

Georgia BIKE SENSE

A GUIDE FOR CYCLISTS & MOTORISTS



A Publication of the Georgia Department of Transportation



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This manual is intended to serve as a guide to help both motorists and cyclists safely share the road, and to help adult cyclists, and young cyclists and their parents, better understand how to ride safely and legally on trails, streets, and highways in Georgia.

It also includes safety suggestions that are not covered by Georgia traffic law. This manual is not to be considered a legal authority for bicycle safety, nor is it intended to be a source to cite in a court of law. Local traffic regulations in some cities, towns, and counties may vary somewhat from state law, provided they do not conflict with state law.



Photo: Bikes Belong

A PDF file of this document is available on the Georgia Department of Transportation web site at www.dot.ga.gov. For printed copies, contact:

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Comments and suggestions for future versions of this manual are welcome. An updated listing of Georgia clubs, organizations, and cycling resources is available by visiting the Bicycle/Pedestrian page on the Georgia Department of Transportation web site at:

www.dot.ga.gov

Click on "Traveling in Georgia" and "Bicycle and Pedestrian Programs". Please submit any new club or organizational listings, as well as contact information for existing groups through the web site.

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Georgia Department of Transportation has a web site dedicated to bicycle and pedestrian issues:

www.dot.ga.gov

Click on "Traveling in Georgia" and "Bicycle and Pedestrian Programs". It includes bicycle route maps, links to statewide cycling organizations, and news and updates on recent meetings and events. For more information, email the State Bicycle & Pedestrian Coordinator at bikeped@dot.ga.gov

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This guide also draws from some excellent cycling information previously published online and in print in the United States and Canada:

Colorado Department of Transportation Bicycle and Pedestrian Program:
Colorado Bicycling Manual

Greater Victoria Cycling Coalition:

The British Columbia Bicycle Operators Manual

League of American Bicyclists: www.bikeleague.org

Los Angeles County Bicycle Coalition:

Bicycle Resource Guide

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About the cover: BikeAthens cyclists travel through downtown Athens, near the University of Georgia.
 Photo: Wendy Giminski, Research Media.



Lance Armstrong, 2004 Tour de Georgia champion, with the winner's trophy. Spectators have enjoyed watching the top professional racers from around the world compete in this multi-day stage race.

TOUR DE GEORGIA



Introduction

Georgia is a great place for cycling. Like other southern states, it has a moderate climate that makes cycling an attractive option for both recreation and transportation all year-round. Georgia is also unique in its varied terrain. Cycling in the mountains of northern Georgia presents different challenges than the flat coastal regions to the south. This guide covers a wide range of situations and conditions you'll likely encounter while cycling here. It also stresses the importance of taking safety precautions and following the rules of the road.

Cycling provides many benefits to both individuals and communities around the state. In addition to exercise and better health, using bicycles for errands and commuting helps to reduce traffic congestion and improve air quality. Those who commute by bicycle to work or school also benefit from reduced costs for parking, automobile maintenance, and insurance.

Spectators and participants visiting Georgia for cycling events are generating significant contributions to local economies all over the state. The Bicycle Ride Across Georgia (BRAG), one of the larger cross-state tours in the country, consistently draws about 2,000 riders each summer. The Tour de Georgia multi-day stage race has drawn a strong field of the top professional racers from around the world. A wide range of recreational rides and tours, many benefiting charities, are held throughout Georgia from early spring through the autumn months each year. Road riding and mountain biking organizations are active across the state,



Photo: Miles McClelland, BRAG

and you will find contact information for these groups in this guide.

The Georgia Department of Transportation and local jurisdictions are working hard to improve cycling conditions in all parts of the state. With the help of transportation planners and input from cycling advocates, many roads and facilities are being built or upgraded to better accommodate bicycles. These improvements will make it easier for cyclists and motorists to safely share the road.

Whether you're a beginner or an experienced rider, this guide provides an overview of how you can ride more safely and effectively. In addition to equipment and riding techniques, there are references throughout to Georgia traffic law and how it applies to cyclists.

The Georgia Department of Transportation is committed to keeping our roads safe for pedestrians, cyclists, and motorists. By incorporating the safe cycling practices covered within, cyclists can build better relationships with motorists and make Georgia's roads safer and more enjoyable for everyone.



Photo: Miles McClelland, BRAG

Road bikes (above) are built for riding on paved roads and are ideal for touring or recreational riding.

Hybrids (right) combine some features of road and mountain bikes. Their upright riding position and bigger tires make them ideal for urban riding and commuting.



Photo: Mark Dodson

Choose a Bike That's Right For You

Select a bike suited for the terrain and the type of riding you'll be doing. There are several varieties to choose from. Your local bike shop is the best place to begin shopping. They stock many different types of bikes and have professionals who can make sure you're getting a frame size that's the proper fit. Below are some details on common styles of bikes.

Road bikes: Designed for road riding, there are several variations available. Racing and training bikes are built for speed. Touring bikes have a longer wheelbase and are set up to haul the extra weight of gear needed for trips of several days or more. They frequently include places to attach panniers and accessories. Most road bikes have drop handlebars that make for a lower, less upright, riding position. This is considered advantageous for covering distances and riding into the wind.

Mountain bikes: These are among the most popular bikes sold today. They feature a more upright riding position and do not have the drop handlebars common to road bikes. They're primarily set up for off-road use, especially when equipped with shocks and fat knobby tires. They are usually equipped with a third chain ring up front that allows the rider to access some extra lower gears for climbing. While these are often seen on the road, mountain bikes are slower and less efficient on paved surfaces.

Hybrids: A cross between a road and mountain bike, these are good for urban or paved trail riding. They provide a more comfortable upright riding position, similar to a mountain bike, and are equipped

Mountain bikes with fat tires and suspension are excellent for riding off road on Georgia's unpaved trails.



Photo courtesy of Bikes Belong

with slightly wider tires than a road bike, which provides a more comfortable ride on rough pavement or gravel. Hybrids are functional for road use also, but are not as fast or efficient as road bikes on smooth pavement.

Recumbents: These look quite different than traditional bikes. They have a reclining seat and sit lower to the ground with the pedals out in front of the rider instead of below. It is recommended to have a flag attached to the back to improve visibility. Generally regarded as faster on flats and downhill, they're ridden mostly by recreational riders. Because recumbents are not mass-produced like ordinary bikes, you may need to search out a shop or dealer who specifically handles or sells them.

Shopping for a bike?

Your local bike shop is the best place to shop for bicycles and accessories.

Tandems. Tandems are popular and seen frequently on rides and tours around Georgia. Riding with another person is a great way to share the cycling experience.

Electric-assisted Bicycles. Electric-assisted bicycles are becoming an option for many cyclists. A wide range of small, electric-powered motors are now available to provide a needed boost for utility, cargo, or fitness bikes. However, the motors only provide assistance to pedaling power and should not be confused with faster motor-powered scooters. Electric-assisted bicycles in Georgia are defined as a two- or three-wheeled device with fully operative pedals and a small electric motor. The motor may not have a power output of more than 1,000 watts, weigh more than 100 pounds, or propel the device faster than 20 miles per hour. Electric-assisted



Recumbents (above) are becoming more popular and are built for comfort and speed.

bikes may generally be operated in bicycle lanes or paths, but some restrictions may apply.

Many paths in Georgia are designated as shared-use paths for use by walkers, joggers, roller bladers, or equestrians. The speeds achieved by electric-assisted bicycles may not be compatible with these other uses in constrained spaces of narrow paths. Some facilities may have restrictions on motorized vehicles; check with your local jurisdiction or facility manager to determine

if any additional considerations apply. General vehicular laws, common sense, and basic courtesy apply when operating electric-assisted bicycles, just as with any other vehicle.

Choose what's best for you. Set up your bike to fit the type of riding you'll be doing most. Urban commuters will have different needs than those doing fast training rides or off-road trail riding. Your local bike shop can show you different types of bikes and accessories to choose from.



• 40-6-294 (e) Electric assisted bicycles as defined in Code Section 40-1-1 may be operated on bicycle paths.

• 40-1-1 (15.5) "Electric assisted bicycle" means a device with two or three wheels which has a saddle and fully operative pedals for human propulsion and also has an electric motor. For such a device to be considered an electric assisted bicycle, it shall meet the requirements of the Federal Motor Vehicle Safety Standards, as set

forth in 49 C.F.R. Section 571, et seq., and shall operate in such a manner that the electric motor disengages or ceases to function when the brakes are applied. The electric motor in an electric assisted bicycle shall: (A) Have a power output of not more than 1,000 watts; (B) Be incapable of propelling the device at a speed of more than 20 miles per hour on level ground; and (C) Be incapable of further increasing the speed of the device when human power alone is used to propel the device at or more than 20 miles per hour.



Tandems can accommodate two riders (left) or sometimes even more (right).

Photos: Miles McClelland, BRAG

Equipment and Gear

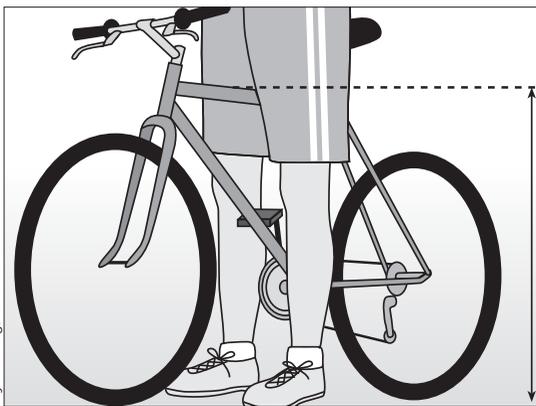
Riding safely and comfortably should be your highest priority.

Proper fit.

A bike that's the right size will be safer, more comfortable, and more efficient. Be sure to select a frame that fits you. Before riding any bike, be sure you can straddle your frame while standing. There should be a couple of inches of clearance between the crotch and top tube. The best way to make sure you fit a bike properly is to have a bike shop use a fit kit to check all the measurements.

Be sure your bike is in good working condition.

To ride safely and efficiently, it is important to be sure all your equipment is operating smoothly and properly. Have a bicycle mechanic check over your bike to make sure it's road worthy if it hasn't been ridden in a while.



Be sure you can stand flat footed with some clearance above the top tube.

Brakes. Both the front and the rear brakes need to be in good working order and adjusted properly. You should be able to bring your bike to a quick, safe stop. In fact, Georgia law requires brakes that will bring the bike to a skidding stop. Over time, cables may need to be adjusted and brake pads replaced. Wet rims can compromise braking power. Allow extra distance to brake in wet conditions.

GEORGIA LAW 40-6-296 (b) Every bicycle sold or operated shall be equipped with a brake which will enable the operator to make the braked wheels skid on dry, level pavement.

Gears. Have your gears adjusted so you can smoothly shift through your entire range of gears. You should be able to shift the chain to all of the possible combinations. Your local bike shop can help with adjustments. Middle and north Georgia have hilly terrain, and you'll benefit by having a wide range of gears. You may want to consider a third front chain ring, sometimes called a "granny gear," that will provide additional lower gears if you'll be riding in hilly terrain.

Tires. Choose tires designed for the type of riding you plan to do. Wide knobby tires, which are standard equipment for mountain bikes, are designed for dirt trails and unpaved surfaces. Thinner tires

with less tread are used on hybrids and road bikes and are better suited for road riding. Inflate tires to the manufacturers' recommended pressure. Tires tend to lose air pressure over time, so check the pressure every week or so.

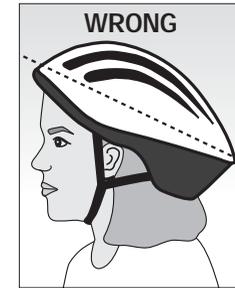
Safety gear and accessories

Whether you're riding on- or off-road, you'll be safer and more comfortable with some basic safety gear and accessories. Here are some important items to have.

Helmets. Always wear a bicycle helmet whenever you ride, which can reduce your chance of a serious head or brain injury by 85%. Helmets made for U.S. sale after 1999 must meet the U.S. Consumer Product Safety Commission standard. Look for a sticker certifying safety by CPSC, ASTM, or Snell. Snell's B-95 standard is slightly higher than the rest.

Bicycle helmets are available at bike shops, sporting goods stores, and large retailers. Do not wear a helmet made for sports other than cycling. These are designed and tested for other types of impact.

GEORGIA LAW 40-6-296 (e)(1) No person under the age of 16 years shall operate or be a passenger on a bicycle on a highway, bicycle path, or sidewalk under the jurisdiction or control of this state or any local political subdivision thereof without wearing a bicycle helmet.



Helmet tilted too high to protect the forehead.



Front of helmet sits lower, protecting the forehead.

Illustrations: Krystia Haag



The strap is adjusted properly when a finger can fit between the lower strap and your chin.

Replace your helmet if it absorbs an impact in a crash, even if it does not appear to be damaged.

Fit your helmet correctly. The front of the helmet should rest about an inch or less above the eyebrows on the forehead.

A helmet tilted upward from this position increases the likelihood of injury in a crash. A common mistake is to tilt the front of the helmet up too high, which leaves the forehead vulnerable.

A helmet should be snug but not excessively tight. Position the strap adjusters directly below the ears. Tighten straps to where a finger can fit between the strap and your chin.



Photo: Mark Dodson

Toe clips or clipless pedal systems will keep your foot in position on the pedal and provide more leverage.

Visible Clothing. Wear bright colors while riding, especially on the road and in traffic. Bright or fluorescent yellow and orange are excellent choices. White is better than darker colors. Avoid black and gray, as well as dark shades of green, brown or blue, which tend to blend with the landscape and are much more difficult to see. Lack of visibility is one of the leading factors in crashes. It is not uncommon for a motorist to say, "I just didn't see them."

Cycling Gloves. Warm-weather cycling gloves are fingerless and have padding to cushion the vibration from the handlebars. Cold-weather gloves are somewhat heavier with full fingers. Gloves also provide some protection to your hands if you fall.

