space on the road for you to ride your bicycle.

> Treat the bike lane just like you would any other travel lane. Follow the same traffic laws you would if you were driving a car.

Shared Lane Pavement Markings or "Sharrows"

Shared lane pavement markings (or "sharrows") are symbols in the road to guide you to the safest place to ride, to avoid car doors, and to alert drivers that they should expect a bicyclist in the travel lane. The marking is made up of a bicycle symbol along two white V-shapes. When driving or bicycling on a street with sharrow markings, it is important to remember:

- Drivers should expect to see bicyclists in their travel lane and pass at a safe distance of at least three feet.
- > Bicyclists should make sure to use the sharrow to guide where they should ride and remember not to ride too close to parked cars.





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Roads without bike lane or sharrow

When a road does not have a bike lane, or when you leave the bike lane, **ride in the direction of traffic** and as close as safely possible to the right-hand curb or edge of the road (list of exceptions on page 25).

Be aware of passing vehicles and pay special attention at driveways and intersections where they will be pulling in and out or turning.

- Always signal when making turns (diagram on page 26) and be sure the roadway is clear before moving from the right side of the roadway to avoid obstacles.
- Always watch out for debris, parked cars, or other hazards at the edge of the road.



Protected Bike Lanes

Protected bike lanes use curbs, planters, parked cars, posts, and other methods to physically separate the bike lane from traffic on roads. They are popular in cities and other areas where large numbers of bicyclists and vehicles share roadways. Even though protected bike lanes can make you feel safer, be sure to:

> Treat it just like you would any other travel lane. Follow the same traffic laws you would in a nonprotected bike lane.



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Bike boxes

A bike box is a designated area at a signalized intersection that is generally painted a different color, often green, that allows bicyclists to position themselves ahead of cars at a red light. Some benefits of bike boxes include:

- > Making bicyclists more visible to drivers.
- > Giving the bicyclists more time to travel through an intersection.
- > Helping prevent conflicts with turning vehicles.



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BICYCLING AS A TRANSPORTATION OPTION



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Bicycling can be a safe, fun, and useful transportation option. Using your bicycle to get around in your community could allow you to increase your level of exercise, reduce stress, and improve overall health, while helping you achieve mobility independence.

TRAVELING WITH YOUR BICYCLE

You may use your bicycle in combination with a car or public transit to help you travel a greater distance. At other times, you might want to take your bicycle to a place to ride, such as a trail, park, or event. Your bicycle may fit inside your car, but if not, you may need to purchase a bicycle rack to help with transport. There are some racks that attach to the roof of your car, while others attach to the trunk or hitch. Research the type of rack that best fits your car and meets your needs.

Many public transit systems (bus, train, etc.) offer an option that allow people to travel with their bicycles. However, the number of bicycles that can be accommodated on a transit vehicle can vary. Generally, only standard bicycles (no tricycles, tandems, or bicycles with training wheels) are allowed on public transit. You should always be prepared to leave your bicycle at the station/stop or wait to catch the next train/bus. Many buses have bike racks located on the front of the vehicle and while these might seem difficult to use at first, most are relatively easy once learned. The resource section of this booklet contains helpful tips on how to use a bus bike rack (page 28). When traveling by train, the bicycle must be placed in a specific area on board marked for bicycles.





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LOCKING YOUR BICYCLE

It is often necessary for you to leave your bicycle unattended, so you want to make sure you have a way to secure it.

> Bicycle locks come in all price ranges, but poorquality locks can be easily broken. Invest in the best quality lock that you can afford.

- Lock your bicycle to something that is sturdy and cannot be moved. Be sure the lock is not touching the ground since a hammer can be used to smash the lock against the ground.
- > The best way to lock your bicycle depends on the type of lock you choose. A general rule is to lock both wheels and the frame to the fixed object. If you only secure your bicycle through the wheel, someone can remove your wheel and walk off with the rest of the bicycle.
- Many buildings, transit stations, public squares, etc. have designated areas for bicycle parking.
- > For your own safety, and to protect your bicycle, only leave your bicycle in a well-lit area.
- > For more information on how to choose and lock your bicycle, please see the resource section (page 29).