Cycling shorts. If you're riding regularly or doing anything more extensive than short trips, you'll find cycling shorts to be more comfortable. They have built-in padding and are made of lycra or synthetic fibers, which tend to

wick moisture away rather than retain it. Many manufacturers now make loose-fit and baggy shorts with padding for those who prefer an alternative to the traditional black lycra style.

Shoes and pedals. At the very least, wear an enclosed shoe while riding. Sandals and open footwear leave your feet vulnerable to injury in a crash. As a novice, it'll be easiest to start with a plain flat pedal and common athletic shoes. As you gain experience and confidence, you'll likely want to graduate to toe clips or clipless pedals, which attach to special cycling shoes via a cleat.

Cycling shoes tend to have stiffer soles, which helps provide extra leverage as you pedal. Toe clips are the next step up from a plain flat pedal. The "clip" will hold the front of your foot in place on the pedal, resulting in a more efficient motion and more power to the drive train. Clipless pedals are the choice of many experienced cyclists. A pair of cycling shoes is fitted with a cleat that attaches directly to your pedal. There are several styles and manufacturers. If you're making the switch to a toe clip or clipless system, allow yourself some time to practice in a parking lot or residential street before heading out into traffic. It takes some time to get accustomed to getting your feet in and out of clipless pedals.



Dressed to ride:
A cyclist equipped for comfort, safety, and visibility.

Helmet

Bright colored clothing

Cycling shorts

Cycling shoes

Photo: Kryslia Haag

Other Useful Accessories



- Rear-view mirror
- Cycling gloves
- Headlight



Stay hydrated: Carrying water is essential, especially in warm weather. Water bottles are easily carried on the bike frame (top). Some riders prefer the extra capacity of hydration packs they can wear on their backs for longer rides (below).



Safety gear and accessories

Lights and reflectors. A white headlight visible from 300 feet is recommended when riding in low-visibility conditions (fog, dusk) and

required by Georgia law when riding at night. Rear reflectors will help to make you more visible in traffic during low light or night rides, and are also required by Georgia law. Red tail lights are also helpful. Several manufacturers make tail lights that will display either flashing or solid red. These are lightweight and easy to carry, and can be easily detached from the bike when not in use.

Rear-view mirror. For road riding, a rear-view mirror ranks up there with a helmet in terms of safety. With a bit of practice, you'll be able to glance down and monitor vehicles approaching from the rear without having to turn and look over your shoulder. A mirror typically attaches to the handlebars or your helmet. Do not depend solely on a mirror for lane changes – always look over your shoulder and scan behind before making a lateral move.

Important safety-related items to carry with you

These small items could be very useful, especially in unusual or emergency situations. Have these with you in an easily accessible place.

- **Identification.** If you're in a crash, or issued a traffic citation, this will be important to have.
- **Emergency contact info.** Name and phone number for someone to contact in an emergency.



40-6-296 (a) Every bicycle when in use at nighttime shall be equipped with a light on the front which shall emit a white light visible from a distance of 300 feet to the front and with a red reflector on the rear of a type approved by the Department of Motor Vehicle Safety which shall be visible from a distance of 300 feet to the rear when directly in front of lawful upper beams of headlights on a motor vehicle. A light emitting a red light visible from a distance of 300 feet to the rear may be used in addition to the red reflector.

Carry these tools and supplies on your bike



- **Water bottle.** A must in warm weather to stay hydrated, and can also be used as a spraying device to deter aggressive dogs.
- **A cell phone.** Useful if you need to call for help, especially in an emergency.
- **Some quarters and a couple of dollar bills.** If you don't have a cell phone, you may be able to find a pay phone if you need help. Cash could buy a drink if you run low on water, or a snack if you're hungry. Stash these somewhere with your tool kit and they'll be there if you need them.
- **An extra energy bar.** On a longer ride, something edible if you get hungry or tired could make a big difference.

your chances of being stranded if you have a flat tire or mechanical problem. A small saddlebag attached to the seat post is a good place to carry them. Here is a basic list:

- **Spare tire tube**
- **Tire patch kit**
- **Pump** (small portable, attaches to frame)
- **Set of two or three tire levers**
- **A compact "multi-tool"** that contains a few hex wrenches, socket wrenches, and a flat-blade screwdriver.

There are many variations of the "multi-tool" on the market, including some more complex versions with more tools. Your local bike shop is likely to have several to choose from.

On-board tools and supplies

Carrying some basic tools and supplies on your bike will reduce

Riding in Difficult or Unusual Conditions

Extra precautions and adjustments are helpful when riding in less than ideal conditions. Some suggestions for dealing with the more common situations are outlined below.

Riding in wet weather

There are three main concerns with wet weather: staying dry, being visible, and compensating for water on the road.



Photo: Miles McClelland

A lightweight cycling jacket can help keep you dry in the event of an unexpected shower.

Staying dry. Jackets designed for cycling have a longer back panel that will keep your lower back covered as you're bent forward over the handlebars. They'll also help deflect water thrown upward by your rear wheel if your bike is not equipped with rear fenders. Many manufacturers are now offering water-resistant jackets that "breathe" to let in some air and help to keep you comfortable. Most cycling jackets have better ventilation than typical rain gear. Rain pants and shoe covers can be added to keep your lower body dry.

Avoid long overcoat-style raincoats as they drop too low and can become entangled in spokes or brakes. They also lack the ventilation needed to keep you dry.

Hooded coats are not recommended because movement and visibility can be restricted when you turn your head. A helmet cover that fits over the top shell of your helmet is a safer solution to keeping your head dry.

Fenders will prevent your tires from splashing water up on you. If you're planning frequent bicycle touring, commuting, or running errands during rainy months, these would be worth the investment.

Limited vision. Keeping rain out of your eyes and off your glasses will help you see better. Some helmets have built-in sun visors, which are somewhat helpful in rain, but often don't extend out far enough to do the job. A lightweight golf- or baseball-type cap underneath a helmet is more effective. The longer bill works well to keep your eyes and glasses dry, especially in heavy rain.

Make yourself visible. Rainy conditions tend to reduce visibility for both motorists and cyclists. Bright colored clothing is a must. Headlights and tail lights should be used also, especially in early morning or late in the day. Don't assume a motorist sees you. Try to make eye contact with drivers, especially at intersections.

Bike handling and riding technique. Wet weather is likely to reduce your bike's braking ability, especially if your braking system uses brake pads on steel rims. Give yourself some extra time to stop, and "wipe" the rims by letting the pads run over them for at least a full revolution before applying the brakes harder. Aluminum rims, disc brakes or a hub brake system will be more effective in wet conditions.

Be wary of metal objects like construction plates in the road and



Slow down and use extra caution when riding through standing water.

Preventive maintenance for a wet bike

Riding in wet conditions will tend to wash lubricant off of your chain and drive train. At the very least, clean up your chain and apply more lube after riding in the rain. Moisture on the bike in general will tend to lead to corrosion or rust over time, and moisture can corrode bearings in your bottom bracket and your wheels.

Have a qualified bike mechanic check these at least every year, and more frequently if you do a lot of wet weather riding.



Photo: Mark Dodson

Water bottles are essential year-round to stay hydrated.

manhole covers. These will be slick and slippery when wet. Moisture can have the same effect on some pavement striping. Puddles pose challenges too, especially if you cannot tell how deep the water is. They could contain potholes, rocks or debris that you cannot see. If you cannot avoid riding through a puddle, slow down and use extra caution.

Temperature extremes

Hot weather riding. Wear lightweight clothing. The best choices are newer, breathable fabrics that help to wick away moisture and dry quickly. Bike shops and outdoor retailers will have these. These are preferable to cotton, which absorbs moisture and takes more time to dry. Bright colors are preferable as you'll be more visible.

Drink plenty of fluids. It is very important to stay hydrated, especially on warm days, so be sure your bike is set up with a bracket to hold

a water bottle, and make a point to drink frequently. More than one bottle is recommended if you'll be out for several hours or covering a long distance. As an alternative to multiple water bottles, consider a "back pack" style hydration system. These can carry large volumes of liquid and have a hose allowing you to sip hands-free, giving you the advantage of carrying lots of fluid and freeing you from having to lift and replace a bottle while pedaling.

Carry and apply sunscreen. This is especially important on longer rides where you'll be out in the middle of the day or for an extended period of time. Sunscreen is highly recommended even in cloudy or overcast conditions.

Cold weather. Dress in multiple lightweight layers rather than one or two heavy ones. This will give you the flexibility to shed a layer if you feel too warm during the ride. Lycra or polyester based layers underneath will help to wick moisture and keep you from becoming chilled. A combination of outer layers could include a heavy cycling jersey, a jacket, or both. Outerwear that zips up in the front is helpful. You'll heat up when climbing, so opening the zipper can keep you from overheating. Hydration is still important in cool weather, so carry at least one water bottle.

In sub-freezing temperatures, you will really notice the chill around your face and ears. Skullcaps and headbands are available that fit underneath a bicycle helmet. There are shoe covers and arm/knee warmers on the market that can be added to your outer layers. Some riders prefer goggles to protect their eyes.

Dealing with dogs

It is likely that at some point you'll be chased by a dog while riding, especially in rural areas. Most are not dangerous, but you may encounter some who are aggressive. Plan ahead to have some tactics in mind. Riders' personal preferences vary, but here are several options you might consider:

Point and yell "No." A cyclist's pedaling motion sometimes gets dogs excited. Many dogs understand this basic command.

Spray the dog with your water bottle. This may startle the dog and it will back off. But be careful, as you'll be left with only one hand on the handle bar.

Commercially available dog repellents, like *Halt!* can be clipped to your shorts or bike for quick access.

Some dogs may be persistent and too fast to outrun. If you need to stop and dismount, keep your bike between you and the dog.

Motorists and Cyclists: Sharing Georgia's Roads

In Georgia, motorists and cyclists share the road. Both have equal rights and responsibilities to obey all traffic laws. All road users should show respect and consideration to each other.

Bicycles & Traffic Violations

A cyclist has all the rights and responsibilities applicable to the driver of any other vehicle except when specifically regulated by law or when certain regulations, by their nature, cannot apply to bicycles.

Cyclists who violate traffic laws will be subject to the same penalties as drivers of motor vehicles, except that no penalty points shall be assessed against the cyclist's driver's license.

Tips for motorists

Motorists also have a responsibility to act in ways to make the roads safer for all users. Please consider the following

Aggressive driving and harassment of cyclists



40-6-397 (a) A person commits the offense of aggressive driving when he or she operates any motor vehicle with the intent to annoy, harass, molest, intimidate, injure, or obstruct another person, including without limitation violating Code Section 40-6-42, 40-6-48, 40-6-49, 40-6-123, 40-6-184, 40-6-312, or 40-6-390 with such intent.

(b) Any person convicted of aggressive driving shall be guilty of a misdemeanor of a high and aggravated nature.

points as you share the road with pedestrians and bicyclists. Scanning for pedestrians and bicyclists should be a normal part of your driving routine as is scanning for other cars and trucks. Extra care should be taken when exiting alleys and driveways since pedestrians and bicyclists may be approaching from your left and right.

At intersections: Bicycles using the road should function much in the same way as traffic. Being slower moving vehicles, bicycles stay to the right most of the time, but there are exceptions. For example, a cyclist can legally move to the left of a lane or into a left turn lane when preparing to make a left turn. They may take part or all of the lane. Be patient and allow them to make the turn. When completed, they'll be able to move back to the right side of the road giving the motorist room to pass.

When passing a cyclist:

- **Allow at least three feet between your vehicle and the bicycle.** Just as the wind produced by a passing tractor-trailer can pull a car off course, so too can a passing car cause a cyclist to swerve out of control.
- **Be patient and wait until it is safe to pass,** as you would with any other slow-moving vehicle. Be aware that when a road is too narrow for cars and bikes to

ride safely side by side, bicyclists should ride in or near the center of the lane to discourage motorists from trying to pass them without enough clearance.

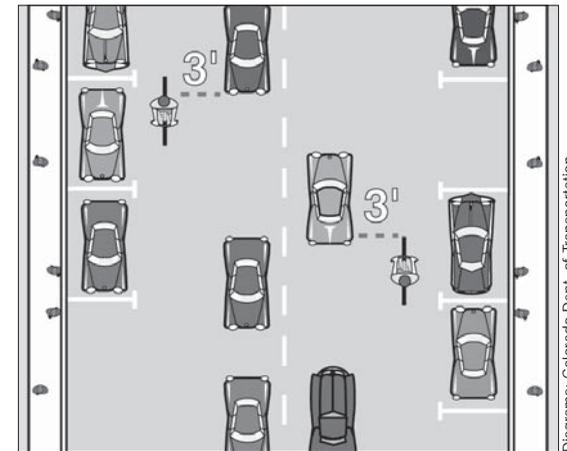
- **Tooting your horn is not recommended when passing cyclists.** If you feel that you must, do so in advance of passing, and from a friendly distance (several hundred feet), not from directly behind. You could startle cyclists and they might veer into your path, causing a crash.
- **Do not speed ahead and cut a cyclist off as you are turning right** when a cyclist is proceeding straight through an intersection. They may not be able to avoid a collision with the passenger side of your vehicle.
- **Do not harass or endanger a cyclist or pedestrian.** Harassment, which may include threats, taunting, or intimidation, is a misdemeanor offense (Georgia Code section 40-6-397 a). Reckless endangerment is also a misdemeanor offense and involves conduct which places another person at risk of personal injury. (Georgia Code section 40-6-397 b)

Other points to remember

Contrary to popular belief, riding on sidewalks is not recommended for cyclists and in many areas it is illegal. In most cases, cyclists are not required to use multi-use paths even



A motorist making a right turn should yield to cyclists traveling straight through the intersection.



As a motorist, give cyclists some space as you pass. Try to leave at least three feet of clearance.

Diagrams: Colorado Dept. of Transportation

if they run alongside the roadway. Be prepared to encounter cyclists using the road. They are considered vehicles under Georgia traffic law.

Give cyclists extra space as you pass. Consider three feet a minimum. Unless traffic is heavy, it is usually possible for the cyclist to move a bit more to the right and the motorist to move out slightly to the left. This type of cooperation allows the motorist and the cyclist to safely share the road.

Riding in Traffic

A cyclist waits for a traffic light to turn green

Photo: Mark Dodson

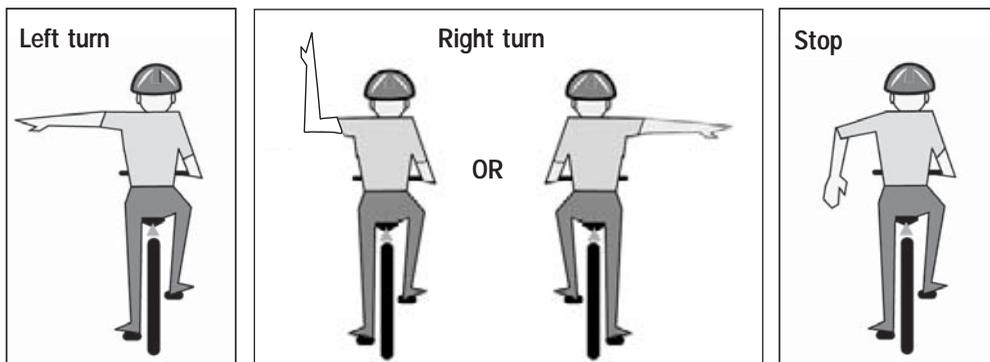
Bikes are vehicles on Georgia roads

Bicycles and automobiles both belong on Georgia's roads. In fact, bicycles are subject to the same traffic laws and have the same rights and responsibilities to the road, as do motor vehicles. When riding a bicycle in traffic, think of yourself as operating a vehicle. You'll need to make some adjustments since you're traveling slower, but the principles of riding

and driving in traffic are very similar.

Cyclists are expected to obey all traffic laws, including traffic lights and stop signs. Not doing so reinforces motorists' beliefs that bicycles either are not subject to traffic laws or choose not to follow them.

Extend the same courtesies to other road users that you'd expect from motorists. Signal your intentions to turn left or right using hand signals.



Use hand signals to indicate turns and stops.

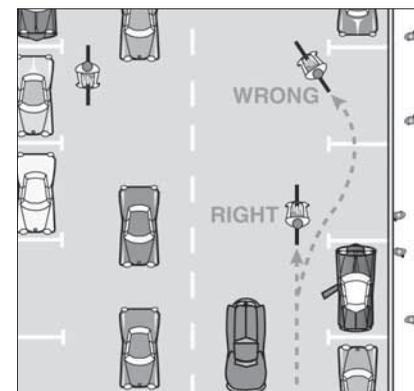
Above all, be respectful of other road users. It is in your best interest as a cyclist to extend common courtesy to drivers and others with whom you share the road.

Where to ride on the road

Ride to the right with the flow of traffic. If sharing a lane with automobiles, you should be 18 to 24 inches out from the curb or edge of pavement. This distance will make it less likely that you'll hit the curb or accidentally run off the side of the road, both of which could cause a crash. Cars sharing the lane will pass on your left.

Always ride in the same direction as traffic, never against it. Motorists and other road users are not expecting bicycles coming toward them in their traffic lane. If the road has bike lanes, always use the lane on the right side of the road.

There are several situations where you'll need to move to the left or



Ride in a straight line – don't weave in and out of the traffic lane



40-6-294 (a) Every person operating a bicycle upon a roadway shall ride as near to the right side of the roadway as practicable, except when turning left or avoiding hazards to safe cycling, when the lane is too narrow to share safely with a motor vehicle, when traveling at the same speed as traffic, or while exercising due care when passing a standing vehicle or one proceeding in the same direction; provided, however, that every person operating a bicycle away from the right side of the roadway shall exercise reasonable care and shall give due consideration to the other applicable rules of the road. As used in this subsection, the term 'hazards to safe cycling' includes, but is not limited to, surface debris, rough pavement, drain grates which are parallel to the side of the roadway, parked or stopped vehicles, potentially opening car doors, or any other objects which threaten the safety of a person operating a bicycle.

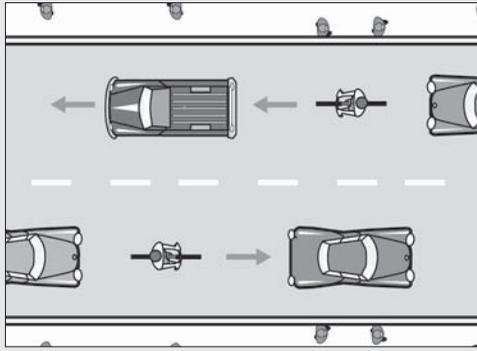
(b) Persons riding bicycles upon a roadway shall not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles.

even take the center of the lane. These include:

- Left turns
- Avoiding hazards or debris
- The lane is too narrow to share safely with other vehicles
- Passing standing vehicles

Moving to the left in these circumstances is legal, so keep in mind that staying to the right is not always required and not always the safest place to be.

Ride in a predictable manner. Ride in a straight line and try to avoid weaving left and right. This will help to visibly establish your place on the road and drivers will be able to adjust accordingly as they approach. Weaving or riding in an unpredictable manner can confuse motorists and make it difficult to



Take the lane when traffic cannot pass safely

In cases where the traffic lane is too narrow to safely share the road with a motor vehicle, it is safer to move to the left and take the center of the lane, even if riding slower than the flow of traffic. When the lane becomes wide enough or traffic eases up, the cyclist can move back to the right to allow motor vehicles to pass. In the illustration above, the cyclist is in a safer position with cars to the front and rear than risking having a vehicle pass dangerously close while trying to get by the cyclist.

Since a bicycle is defined as a vehicle under Georgia traffic law, this is a legal and acceptable maneuver. Drivers should be patient and wait until there is enough lane width to pass comfortably, at which time the cyclist should move to the right and let faster traffic pass.

tell where you'll be on the road as they get closer.

Unless a bike lane, wide curb lane, or shoulder exists, do not pass traffic on the right. Unless you're in a designated bike lane, do not pass cars stacked up at a traffic light in order to position yourself at the front of the line. It is safer and more courteous to pull up behind the last car in the line and wait your turn.

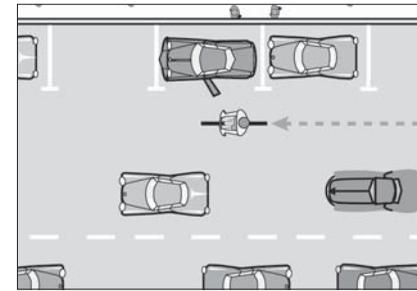
If the lane is narrow, take the entire lane while you wait.

At intersections, stay on the road to make turns or ride straight through. This is safer and more predictable than swerving over into a cross walk. Nor is it necessary to dismount and cross as a pedestrian.

Narrow and multiple traffic lanes. Busier thoroughfares and multi-lane roads require more caution. Two-lane roads are often too narrow for two cars and a bicycle to pass safely. If you anticipate this happening, it's safer to move further to the left and "take the lane," to prevent the vehicle approaching from behind from passing you. You may encounter an occasional driver who is not aware that this is acceptable for bicycles. When it appears there's room for them to move left and give you more space, move back toward the right shoulder.

The same principal applies when riding in heavy traffic on roads with more than one traffic lane in each direction. By taking the entire lane, you'll discourage motorists from passing until they can move at least partially into the other lane and pass safely.

Parked cars. When passing cars that are parallel parked, ride far enough from the cars that you'll avoid being hit by a car door if it opens. Never assume that the car is unoccupied. Avoid weaving in and out of areas where cars are parallel parked. Staying in the traffic lane will make you more visible and



Don't get "doored" – keep enough distance from parked cars to avoid getting hit by an opening door.

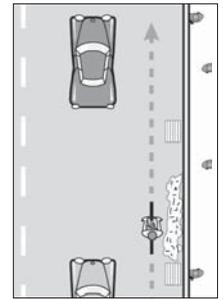
prevent you from surprising passing motorists.

Bike lanes and wide curb lanes. Bike lanes or areas are being added to streets in many cities and counties around Georgia. These vary in width, but typically span 3 to 5 feet. Most cyclists find these helpful as they create a visual separation for motorists that helps distinguish where to expect bicycle traffic. There are also roads built with wider than usual traffic lanes, called wide curb lanes, which help to separate bicycle and automobile traffic and allow more room to pass.

Be prepared to merge into traffic if the bike lane or wide curb lane comes to an end. It is not uncommon for this to occur at intersections. Be ready to move into the appropriate lane for turning or to continue straight through the intersection.

Watch for debris and grates. Cyclists need to be on the lookout for these everywhere. However, dirt, rocks, glass and other debris tend to accumulate more heavily near the curb and in paved shoulders. Since automobile traffic

doesn't usually pass close enough to sweep the debris away, be ready to slow down or move to the left if you encounter this. Drainage grates on city streets are another hazard you may encounter. Be especially wary of horizontal grates that run parallel to the direction of traffic, as these could easily catch your wheel. Report any grates that are hazardous to cyclists to the local transportation and public works department or local bicycle advocacy group.

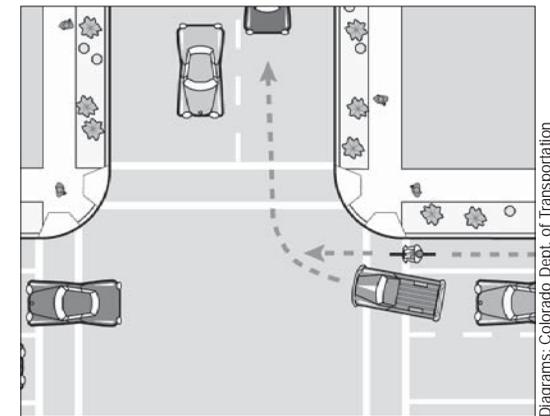


Beware of trash and debris in bike lanes.

Intersections and turns

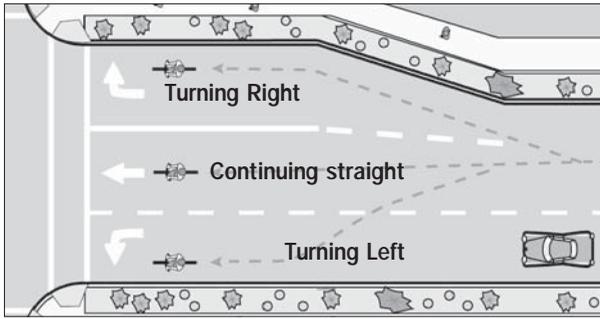
Approach an intersection much in the same manner as you would in a motor vehicle. Prepare to stop at traffic lights and stop signs and yield to any other traffic and pedestrians that have the right of way. As you approach the intersection, begin to position yourself in the best part of the lane to proceed through.

If you are going straight or turn-

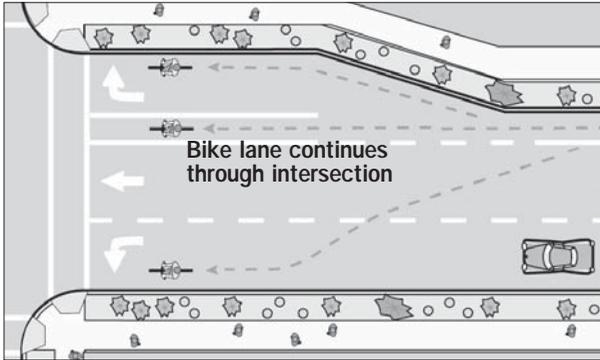


Watch for cars turning right when approaching intersections.

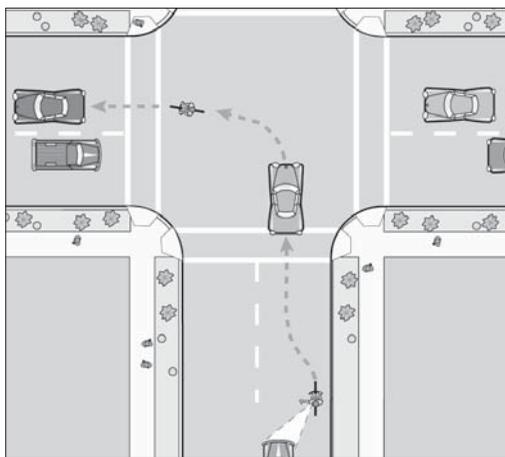
Diagrams: Colorado Dept. of Transportation



Prepare to move into the appropriate position in the lane as you enter multi-lane intersections.



ing right, stay to the right unless it is a right turn only lane. The only exception to this rule is if you are approaching a right-turn-only lane and you intend to continue straight. In this case you would



For a left turn, move to the left center of the traffic lane and move through the intersection with the flow of traffic.

position yourself to the left of the right-turn-only lane. If you are turning left, check for traffic coming up from behind, then signal your intent to move to the left side of the traffic lane. Once traffic is clear, you'll make the left turn into the right side of the traffic lane you are turning into. Never proceed through an intersection side-by-side with a motor vehicle.

Beware of cars turning right. Be aware that cars may be intending to turn right at an intersection or driveway, but may not signal their intention to do so. Keep your distance so that

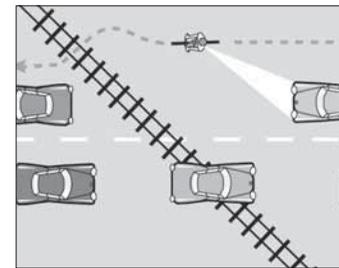
if they turn, they do not cut you off or turn right in front of you.

Intersections with multiple turn lanes. Some intersections may have several turn lane options. As a cyclist, choose the lane that's marked for the direction you want to go. It's generally safer to "take the lane" so that you're not passed or overtaken until after you are through the intersection.

Making a left turn. Check traffic behind you and then be prepared to move to "take the lane" and move to the left center area of the appropriate traffic lane. When traffic is clear, you'll proceed through the intersection and onto the next road, then move quickly over to the right so faster vehicles can pass. This maneuver may seem difficult

at first for inexperienced cyclists, but you'll develop confidence as you gain experience.

Railroad tracks. Try to cross railroad tracks at as close to a 90-degree angle as possible. If the tracks cross the road at an angle, check for traffic behind you and turn "in" to the tracks as perpendicular as possible. Tracks are likely to catch your tires and cause a crash if you approach from a



parallel position. Always be on the lookout for gravel or other debris in the vicinity of the tracks.