MAINTENANCE



There are many different parts of a bicycle. It is important to familiarize yourself with the main components of your bicycle before riding.

PARTS OF A BICYCLE

Frame: The main body of the bicycle.

Fork: Connects the bicycle frame to the front wheel and allows you to steer.

Handlebars: Used to steer, and usually have devices that allow you to shift gears and brake.

Saddle: The seat of the bicycle.

Tires and Rims: Bicycle tires are made of rubber and have different tread depending on the type of riding you do. Tires are usually inflated by a tube that lies between the rim and the tire. Rims are what the tire is attached to, and generally have spokes.

DRIVETRAIN INCLUDES:

Pedals: The part of the bicycle that the rider pushes with their feet (generally) to make the bicycle roll.

Cranks: The arms attached to the pedals which turn the front gears or chain ring(s).

Chain ring(s): The sprockets/gear that allow the chain to spin and transfer power to rear gears (cassette).

Chain: Transfers the driving power of the pedals from the chain ring to make the rear wheel turn.

Cassette: The sprockets/gear set on the rear wheel that allow you to shift gears in small increments.

Front and Rear Derailleur: A device that changes gears by moving the chain from one gear to another. There are usually two derailleurs, one in the front and one in the back.



ABC QUICK CHECK

Once you are familiar with the main parts, it is important to know how to identify issues or check for maintenance to safely operate your bicycle. The ABC Quick Check (Air, Brake, Chain/Cassette/Crank Check) helps you identify potential concerns before you go out on a ride where they can become major safety issues.

A - Air

- One of the most important maintenance items is to make sure your tires have the appropriate air pressure. Like other vehicle tires, the recommended air pressure can be found on the sidewall of the tire. Tires that are under-inflated require more energy to spin, make it harder to steer, and are more likely to get pinch flats which can leave you stranded. A pinch flat occurs when the tires are under-inflated and the tube gets pinched between the rim and the tire. With over-inflated tires you are more likely to experience a blowout.
- You need to check not only the air pressure, but the tire itself (e.g., excessively worn, dry rot, debris embedded in tire likely to cause a flat, etc.) every time you ride and will likely need to add air regularly. It is a good practice to inflate the tires a few hours, or a day, before you ride so you can determine if there is a slow leak.
- Carry a portable tire pump with a gauge, spare tubes, tire levers, and a patch kit. It is best to learn how to change a flat on your own, but if you are not comfortable doing so, AAA Auto club offers extended bicycle roadside assistance to members.

B - Brakes

- > There are many different types of brakes, such as coaster brakes, disc brakes, and rim brakes. Typically, with hand-operated brakes, the left brake lever controls the front brake, and the right brake lever operates the rear brake.
- > It is important to apply brakes evenly but be careful not to apply too much front braking which could cause you to flip over the handlebars. If you have not ridden your bicycle in some time, make sure to practice controlled braking in a safe area.
- If the bicycle has hand brakes, the brake levers should not touch the handlebar when squeezed. If they do, the brakes need to be adjusted or replaced.
- > To check the brakes, lift each tire off the ground and spin the wheel. The tire should stop smoothly and promptly when you squeeze the correct brake lever. Make sure the brake pads are clean and that they are in contact with the metal rim.
- > Electric bicycles may wear down brakes quicker. This may require checking the brakes more often.

C - Chain, Crank, Chain ring, Cassette

> The chain, crank, chain ring(s), and cassette make up the drivetrain of your bicycle. You want to visually inspect these for rust, looseness, debris caught in the chain, etc. Make sure there is no clicking or jumping gears when spinning the chain since this could be a sign of a derailleur issue.



QUICK RELEASE(S)

Many bicycles today have quick release levers that allow you to adjust the seat height and to remove the wheels without the need for tools. If your bicycle has this function, it can be found on the wheels and the seat post. Make sure the quick release levers are firmly closed before every ride.