Shoulder Rumble strips

Some roads built to accommodate traffic over 50 mph in Georgia are equipped with paved shoulders and rumble strips. Paved shoulders are areas of pavement to the right of the white edge line. Shoulder rumble strips are a series of indentations pressed or ground into the pavement that cause vibration and noise in a motor vehicle if a driver veers to the right over the white edge line. The vibration and noise are meant to alert a driver leaving the roadway, possibly averting a run-off-the-road crash.

The strong vibration caused by riding a bicycle over shoulder

Photo: David Crites



More recent installations of shoulder rumble strips feature a gap to allow cyclists to enter or exit the paved shoulder.

rumble strips adversely affects handling and control. As cyclist speed increases, the effect of rumble strips becomes more noticeable, and the rumbles become more



Photo: David Crites

Older installations of shoulder rumble strips take up most of this 4' paved shoulder.

difficult to avoid. Unless it is really necessary to move out of the travel lane, riding on the rumble strips is not recommended.

Older rumble strip installations sometimes take up the entire paved shoulder. More recent installations provide for narrower strips with 12' long breaks of clear space every 28'. If there is sufficient shoulder width and no shoulder debris, a cyclist can ride separated from traffic by crossing at a break and riding to the right of the rumble strips.

City of Atlanta Sidewalk Ordinance

Sec. 150-210. Riding on sidewalks.

(a) **Business district.** No person shall ride a bicycle upon a sidewalk within a business district or the central traffic district.

(b) **Age restriction.** No person 13 or more years of age shall ride a bicycle upon any sidewalk in any district.

(c) **Duties to pedestrians.** Any person who is riding a bicycle upon a sidewalk shall yield the right-of-way to any pedestrian.

The driver of a vehicle emerging from an alley, building, private road, or driveway within a business or residential district shall stop such vehicle immediately prior to driving onto a sidewalk or onto the sidewalk area extending across such alley, building entrance, road, or driveway or, in the event there is no sidewalk area, shall stop at the point nearest the street to be entered where the driver has a view of approaching traffic thereon. The driver of a vehicle shall yield the right of way to any pedestrian on a sidewalk. Except as provided by resolution or ordinance of a local government for sidewalks within the jurisdiction of such local government authorizing the operation of bicycles on sidewalks by persons 12 years of age or younger, no person shall drive any vehicle upon a sidewalk or sidewalk area except upon a permanent or duly authorized driveway.

Riding on sidewalks

Riding on the sidewalk is not recommended except for children. Many Georgia cities and counties have regulations regarding where sidewalk riding is legal. Sidewalks were designed to accommodate pedestrians, not bicycles. Motorists are not looking for or expecting bicycles on sidewalks, which is potentially dangerous if you cross a driveway or pull back out onto the road from a sidewalk.

A moving bicycle poses a danger to pedestrians. Slow down or get off and walk if pedestrians are present, and call out or signal a warning if approaching from behind. When in doubt, always yield to pedestrians.

Try to avoid sidewalk riding if at all possible. If you choose to do so, be sure it is not prohibited by local ordinances. Ride at a slower pace and always yield to pedestrians. Use extra caution at driveways and when pulling back out onto the roadway.

Sharing the road with large trucks and buses

Most truck drivers know to allow extra space between themselves and other trucks and buses. Since these large vehicles need more room to move and stop, it's wise to use extra caution and give them a wide berth. Too often, bicyclists put themselves at risk when they cross inattentively in front of or beside trucks or buses.

Trouble can be avoided when cycling near large vehicles by keeping in mind that the driver of a truck or bus has several "blind

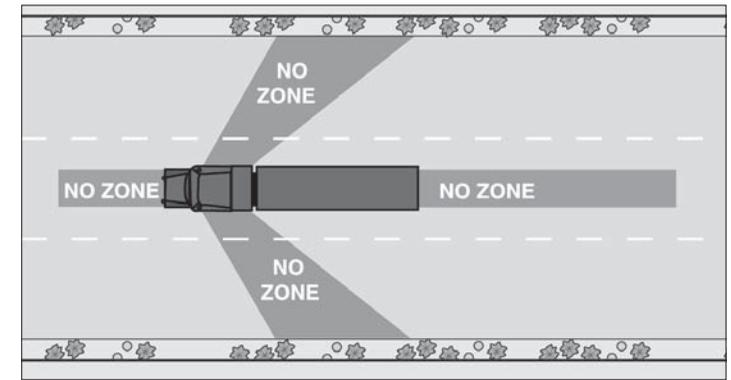
spots" – certain areas around the vehicle that the driver simply cannot see, even with the specialized side view and fish mirrors that modern large vehicles are equipped with for safety. Risks can be substantially reduced by staying out of these blind spots when near large vehicles.

As noted on the graphic on the following page, be aware of the "No-Zone" when cycling or walking around large vehicles.

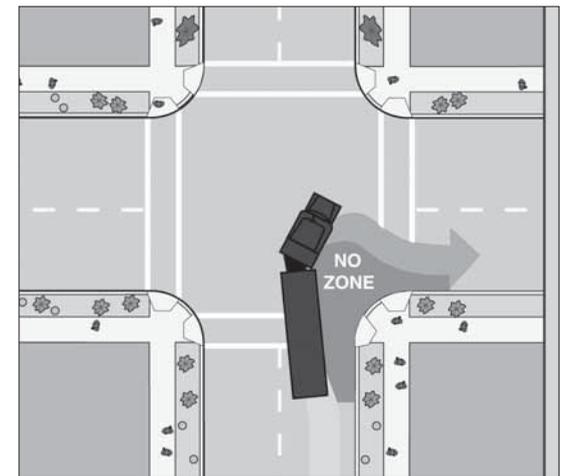
Side Blind Spots. When a large vehicle makes a turn at a street corner, that long distance between front and rear wheels means that the rear wheels may "off-track" and run across a shoulder or bike lane, or even a pedestrian area at the curb. A skilled driver knows just how the wheels must track in order to make a safe turn. Cyclists need to use extra caution here. Avoid being positioned at a street corner or intersection when a large vehicle approaches for a turn.

Cyclists should not pass trucks or buses on the right and should always stay out of "No Zone" areas. Keep your place in traffic behind these vehicles staying alert for lane changes or turns at intersections or driveways.

Behind the Vehicle. When it becomes necessary for a truck



Be aware of the NO-ZONES around large vehicles, where the driver cannot see other vehicles or fixed objects.



Diagrams: Colorado Dept. of Transportation

to back up, perhaps to make a delivery, the vehicle may block the roadway for a short time. Stay clear as the truck backs up. Remember that a truck or bus that appears to be standing still may move suddenly, particularly in crowded city traffic. Stay safe by staying clear of backing trucks and buses.

Buses and large trucks take longer to stop. It's important to realize that once a large vehicle gets rolling, it's going to take a longer distance to come to a safe stop – much farther than for a passenger car! Don't be in a hurry

to cross in front of an approaching bus or truck. Even a well trained professional driver might have difficulty stopping quickly, resulting in a crash. Let the vehicle pass before pulling out into traffic.

Dealing with hostile or aggressive motorists. If you ride regularly, you may encounter hostile or aggressive motorists. Sometimes they do not realize that bicycles are vehicles under Georgia traffic law, and may think you belong on the sidewalk or should not be riding

in traffic. They may honk, yell, or even throw something at you. You may be tempted to respond, but generally it is best not to. Yelling back or displaying an obscene gesture is only likely to escalate the situation.

If you are threatened or are harassed or assaulted, try to get the vehicle's tag number and a description of the driver. Notify law enforcement in that area as soon as possible and be prepared to provide location information and a clear account of what happened.

Basic on-road traffic safety strategies

Never ride against traffic. Ride in the right hand traffic lane with the flow of traffic.

Signal to other road users. Use hand signals to indicate your intentions to turn and stop. Try to make eye contact with drivers, especially at intersections.

Pull entirely off the road if you need to stop for any reason other than a traffic signal, stopped traffic, or a traffic light. This frees up the traffic lane for other road users, cyclists and motorists alike.

Be visible. Bright colors, like orange, yellow, and fluorescent green, are highly recommended in traffic.

Use lights in low visibility conditions. A white headlight and a flashing red tail light will make you much more visible, especially at dawn or dusk.

Use a mirror. A rear-view mirror is extremely helpful if you frequently ride in traffic. It will allow you to easily monitor traffic approaching from behind without turning your head.

Plan to stop if you're approaching a yellow light. Bicycles usually move slower

than cars, so you probably won't have time to clear the light on your bike. Beware of any cars approaching from behind who may not intend to stop at the yellow light.

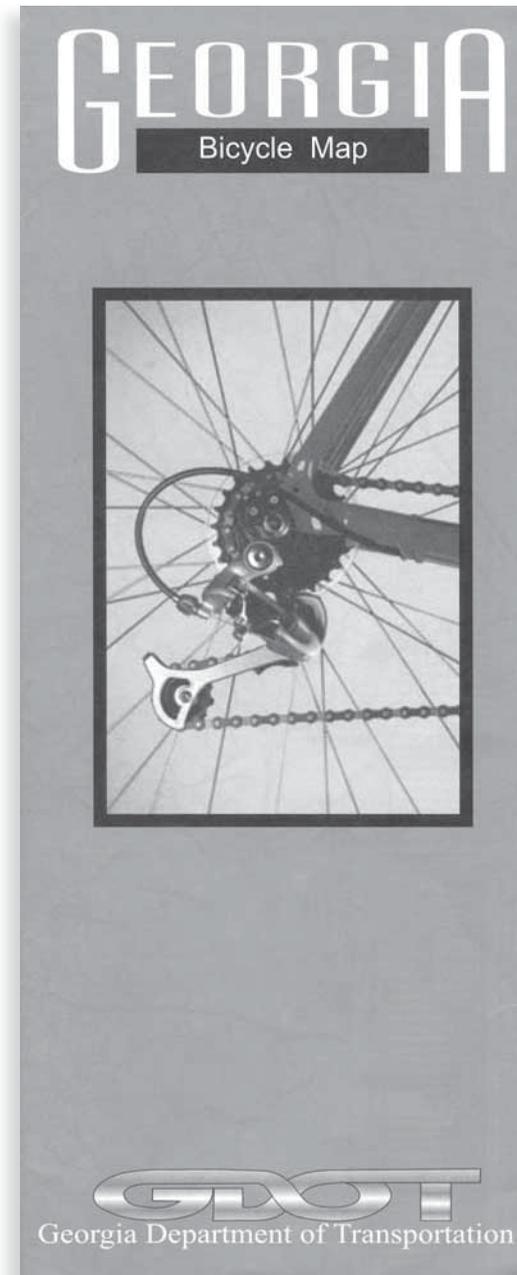
Pass others on the left, not on the right. Other road users are not expecting vehicles to pass on the right. Exceptions are passing automobiles while riding in a bike lane or a wide curb lane. Be sure to pass other cyclists on the left if sharing a lane.

Use caution at driveways and curb cuts. Cars entering and leaving the road from parking lots and driveways pose a major hazard for cyclists. Be wary of any cars in your vicinity as you approach these. The motorist may not be expecting bicycles and may not see you. Try to make eye contact with the driver.

Use extra caution around large vehicles like trucks and buses. Drivers of these vehicles have "blind spots" where they cannot see you, and take longer to stop.

Ride in a predictable manner. Avoid sudden, unexpected movements and do not weave in and out of traffic.

GDOT Georgia Bicycle Maps Available



Copies of the **Georgia Bicycle Map** are still available. In addition to showing the designated state bicycle routes, the map also features information on cycling in Georgia and has insets of major cities.

To request copies, contact the State Bicycle & Pedestrian Coordinator at:

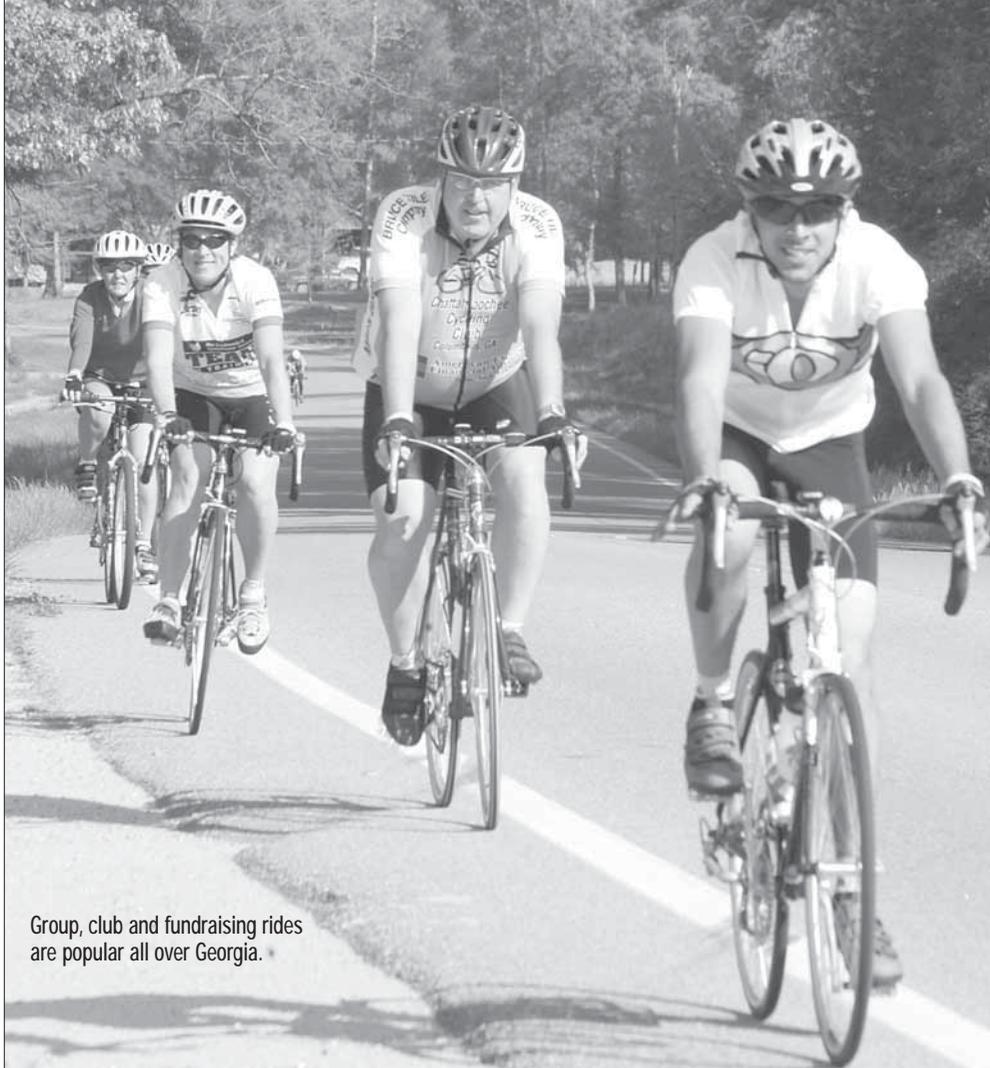
404-631-1778
or email
bikeped@dot.ga.gov

Additional resources:

Google Maps bicycling information
<http://maps.google.com/biking>

A-Train Trip Planner for the metro Atlanta area
<http://trip.atltransit.com>

Refer to the regional cycling organizations listed on page 60 of this manual for additional information and resources for maps and rides



Group, club and fundraising rides are popular all over Georgia.

Photo: Miles McClelland, BRAG

Riding With Other Cyclists

Riding with other cyclists requires some extra caution. Paying close attention to the riders around you and giving other cyclists and motorists some room will go a long way towards keeping everyone safe.

Don't pass on the right. When riding in traffic or with other cyclists, respect the principal that slower traffic stays to the right

and faster traffic passes on the left. Never, under any circumstances, pass another cyclist on the right. As a slow moving vehicle, cyclists are accustomed to yielding to faster traffic on the left, not the right. Passing on the right can be startling and unexpected, which can lead to bicycle collisions.

Riding two abreast is legal. If cars are approaching from behind,

especially on major thoroughfares or two-lane roads, be courteous and ride single-file until traffic clears. This is safer and shows some respect for other road users. If the road is winding, with lots of blind curves, or hilly, riding two abreast is not recommended. Vehicles coming around a curve or over a hill may be late seeing you and have little time to slow down or react.

Warn others in your group about approaching vehicles, hazards in the road, and other possible hazards. If you're at the front of a pack of riders, call out "car up" to warn those behind you that traffic is approaching. If you're riding behind others, call out "car back" to warn those ahead that traffic is approaching from behind. Pointing out glass, gravel, or debris in the road is also helpful to riders behind you.

Don't follow too closely. Use caution when following other riders. It's safer to leave a comfortable amount of space between you and another rider in case you need to stop quickly. If your front tire hits the rear tire of the rider in front

Photo courtesy of Aliba Mbiwan, BRAG



Riding two abreast is legal under Georgia traffic law.

of you, you will likely cause a crash. Pacelines (several riders riding as a group following very close to each other) should be left to very experienced riders in areas with little traffic.

Be aware of other road users. When riding in a group, it is important to always take personal responsibility for riding safely and to remain aware that you are



40-6-294 (b) Persons riding bicycles upon a roadway shall not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles.



Signs encouraging motorists and cyclists to share the road are becoming more common in Georgia.

sharing the road with others. Be sure to check behind you and to your left and right before passing or changing positions in the pack. Do not automatically follow other riders into an intersection. Personally check for traffic before proceeding. Also, do not get in the habit of hollering "clear" when entering an intersection to let riders behind you know it is OK to proceed. By the time they're ready to cross, there may be traffic present. Individual riders need to check for themselves before proceeding into intersections.



Warn riders behind you by pointing out hazards, such as trash, grates, or gravel.

Learn from others. Club and group rides are an excellent way to improve your cycling skills and make new friends. You can learn a great deal about techniques and equipment from other riders. There are also many organized fund raising rides held all over Georgia, especially on weekends in the spring and fall. Contact information on the major Georgia bicycle organizations is on page 60. Many of their web sites contain links to organized rides or cycling event calendars.



Riding two abreast is legal in Georgia. However, it shows courtesy to other road users to ride single file when traffic is attempting to pass.

Basic group riding safety strategies

Pass on the left. Always pass other cyclists on the left, never on the right. Pull to the right to let faster riders by.

Pull entirely off the road if you need to stop for any reason.

Ride predictably. Avoid sudden stops and turns, and do not weave left and right. Let other riders know your intentions.

Use hand signals. Signal to riders behind you that you are planning to stop or turn. A verbal reminder is helpful as well if they are close enough to hear you.

Verbal warnings. If you're on the front or tail end of a group and are

aware that traffic is approaching, let those in front or behind know with a loud "car up", "car back", or similar warning.

Don't follow too closely. Leave a gap between you and the rider in front of you. You are likely to crash if your front tire comes in contact with their rear wheel. Paceline riding should be left to very experienced cyclists only.

Be courteous – do not block traffic. Riding two-abreast is legal in a traffic lane. However, it shows common courtesy to ride single file when traffic is attempting to pass. Avoid joining large groups of cyclists if they seem to be blocking entire lanes of traffic.

What to Do if a Crash Occurs

Hopefully you'll never be a victim, but solo and vehicle crashes are risks that come along with cycling. By becoming familiar with the procedures below, you will be in a better position to deal with issues resulting from crashes or altercations involving other road users or vehicles.

Attend to injuries first. The first priority in any crash is checking for injuries. If someone is injured, immediately call for help and notify the appropriate law enforcement agency in your area. Once any injured parties have been attended to or taken out of harm's way, the process of gathering information can begin. This is not the time to discuss or speculate who is at fault. That can be sorted out later.

Here is a checklist of what to do if you're involved in a crash

At the crash scene:

- **Call 911 and ask for the police** (ask someone to call if you are not able). If you think you may be injured, don't hesitate to ask for an ambulance. Do not concern yourself with other matters such as damage to your bike.
- **If a motorist is involved, ask them to remain at the scene until the police arrive.** Leaving the scene of a crash is illegal.
- **Get the driver's license number,** insurance, vehicle type, tag number, and contact information from the driver.
- **Get names and phone numbers** from any witnesses.

- **Get the name of the car owner's insurance company and the policy number.** If it isn't the driver's car, be sure to get insurance information on both the driver and the vehicle.
- **If you are too injured to secure the information noted above** or are being removed from the scene, ask a friend or bystander to get the information for you. Be sure to exchange a way to contact them.

When law enforcement arrives:

- **Write down** what you believe happened as soon as you are able.
- **Ask the officer** to take a report.
- **Get the officer's name,** badge number, and department.
- **If you think you may be injured,** inform the officer and ask for EMS, then visit the emergency room or see a doctor to rule out or confirm any possibility of injury.
- **Be prepared to provide your contact information** to the other party and to law enforcement on the scene. For this reason it is important to carry identification with you when riding.
- **Be prepared to provide your medical insurance information** to the EMTs or at the emergency room.

After the crash:

- **Request a copy of the crash report.** The investigating officer will usually give you a business card at the scene. Call the officer and ask how to get a copy of the report. In Georgia, law enforcement agencies will usually provide this to you, your attorney, or an immediate family member. If you were given a blank report, take the time to fill it out and

return it within the required time frame. In the event you did not get a form, contact the appropriate law enforcement agency. There may be a "counter form" that you can fill out at the precinct. Submission of this form will insure that your incident becomes public record.

- **Notify all insurance companies.** If you have damaged property or were injured, notify the other driver's insurance company and, if you were injured, notify all insurance companies insuring motor vehicles for anyone in your household to be sure you meet notice requirements for future claims for medical payments, uninsured motorists and under insured motorists insurance. If the other driver is insured, ask his/her insurance company if you can submit your medical bills directly to them.
- **If asked by the driver's insurance company** to give a statement or to sign a medical release, consult with an attorney before signing anything.
- **Provide the insurance adjuster with a cost estimate to replace your bike, helmet, and other accessories.** Plan to replace your helmet if it hit the ground, even if it seems intact.
- **Do not throw away any damaged clothing or equipment.** Instead, take photographs of the damaged clothing or equipment and keep both the photographs and the clothing/equipment, unaltered, as evidence until any possible claims are settled.

- **Take photographs of the crash scene as soon after the incident as possible.** Take photographs from several angles and at several distances away. Take multiple pictures to ensure you get some good ones.
- If the other party is given a traffic citation (or other citation) by the police, **be sure to show up on that person's court date** so that you can tell the judge your side.
- If you are given a traffic citation (or other citation) by the police, **consult with an attorney.**
- **If you are injured, even slightly, keep a daily "Confidential Memo" of your injuries, treatment and recovery.** Take good quality, color photographs of your injuries and any medical apparatus used to treat your injuries. Keep your braces, casts or other medical apparatuses until possible claims are settled.

Always be prepared

Create a small identification kit to carry with you whenever you are cycling. Insert your identification, insurance information, emergency contact information, and change for a pay phone into a small zip-lock baggie, which will keep it clean and dry. Carry a mobile phone if possible.



Bicycling for Transportation

Photo: Krysia Haag

Bicycles provide a functional, practical, and cost-efficient means of transportation for many Georgia residents. Commuting, shopping, and running errands can all be accomplished quickly and easily, especially within distances of 3 miles.

Advantages of bike commuting:

Better overall fitness. With recent studies pointing to lack of exercise and obesity as serious health hazards, bike commuting is an easy way to work exercise into your daily routine.

Over 22% of all motor vehicle trips Americans take are less than one mile long, and 50% of the working population commutes five miles or less to work, an easily bikeable distance.

Source: www.bikemonth.com

Feel better. A cardiovascular workout before getting into the office will have you feeling more energized when you arrive at work. And as your overall fitness level improves, you'll find yourself feeling better in general.

Save money. The financial rewards are significant. AAA (American Automobile Association) estimates the cost per mile to drive an automobile in 2009 is 62 cents, which does not make financial sense for short distances. On a bike, you will not be paying for gas or parking each day.

Better for the environment. More bicycles being used for transportation result in fewer cars on the road, which helps improve air quality, can reduce traffic congestion, and conserves our natural resources.

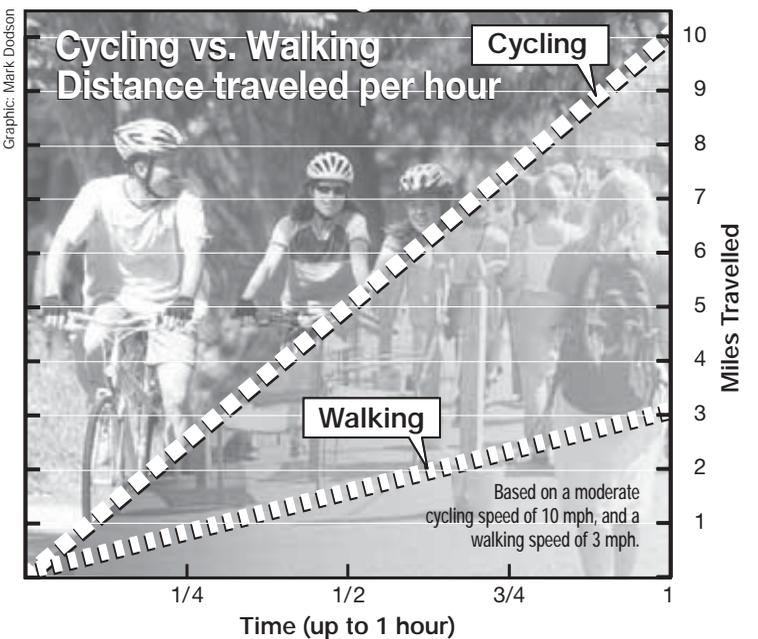
No parking hassles or expense. You'll likely be parking close to your building or destination and won't need to pay for parking.

Get to your destination faster than walking. A cyclist going at a moderate pace can cover ground quickly – arriving at a destination almost as quickly as an automobile in an urban environment, and considerably faster than walking.

What type of bicycle is best?

Any type of bike will do, so long as it is equipped properly to comfortably haul you and your gear. Consider how far you have to travel, what you'll need to carry, and in what conditions you'll be riding. Fat knobby tires that are common on mountain bikes are not ideal for paved streets, so a hybrid is a good choice if you're looking for the stability of an off-road bike that retains some of the quickness of a road bike. Several manufacturers also now offer "commuting bikes," with fenders, kickstands, locks and lights included as standard equipment.

Graphic: Mark Dodson



Commuting essentials

- **Helmet.** Don't ride anywhere without it.
- **Tire repair kit:** a pump, extra tube, tire levers and a patch kit – the basics for fixing a flat. Some basic bike tools could come in handy also.
- If you'll be riding at dusk or at night, a **white headlight** and **red taillight** are essential.
- **Rear-view mirror.** Great for monitoring traffic coming up behind you.
- **Bell or horn.** Good for warning pedestrians or other road users.
- **Lock.** Lock to a sturdy bike parking rack or heavy fixed object. Never leave your bike unlocked, especially if you will not be able to see it. A u-lock is the most secure, but cable locks will deter many thieves.
- **Bright colored clothing.** This will make you more visible to motorists and other road users. Dark colors or earth tones tend to blend into the landscape and make you difficult to see.
- **Water bottle.** Essential for all riding.



Several manufacturers now offer bikes built for commuting, like this one, featuring fenders and a chainguard, plus a built-in lock, a headlight, and a rear rack.

Photo: Krysia Haag. Trek bicycle courtesy of @ the Hub Bicycles, Athens.

Useful accessories

- **Rear rack.** A versatile piece of equipment to which a wide assortment of panniers or a basket can be attached.
- **Panniers or bags.** Many different styles are available, depending on what you need to carry and how much protection from the elements is required.
- **Fenders.** Will keep you dryer and cleaner if you're commuting in wet conditions.
- **Cycling computer.** Track your mileage, speed, and time.
- **Lights.** A white headlight and red tail light are a must if you'll be commuting at night or in low light conditions. Visibility is crucial to safe commuting.