OVERALL CHECK

After you inspect the bicycle to make sure it is in proper working order, take a short, slow-paced ride in a safe area to make sure everything is working properly. Do not forget to change gears to make sure there are no issues.

Performing the ABC Quick check and inspecting your bicycle before each ride will help you identify any potential issues, particularly those related to safety. You can choose to fix these yourself, or you can take it to a bicycle shop where they can provide professional service. Some bicycle shops offer classes on how to perform basic maintenance.

FLORIDA BICYCLE LAWS



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Many bicyclists may not be aware that they are violating traffic laws or practicing unsafe behaviors. Since you may not have ridden a bicycle in many years, or may only ride on occasion, it is important to understand your responsibilities. As a bicyclist you must always obey traffic laws, which are in place to keep you and others safe.

RIDING IN THE ROADWAY

According to Section 316. 2065 of the Florida Statutes, bicycles are legally considered vehicles, and bicyclists must follow the same traffic laws as drivers. This means as a bicyclist you have all the rights and responsibilities as drivers along with additional laws:

- You must ride in the direction of traffic since riding in the opposite direction (facing traffic) increases your risk of a crash.
- > When riding in the roadway at less than the normal speed of traffic, you must ride as far to the right as safely possible. If available and safe to do so, you must ride in a marked bike lane. You may only leave the

designated lane, or right side of the roadway, when:

- Passing another vehicle
- Preparing for a left turn
- Avoiding a potential conflict or hazard
- A lane is too narrow for a car and bicycle to safely share side by side (12 feet or less)
- Riding on a one-way street
- > You must follow all traffic markings, signs, and signals.
- > Bicycles are legally considered vehicles in Florida. It is illegal to:
 - Ride a bicycle while under the influence of alcohol or drugs.
 - Be in possession of an open container of alcohol while riding a bicycle or while riding as a passenger on a bicycle.
- It is legal for two bicyclists to ride side by side within a single lane as long as you are not impeding the flow of traffic.
- You must use hand signals 100 feet before making a turn.







> Bicycles must have working brakes that allow the rider to stop within 25 feet from a speed of 10 mph on dry, level, clean pavement.

- Bicycles may not carry more people than they are designed for, i.e., a bicycle with one seat may only carry one person. However, a child may ride in a child seat or trailer designed for such purposes.
- > Between sunset and sunrise, your bicycle must be equipped with a minimum of a white front light, a red rear light, and a red rear reflector.

RIDING ON SIDEWALKS

- > You may legally ride on the sidewalk unless otherwise restricted by local law, such as in downtown areas with a higher number of pedestrians.
- > You may ride in either direction on a sidewalk, however, riding in the opposite direction of traffic (facing traffic) increases your crash risk at intersections and driveways.
- > When passing a pedestrian, you must give an audible signal before passing.
- > E-bikes are allowed on any road, path, or way that is open to bicycle travel.

DID YOU KNOW?

When riding on the sidewalk, you have the same rights and responsibilities as a pedestrian.







RESOURCES

Florida's Safe Mobility for Life Coalition: SafeMobilityFL.com

Alert Today Florida: <u>AlertTodayFlorida.com</u>

Florida Traffic & Bicycle Safety Education Program: https://doi.org/10.1007/j.min.neg/<a href="https://do

The provision of the following links does not imply our endorsement of them, nor our acceptance of responsibility for the content they do or do not provide.

Bicycle Helmet Safety Institute: <u>Helmets.org</u>

Florida Bicycle Association: Florida Bicycle.org

How to Choose a Bicycle Lock: <u>REI.com/learn/expertadvice/bike-lock.html</u>

How to Lock Your Bike: <u>TheBestBikeLock.com/how-to-lock-your-bike</u>

How to Use a Bike Bus Rack: <u>Broward.org/BCT/Riders/Pages/Bike.aspx</u>

League of American Bicyclists: BikeLeague.org

People for Bikes: Peopleforbikes.org/topics/electric-bikes





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