Generally, any bike can be outfitted for commuting, provided it can be set up to comfortably transport you and accommodate anything you need to carry on a regular basis. There are some photos of bikes equipped with several types of racks and panniers later in this section.

What to wear

Dress for conditions appropriate for the weather and terrain you'll be riding in. This will vary quite a bit from season to season. The mileage and amount of time you'll be exposed to the elements should also be considered.

There are many new "high tech" synthetic fabrics on the market. These are nylon and polyester mixes that are designed to wick perspiration away from the body and dry quickly, which cotton does not do as well.

For short commutes in warm weather, a t-shirt, shorts, and possibly a light jacket may be adequate. In the spring and fall, it may even be possible to commute in your work clothes. Try some different combinations and see what works best for you.

Dress for visibility. As mentioned elsewhere in this manual, visibility is important, so always wear a bright colored outer layer. Yellow, orange, and neon green are the best choices. White is preferable to dark colors and earth tones, which tend to blend into the scenery. Red can be difficult to see in low light conditions that occur at dawn or dusk.



Photo: Mark Dodson

Increase your visibility with bright colored clothing.

You can commute by bicycle

Bike commuting is enjoyable. It's good for your health and the environment. The first big step for many would-be bicycle commuters is to overcome the excuses and get started. Here are some frequently heard excuses for not biking and how they can be overcome.

I'm out of shape. Start out with some short rides and gradually work up to some longer distances. You'll probably find destinations within a mile or two quite easy. Once you are comfortable with short trips, you'll find it easier to go farther as your overall fitness and confidence level increases.

My workplace is too far away. You may be surprised at how efficiently and quickly you can cover several miles. Trips fewer than three miles will probably seem quite easy. Trips of 4-8 miles may seem more challenging, but you may find you can cover this distance in not much more time than you do by car.

If riding the entire distance to work is too much, consider a "combo commute," combining biking with a bus or train ride, or riding your bike to a "park and ride" lot to join a carpool.

It's too hot (or cold). Riding comfortably is a matter of dressing properly for the conditions and altering your style of riding. In the heat of summer, you're going to get sweaty. Leaving early in the morning and riding slowly, especially up hills, will help. For winter riding, there are new fabrics that can be layered to let you ride comfortably in very cold temperatures. Most local bike shops have an extensive selection of cycling clothing.

I don't have a good bicycle. The latest in high-tech equipment isn't a requirement. A used or inexpensive bicycle in good working condition that fits you properly will be perfectly adequate to get around on, especially for short in-town trips.



Photos: Krystia Haag

Georgia is getting more cycling-friendly roads with wide shoulders or bike lanes.

Planning your route

There are several factors that go into planning a route. You'll want to consider the terrain and traffic volume. The route that works best for cycling will probably be one that's somewhat different than what you'd choose to drive.

Get started by mapping out a route. A city or county map is a useful reference. Some Georgia cities also have maps available showing bike facilities and bike-friendly routes. Once you've settled on a route, plan to do a test ride on a weekend. Carry a load similar to what you'd have with you on an actual commuting day. This will give you a general idea of what it's like and how much time to allow for the trip.

Traffic patterns may vary somewhat depending on the day of the week or time of year. For

example, if your route takes you past schools where students are being dropped off by their parents or school buses, you may encounter considerably more traffic at certain times of day. So when school is out for the summer, there will be fewer vehicles on the road, at least in the vicinity of the schools. A stretch of road that is headed directly into the setting sun in the late afternoon hours may seriously compromise visibility. You might want to consider a slightly different route during this period.

Even after commuting regularly, you may think of ways to alter or improve your route. Try different variations to see what works best.

Packing for the trip

Depending on the distance and conditions you'll be commuting in, you may want to pack your work clothes and change into them when you arrive at your destination.



Photos: Mark Dodson

Panniers or bags attached to a rear rack provide versatile and expandable carrying capacity.

Clothing can be kept neat by folding or rolling it, then inserting it into a closed bag or pannier. If you'll be carrying it in a basket or open bag, insert it into a large plastic bag that you can fold over. Pack dress shoes in a separate bag. This will keep them clean and dry.

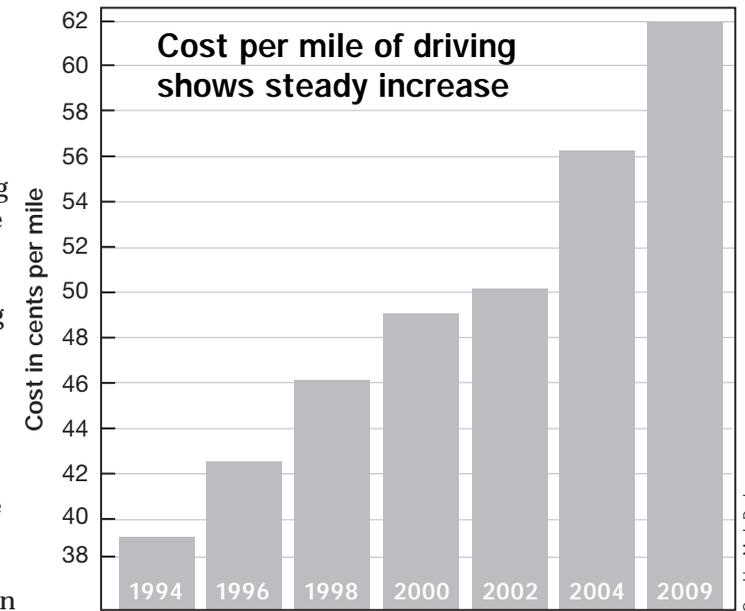
Another alternative is to deliver or drop off your work clothes ahead of time. This can be a good option for those who have a lot to carry each day and have space available to store the clothes.

Backpacks can be functional for light items; however, in warm weather or on longer trips many riders find them too hot, as the weight pressing on your back will tend to make you perspire. If you'll need the pack at your destination, a good solution is to equip your bike with an open bag or pannier that can accommodate it on your bike rather than your body.

Messenger bags, made popular by urban bike messengers, are popular among some commuters. Some riders find these are a more comfortable alternative to the standard two-strap backpack.

Cleaning up

Some workplaces, but not many, have access to shower facilities. If yours does not, there are still other effective ways to freshen up once



Source: AAA. Cost per mile estimates compiled using a sampling of vehicles and is based on average annual vehicle depreciation, and estimated costs of insurance, fuel, tires, and routine maintenance.

Graphic: Mark Dodson

you arrive at the office. A small towel and a washcloth are useful if you only have access to a rest room sink. Baby wipes and deodorant work well for some riders for cleaning up in warm weather.

Shopping

A commuting bike is also useful for shopping and errands. Rear pannier-style bags are available that are suitable for carrying grocery bags. Even fairly bulky items can be carried efficiently on a bike. If you are stacking items, the heaviest and bulkiest items travel best at the bottom. Fruit or more delicate items can ride on top, and lightweight durable items can be strapped or bungeed.



Photo: Byron Rushing

Bicycle racks are convenient and secure for parking and locking a bike.

Parking your bike

Bike parking is often in short supply at many work places. Finding a good parking spot may involve some creativity on your part. If there are no racks or designated bike parking available, consider the following options:

- **Inside your office or work place.** Check with your office management to see if you can store your bike in your office, or a storage or break room. If not, be resourceful and find a good parking spot nearby.

Bike to Work Events

May is National Bike Month. Sponsored by the League of American Bicyclists, it also includes **National Bike-to-Work Day** and **Bike-to-Work Week**. There are frequently bike-to-work events held in cities with active cycling advocacy groups during the month.

- **Look for spots in well-lighted areas** where there is lots of activity. Avoid dark or remote locations.
- **Bike racks** do exist in some locations. The U-shaped racks are common in newer facilities. These are secure and allow you to easily attach your bike with a bike lock.
- If there are no bike racks, secure your bike to a **railing or sturdy object**. There are places this will not be permitted, so try to check ahead of time to get an OK.
- Even if there is good outdoor parking available, also try to find a good covered area for days when there may be rain or bad weather.
- **Remove equipment.** If your bike will be unattended for a long time, consider removing the seat, front tire, headlights, or other expensive equipment that is detachable.



Photo: Krysia Haag

A U-Lock provides the best security for your bike, especially when attached to a bike rack.

Locks: Always lock your bike by securing it to a solid, heavy object, like a post or pillar. Be wary of signposts that could be pulled out of the ground. Small trees are not good options either. “U” style locks are the most secure, although cable locks will deter many thieves. If you have an expensive bike that you’re leaving in a high-risk area, consider using multiple locks, such as a “U” lock and cable combined.

Take stock of the facilities available at or near your workplace and determine what is most workable for you.



Photo: Mark Dodson

A cable lock provides less security, but allows you to tie up to larger objects.

Safe Commuting

Many would-be bicycle commuters have some concerns about riding in traffic. By following Georgia traffic laws and taking a few basic precautions, risks are reduced significantly.

- **Be visible to motorists.** Bright colored clothing is a must. It’ll help to ensure that other motorists see you. Lights and reflectors are a must in low light conditions or at night.
- **Ride in a predictable manner.** Maintain a steady line and do not weave in and out of traffic. This helps motorists to predict your course and pass safely.
- **Interact and communicate with motorists.** Use hand signals to show your intent to turn. Make eye contact at intersections. Wave and smile when a motorist yields or lets you through.

Some good resources for bicycle commuting and Bike-to-Work events:

League of American Bicyclists

www.bikeleague.org

National Bike Month

www.bikemonth.com/

Paul Dorn’s Bicycle Commuting Tips

www.runmuki.com/commute/

A-Train Trip Planner

www.trip.atltransit.com

Georgia's largest transit system, metro Atlanta's MARTA, has bicycle racks on all of its buses.

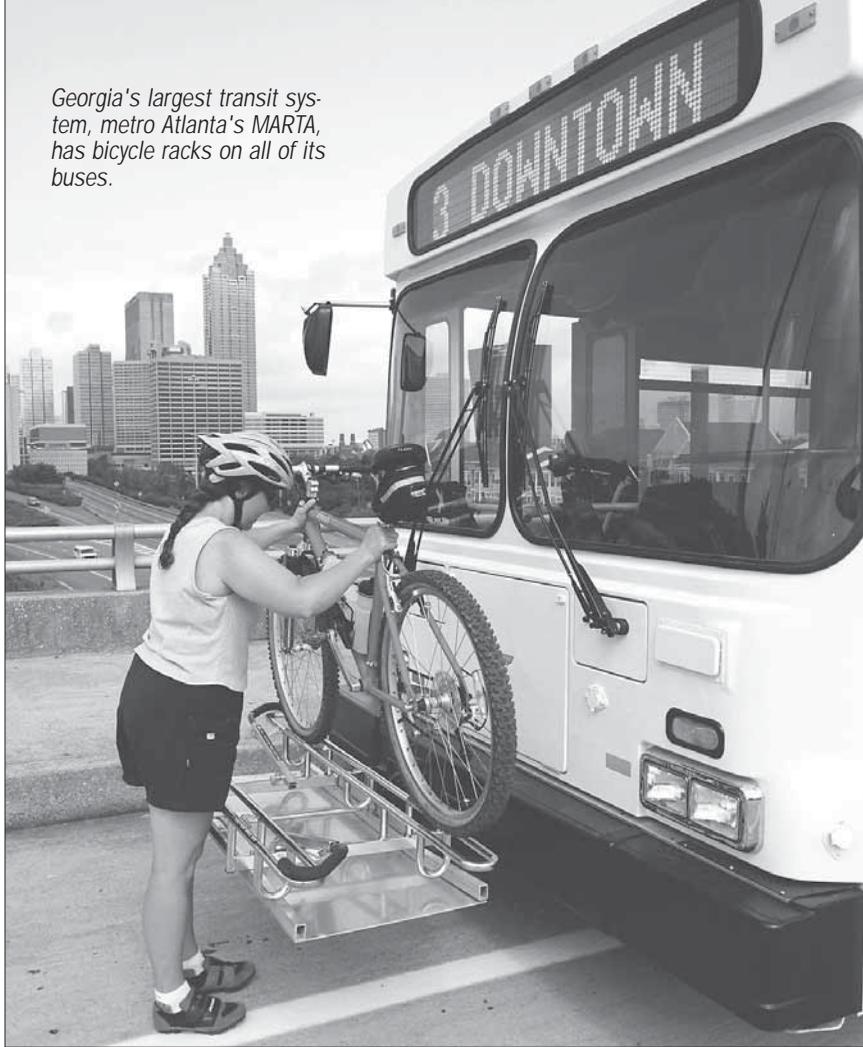


Photo: Kelly Mills, MARTA

Bikes on Trains and Buses

Many Georgia Transit systems now accommodate bicycles, mostly with front-mounted bike racks. Georgia's largest transit system, MARTA (in the Atlanta area) also allows bikes on the trains.

Combining cycling with transit is an efficient alternative to commuting without an automobile, especially on days with bad weather in the forecast or air quality issues. The additional mileage you can cover quickly on a bus or train increases your bicycle commuting

range and also reduces some of the limitations you may encounter due to weather. For example, on a winter morning you could take a bus most of the way to your destination, then bike home during the afternoon hours when it is warmer. Or use transit to cover long stretches where terrain or traffic conditions would make cycling more challenging. In summer, take public transit home when it is too hot or air quality is poor.

A bike rack accommodating 2 or 3 bikes on the front of a bus is the most common set up. The photos

on pages 48-49 show the steps for loading your bike on a front rack. Bicycles are permitted on board MARTA rail cars at all times during the day. The first and last cars of a train are usually least crowded.

Transit tips for cyclists

- The bus driver may be able to provide some assistance if it's your first time using the rack or you are having difficulty.
- Do not leave your helmet or anything loosely attached to your bike. Bags or panniers that are not permanently attached should be removed.
- When you arrive at your destination, be sure you have all your belongings and mention to the driver that you'll be removing your bike.
- Load your bike on the rack furthest back so that riders at



Photo: Preston Tyree

Bikes are permitted in the MARTA rail cars.

later stops can load their bikes more easily.

- Give pedestrians space on train platforms and when entering the doors with your bike. Hold on to your bike in the rail car to keep it from moving or rolling into other passengers. Do not block exits on the train with your bike.

GEORGIA TRANSIT SYSTEMS THAT ACCOMMODATE BICYCLES

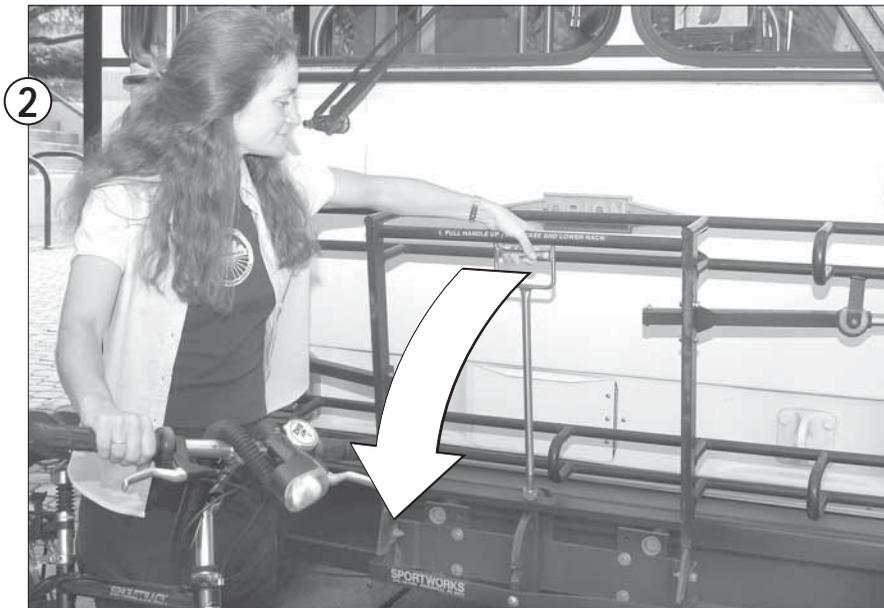
Atlanta	MARTA	www.itsmarta.com
Atlanta metro	Xpress	www.xpressga.com
Athens	Athens Transit	www.athenstransit.com
Rome	Rome Transit	www.romefloyd.com/EnrichingLife/Transit/tabid/105/Default.aspx
Columbus	METRA	www.columbusga.org/Metra/
Cobb County	Cobb Community Transit	www.cobbdot.org
Emory	Emory Univeristy	www.epcs.emory.edu/alltransp/
Gwinnett County	Gwinnett County Transit	www.gctransit.com
Savannah	Chatham Area Transit	www.catchacat.org
Amtrak		www.amtrak.com/servlet/ContentServer/Page1241267362028/1237405732517

Using front loaded bike racks on buses

Follow these steps to use a front-loaded bus rack. The entire fleet of Athens Transit buses (Athens, GA) shown here is equipped with racks.



1 Get ready to load: As the bus arrives and stops, make sure the driver sees you and knows you're planning to use the rack.



2 For front mounted racks like this, pull the center handle forward to fold out the rack.



3 Load the bike onto the rack by dropping the wheels in the slot.



4 Secure the bike by lifting the bar up and clamping it over the tire.

Photos: Kysia Haag

Riding on Paved Paths



Photos: Krysia Haag

Paved paths are increasingly popular in many parts of Georgia. Some, like the PATH system in metro Atlanta, are bikeable networks that provide alternate routes to destinations and provide good connectivity. The Silver Comet Trail, west of metro Atlanta, now links up with Alabama's Chief Ladiga Trail, linking Smyrna, Georgia with Anniston, Alabama, a distance of over 100 miles.

Paved paths usually fall into two categories – rail-to-trail conversions, or paved paths that run along roadways or through parks and greenspace. The latter are referred to by interchangeable names such as multi-use trails, shared-use paths, sidepaths, greenways, or some

variation thereof. Rail-trails, built on former railroad beds, feature reasonably flat terrain and access that is limited to trailheads, other trails, intersecting roadways, and sometimes parks.

Typical paved paths sometimes look like a wide sidewalk, but are built to accommodate pedestrians, cyclists, and other non-motorized users. An extended trail like this may run along a roadside, then veer into a park or open space before connecting to another road. These are sometimes combined with on-road bicycle facilities to form a network of "bike routes" that connect various destinations.

Safety issues. Many people assume that cyclists are automatically safer on paved paths than sharing

the road with automobile traffic, but this is not necessarily the case. While they provide a degree of separation between automobiles and bicycles, paths present other potential hazards. Cyclists will frequently find themselves sharing these facilities with other cyclists, pedestrians, joggers, small children, and pets. Any type of collision involving a cyclist with other users poses a serious risk of injury to all.

Often, both pedestrians and cyclists have little experience or training sharing space with one another, so misunderstandings on what constitutes proper "trail etiquette" can happen. To be safe, ride slower around pedestrians, and always assume that they have the right of way.

Sidepaths. Cyclists using side paths along roads have an added element to deal with – automobile traffic. When using these paths, cyclists need to be aware of possible automobile traffic crossing the path at curb cuts and driveways. Cyclists will also need to use extra caution to safely merge back on to the road in areas where the path comes to an end.

Some sidepaths are built only on one side of a road, but accommodate bicycle traffic going in both directions. Cyclists riding against traffic on these paths can find themselves in awkward positions at intersections where they are not riding with the flow of traffic. When this occurs, it can be safer to dismount and cross the intersection as a pedestrian.

Paved Path Etiquette

- Yield to pedestrians. Pedestrians always have the right-of-way.
- The path is like a roadway. Keep to the right and pass on the left.
- Announce yourself. Warn other path users as you approach from behind. For example, say "On your left" when approaching.
- If you stop, pull off of the path. Always allow other users to pass on the left.
- Watch out for maintenance and security needs while on the trail. Report crime and maintenance problems to authorities.
- Obey all signs and rules. Stop at intersections. Travel at safe speeds. Keep right.
- Keep the trail clean. Don't litter.

Paved path basics for cyclists

As a cyclist, the same general principles of road riding apply on trails. Stay to the right, and pass others on the left. Be mindful of other users, and adjust your speed accordingly so you don't pose a hazard to them. Assume that pedestrians have the right of way. Use extra caution at intersections, trailheads, or anywhere there is



Photo: Krysia Haag

Paved paths that run along only one side of the road can leave cyclists in an awkward position at intersections where they are not in the flow of traffic.



Photos: Krystia Haag

Use extra caution near intersections, driveways, and curb cuts where automobiles can cross a path.

access for anyone to enter or exit the path. Provide some audible or verbal warning if you're approaching from behind, but do so in a way that does not scare or startle them (they may just move into your travel path).

While paths directly along roadways provide an added degree of separation from automobile traffic, it is important to be aware of traffic on the road. If the path itself crosses driveways or intersec-

tions, drivers may be looking to turn into an area that crosses the path. Since the cyclist is not actually in the road, drivers' awareness of them as part of the traffic pattern may not register. The same rules of road riding still apply: use hand signals to indicate turns and stops. Wear bright colored clothing so as to make yourself more visible.

Sharing paths with other users

Approaching pedestrians from behind. Do not assume pedestrians are aware you're coming up behind them. They almost certainly do not see you and they may not hear you. Try to provide some audible warning as you approach, and do so before you get too close so you do not startle them. If you have a bell or horn, sounding it from a reasonable distance is helpful. If not, say "Passing on your left" as you get closer, but do not wait until you are right on top of them. If

they have an idea a cyclist is approaching, they will have time to react and won't be caught off guard. Unless you're already going slow, make a point to slow down and give them some extra space as you pass.

Approaching head-on. Since pedestrians usually prefer to travel against traffic, it can create an awkward situation when a cyclist is traveling in the opposite direction on the same path. The cyclist, moving faster, will usually be the one to choose which way to go. Make eye contact and try to get an indication of whether or not they are aware that you're approaching. Slow down as you get closer and give them some space as you pass.

Not all of the pedestrians you encounter will be accustomed to dealing with cyclists. Talking with another person, attending to a child, or listening to headphones also may distract them. It helps if they are aware that you're approaching, but they are likely to be annoyed if yelled at or do not see or hear you until you are too close.

Pets, children, and skaters. The term "multi-use," as applied to paths, means just that - paths are open to all users, not just cyclists. Rail-trail facilities such as Silver Comet are popular destinations for families with kids and pets, since they are often park-like places. Kids and dogs can be somewhat unpredictable and can veer into

See these links for more details on trails in Georgia and the southeast

Trail Express	www.trailexpress.com
PATH Foundation	www.pathfoundation.org
Georgia State Parks Department	www.gastateparks.org
Rails to Trails Conservancy	www.railtrails.org
Great Bicycle Trails	www.great-trails.com

your travel path, so slow down considerably when approaching, especially from behind.

Non-cyclists can sometimes have trouble estimating how fast a bicycle is approaching. If you see someone at the trail side who's about to enter the trail, slow down and try to make eye contact. Be prepared if they move out into the lane to give them some space if needed.

Inline skaters require more pavement width as they push from side to side. Plan to give them a wide berth as you pass and some verbal indication that you're approaching.

Young children sometimes have a tendency to weave as they ride, rather than riding in a straight line. They also don't have the awareness of other trail users that most adults do. Always slow down and give kids some extra space.

Most paved paths experience much heavier traffic near the trailheads and attractions, especially during nice weather in the spring and fall. Cyclists should give pedestrians the right-of-way and slow down, using extra caution riding in these areas. Speed can be increased where traffic is lighter, depending on location, time of day, and season.



Photo: Krystia Haag

Ride to the right on trails, much like on the street.



Photo: Bikes Belong

Cycling with Kids

Cycling with kids can be a very rewarding experience. You can get out and enjoy Georgia's great climate with the entire family. It is also an excellent opportunity to teach a child cycling skills that will last a lifetime.

Kids can participate in cycling from a young age. Young children will probably start out in a child's seat or a trailer. Slightly older children will get their start when they graduate from a tricycle to their first bicycle equipped with training wheels.

In a sense, a bicycle is a child's first vehicle. While it only has two wheels, it is wise to always stress the point that a bike is a vehicle, and not a toy, and Georgia traffic

law defines it as such. With the freedom and mobility it offers come many responsibilities, including many important safety considerations.

For parents, being a good role model is a very important step toward teaching children to ride responsibly. Be familiar with safe cycling practices and make a point to ride safely and responsibly yourself. Wear a helmet. Stop at stop signs. Wear bright colored clothing.

Getting started

Young children (ages 1-4) can begin participating in cycling from around 1 year old. Be sure to get an OK from your pediatrician before getting started. Georgia law requires anyone under the age of 16 to wear

a helmet while cycling. This applies to toddlers who are passengers on a bicycle or a trailer as well. Most manufacturers make helmets specifically designed for children of various ages. Check with your local bike shop.

Rear mounted child seats serve as a good way to get started with very small children, but they do raise the bike's center of gravity which will make it handle somewhat differently. Many parents find themselves graduating or going directly to a trailer instead. These allow the child to ride behind the



Photo: Miles McClelland, BRAG

bike rather than on top of it. Newer models will disengage in the event of a crash, reducing the likelihood the trailer will roll over. Overall, the trailer is considered the safer of the two options.



40-6-296 (e)(1) No person under the age of 16 years shall operate or be a passenger on a bicycle on a highway, bicycle path, or sidewalk under the jurisdiction or control of this state or any local political subdivision thereof without wearing a bicycle helmet.

Rides can be an educational opportunity. Talk to a child and point out safety issues as you're riding. Mention that you're slowing to look for oncoming traffic, or stopping for a stop sign. Point out potentially hazardous situations such as cars pulling out of driveways or pedestrians about to step out into the road. Explain in simple terms how these situations could result in a crash. Kids will pick up on these things and learn by your example.

Most preschoolers will not have the coordination to ride by themselves, certainly not without training wheels. However, it is still not too early to get them familiar with various parts of the bike and how they work. Show them the brakes and how to apply them. Teach them to keep hands and feet away from the spokes of a spinning wheel and clear of the chain. If something breaks or is in need of repair, show them the problem and explain why it is important to fix it.

Preschoolers should not ride in the street. Explain that bikes ridden by small children are harder for drivers to see, and use it as a bridge to a lesson on dressing for visibility before going out on a ride. Once they're up and running, let them get some experience on driveways, trails, or sidewalks with close adult supervision. Continue to stress safety issues such as wearing a helmet and visibility.



Photo: Miles McClelland, BRAG

Family affair: a youngster is pulled along on the trail-a-bike behind a tandem, while the older child is in the stoker position behind dad, who is up front.

Older children (ages 5-10)

School age kids can begin to grasp the basics of cycling. They can start to get familiar with shifting and braking, as well as dodging rocks and obstacles. This is a good time to begin introducing general concepts of how cyclists and other road or trail users interact with one another. Stress the importance of always riding on the right and passing on the left. Teach them to make eye contact with other road or trail users and to understand that there is no way to predict where other vehicles are going to go.

Basic concepts of group riding can be introduced, such as not riding too close to others, using hand signals to indicate stops and turns, and giving verbal warnings such as “on your left” when passing other riders.

Stress the concept of riding with traffic rather than against it, and always ride this way to set a good example.

They may be ready to venture onto low traffic streets with adult supervision; however, at this age they still don't have the experience to judge how fast other vehicles are moving or approaching, so use extra caution. When crossing a street or busy intersection, have the child dismount and walk across as a pedestrian. Use the same degree of caution on roads in your neighborhood as you would on a busy thoroughfare with heavier automobile traffic.

They are now old enough to get more familiar with how equipment and accessories work. Show them how to properly put on a helmet, use a bike lock, clean the bike, and inflate the tires.

Children and Early Teens

From the ages of 11-14, kids are getting stronger and now have the physical ability to ride independently. If they have already had some cycling experience, they'll be somewhat familiar with the basics of bike handling and safety. At this age, kids can work on refining and expanding those skills to ride safer and more efficiently.

They are likely to have more interest in bicycle accessories. You can show them how gloves, rear-view mirrors, and different types

of clothing can be useful. How and when to use head and tail lights is important, and also required by law. Cycling computers are inexpensive and will help them to track and understand speed and distance.

If they are regular riders, their bikes can be equipped with some simple tools and a pump for changing a flat. They can also get more involved in maintaining their bikes and learn to make simple adjustments and repairs such as changing or patching a tire.

Bike Trailers vs. Bike Seats

Bike trailers and bike seats each have advantages and disadvantages. A trailer is a more stable way to transport a child over one year-old who has adequate neck strength to maintain head position. A seat loaded with a child raises the bike's center of gravity, making it more top-heavy and prone to tip-over. In addition, some children attempt to see around the adult's body by shifting back and forth in the seat, forcing the adult to unexpectedly adjust balance. However, a child in a bike seat has a better view than a child in a trailer.

Both trailers and seats have five-point harnesses to keep a child firmly restrained, but in the event of a tip-over, the trailer provides a frame to absorb impact. Most bike trailers also have hitches that keep the trailer level in the event that the adult falls. Trailers can tip if turns are taken at high speeds, but the harnessing system in addition to the trailer's external frame help minimize the chances of serious injury.

On top of being heavier, a trailer creates more wind drag, especially if the clear vinyl windshield is rolled up to increase ventilation.

Trailers also tend to be wider than a bike, which can present problems in narrow or confined spaces. Because trailers are more enclosed, they are more conducive for use during cooler or wetter weather, but in summer they can be considerably hotter than a bike seat.

In the end, the choice of either a trailer or a seat depends upon the purpose of travel and the relative riding skills of the parent. Recreational riders who only ride with their children in good weather probably will be content with a seat. Parents who rely on their trailers for transportation may find a trailer more versatile.



Photo: Paul Quick



Photo: Miles McClelland, BRAG

Families with children enjoy the annual Bicycle Ride Across Georgia every summer.

This is also a good time to show them more about positioning themselves safely on a road or trail. Scanning for traffic and other road hazards is a good habit to get them into. Teach them to check behind them before changing lanes or moving out into traffic.

They may want to ride with headphones, but this is hazardous and should not be permitted. It prevents them from being able to hear traffic and warning signs around them.

More kids' cycling resources

Pedestrian and Bicycling Information Center
www.bicyclinginfo.org/ee/ed_child_main.htm



Photo courtesy of Atiba Mbiwan, BRAG

An adult helps a teen rider get familiar with road riding on a recumbent tandem during the Bicycle Ride Across Georgia.

Getting children and teens started in cycling

- **As an adult, always set a good example.** Wear a helmet, stop at traffic lights and stop signs, and ride responsibly.
- **Insist that kids wear helmets at all times.** It will significantly reduce the risk of serious injury and it is the law in Georgia.
- **Make riding with children a learning opportunity.** Point out safety hazards and encourage them to follow the rules of the road.



Photo courtesy of Atiba Mbiwan, BRAG

National, Regional and Local Cycling Organizations

There are a wide range of clubs and organizations in Georgia that are actively supporting cycling. Some plan and conduct rides and events, others are non-profit advocacy groups working to improve cycling conditions.

Some focus on both in addition to other activities. Since each group's mission, services, or contact information can change over time, we are directing readers to their respective Web sites for details and contact information.

LOCAL ORGANIZATIONS	LOCATION	WEB SITE
Azalea City Cyclists	Valdosta	www.azaleacitycyclists.com
BikeAthens	Athens	www.bikeathens.com
Coastal Bicycle Touring Club	Savannah	www.cbtc.org
Coosa Valley Cycling Assn.	Rome	www.cvca.org
Decatur Yellow Bikes	Decatur	www.dybikes.org
Gwinnett Touring Club	Gwinnett County	www.gtcbike.org
Metro Atlanta Cycling Club (MACC)	Atlanta	www.maccattack.com
Nitty Gritty Bike Band	Athens	www.cyclenittygritty.org/
Pecan City Pedalers	Albany	www.pecancitypedalers.org
Savannah Bicycle Campaign	Savannah	www.bicyclecampaign.org
Southern Bicycle League	Atlanta	www.bikesbl.org
Sweet Onion Cyclists	Vidalia	www.letsride.net

An updated listing of Georgia clubs, organizations, and cycling resources is available on the Georgia Department of Transportation web site at www.dot.ga.gov. Click on "Traveling in Georgia" and "Bicycle and Pedestrian Programs".

To submit or update info on your cycling club or organization, email the *State Bicycle & Pedestrian Coordinator* at Bikeped@dot.ga.gov or call 404-631-1778.

REGIONAL ORGANIZATIONS

Atlanta Bicycle Coalition	www.atlantabike.org
Bike! Walk! Northwest Georgia	www.bwnwga.org
East Point Velodrome Association	www.dicklanevelodrome.com
North Georgia Bicycle Dealers Assn.	www.bike4fun.com
PATH Foundation	www.pathfoundation.org

STATEWIDE ORGANIZATIONS

Georgia Bikes!	www.georgiabikes.org
Bicycle Ride Across Georgia	www.brag.org
SORBA (Southern Off-road Bicycle Assn.)	www.sorba.org

GOVERNMENT RESOURCES

Atlanta Regional Commission Bike/Ped Pages	www.atlantaregional.com/transportationair/bikeped.html
Georgia Dept. of Transportation Bike/Ped Pages	www.dot.ga.gov
Georgia Tourism	www.georgia.org
Georgia State Parks	www.gastateparks.org
Federal Highway Administration Bike/Ped Pages	www.fhwa.dot.gov/environment/bikeped/

NATIONAL ORGANIZATIONS

AmericaBikes	www.americabikes.org
Bikes Belong	bikesbelong.org
League of American Bicyclists	www.bikeleague.org
National Bicycle Tour Directors Assn.	www.nbtda.com
National Center for Biking and Walking	www.bikewalk.org
Pedestrian and Bicycle Information Center	www.pedbikeinfo.org
Rails to Trails Conservancy	www.railtrails.org
Alliance for Biking & Walking	peoplepoweredmovement.org

Georgia Bicycle Laws

40-6-290.

The provisions of this part applicable to bicycles shall apply whenever a bicycle is operated upon a highway or upon any path set aside for the exclusive use of bicycles, subject to those exceptions stated in this part.

40-6-291.

The provisions of this chapter that apply to vehicles, but not exclusively to motor vehicles, shall apply to bicycles, except that the penalties prescribed in subsection (b) of Code Section 40-6-390, subsection (c) of Code Section 40-6-391, and subsection (a) of Code Section 40-6-393 shall not apply to persons riding bicycles.

40-6-292.

(a) A person propelling a bicycle shall not ride other than upon or astride a permanent and regular seat attached thereto and shall allow no person to ride upon the handlebars.

(b) No bicycle shall be used to carry more persons at one time than the number for which it is designed and equipped.

(c) No person shall transport a child under the age of one year as a passenger on a bicycle on a highway, roadway, bicycle path, or sidewalk; provided, however, that a child under the age of one year may be transported on a bicycle trailer or in an infant sling so long as such child is seated in the bicycle trailer or carried in an infant sling according to the bicycle trailer's or infant sling's manufacturer's instructions, and the bicycle trailer is properly affixed to the bicycle according to the bicycle trailer's manufacturer's instructions or the infant sling is properly worn by the rider of the bicycle according to the infant sling's manufacturer's instructions

and such child transported in a bicycle trailer or infant sling is wearing a bicycle helmet as required under paragraph (1) of subsection (e) of **Code Section 40-6-296.**

(d) No child between the ages of one year and four years shall ride as a passenger on a bicycle or bicycle trailer or be transported in an infant sling unless the child is securely seated in a child passenger bicycle seat, bicycle trailer, or infant sling according to the child passenger bicycle seat's, bicycle trailer's, or infant sling's manufacturer's instructions and the child passenger seat or bicycle trailer is properly affixed to the bicycle according to the child passenger bicycle seat's or bicycle trailer's manufacturer's instructions or the infant sling is worn according to the infant sling's manufacturer's instructions.

(e) Violation of subsections (c) and (d) of this Code section shall not constitute negligence per se nor contributory negligence per se or be considered evidence of negligence or liability.

(f) No person under the age of 16 years failing to comply with subsections (c) and (d) of this Code section may be fined or imprisoned.

40-6-293.

No person riding upon any bicycle, coaster, roller skates, sled, or toy vehicle shall attach the same or himself to any vehicle upon a roadway.

40-6-294.

(a) Every person operating a bicycle upon a roadway shall ride as near to the right side of the roadway as practicable, except when turning left or avoiding hazards to safe cycling, when the lane is too narrow to share safely with a motor vehicle, when traveling at the same

speed as traffic, or while exercising due care when passing a standing vehicle or one proceeding in the same direction; provided, however, that every person operating a bicycle away from the right side of the roadway shall exercise reasonable care and shall give due consideration to the other applicable rules of the road. As used in this subsection, the term "hazards to safe cycling" includes, but is not limited to, surface debris, rough pavement, drain grates which are parallel to the side of the roadway, parked or stopped vehicles, potentially opening car doors, or any other objects which threaten the safety of a person operating a bicycle.

(b) Persons riding bicycles upon a roadway shall not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles.

(c) Whenever a usable path has been provided adjacent to a roadway and designated for the exclusive use of bicycle riders, then the appropriate governing authority may require that bicycle riders use such path and not use those sections of the roadway so specified by such local governing authority. The governing authority may be petitioned to remove restrictions upon demonstration that the path has become inadequate due to capacity, maintenance, or other causes.

(d) Paths subject to the provisions of subsection (c) of this Code section shall at a minimum be required to meet accepted guidelines, recommendations, and criteria with respect to planning, design, operation, and maintenance as set forth by the American Association of State Highway and Transportation Officials, and such paths shall provide accessibility to destinations equivalent to the use of the roadway.

(e) Electric assisted bicycles as defined in Code Section 40-1-1 may be operated on bicycle paths.

40-6-295.

No person operating a bicycle shall carry any package, bundle, or other article which prevents him from keeping at least one hand upon the handlebars.

40-6-296.

(a) Every bicycle when in use at nighttime shall be equipped with a light on the front which shall emit a white light visible from a distance of 300 feet to the front and with a red reflector on the rear of a type approved by the Department of Public Safety which shall be visible from a distance of 300 feet to the rear when directly in front of lawful upper beams of headlights on a motor vehicle. A light emitting a red light visible from a distance of 300 feet to the rear may be used in addition to the red reflector.

(b) Every bicycle sold or operated shall be equipped with a brake which will enable the operator to make the braked wheels skid on dry, level pavement.

(c) No bicycle shall be equipped or operated while equipped with a set of handlebars so raised that the operator must elevate his hands above his shoulders in order to grasp the normal steering grip area.

(d) No bicycle shall be equipped, modified, or altered in such a way as to cause the pedal in its lowermost position to be more than 12 inches above the ground, nor shall any bicycle be operated if so equipped.

(e)(1) No person under the age of 16



For more information on Georgia state laws, see

www.legis.state.ga.us

Click on the Georgia Code link.

years shall operate or be a passenger on a bicycle on a highway, bicycle path, or sidewalk under the jurisdiction or control of this state or any local political subdivision thereof without wearing a bicycle helmet.

(2) For the purposes of this subsection, the term “bicycle helmet” means a piece of protective headgear which meets or exceeds the impact standards for bicycle helmets set by the American National Standards Institute (ANSI) or the Snell Memorial Foundation.

(3) For the purposes of this subsection, a person shall be deemed to wear a helmet only if a helmet of good fit is fastened securely upon the head with the straps of the helmet.

(4) No bicycle without an accompanying protective bicycle helmet shall be rented or leased to or for the use of any person under the age of 16 years unless that person is in possession of a bicycle helmet at the time of the rental or lease.

(5) Violation of any provision of this subsection shall not constitute negligence per se nor contributory negligence per se or be considered evidence of negligence or liability.

(6) No person under the age of 16 failing to comply with any provision of this subsection may be fined or imprisoned.

40-6-297.

(a) It shall be unlawful for any person to sell a new bicycle or a pedal for use on a bicycle unless the pedals on such bicycle or such pedals are equipped with reflectors of a type approved by the Department of Public Safety. The reflector on each pedal shall be so designed and situated as to be visible from the front and rear of the bicycle during darkness from a distance of 200 feet. The commissioner of public safety is authorized to promulgate rules and regulations and establish standards for such reflectors.

(b) This Code section shall not apply to any bicycle purchased prior to July 1, 1972, by a retailer for the purpose of resale.

40-6-298.

(a) It is a misdemeanor for any person to do any act forbidden or fail to perform any act required in this part.

(b) The parent of any child and the guardian of any ward shall not authorize or knowingly permit such child or ward to violate any of the provisions of this part.

40-6-299.

The Board of Public Safety is authorized to promulgate rules and regulations to carry this part into effect and is authorized to establish regulations for any additional safety equipment or standards it shall require for bicycles.

40-6-144

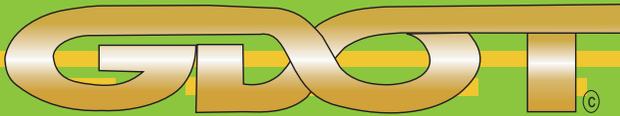
The driver of a vehicle emerging from an alley, building, private road, or driveway within a business or residential district shall stop such vehicle immediately prior to driving onto a sidewalk or onto the sidewalk area extending across such alley, building entrance, road, or driveway or, in the event there is no sidewalk area, shall stop at the point nearest the street to be entered where the driver has a view of approaching traffic thereon. The driver of a vehicle shall yield the right of way to any pedestrian on a sidewalk. Except as provided by resolution or ordinance of a local government for sidewalks within the jurisdiction of such local government authorizing the operation of bicycles on sidewalks by persons 12 years of age or younger, no person shall drive any vehicle upon a sidewalk or sidewalk area except upon a permanent or duly authorized driveway.

Vision

Keep Georgia moving with
quality transportation.

Mission

The Georgia Department of Transportation
provides a safe, seamless and
sustainable transportation system that
supports Georgia's economy and is
sensitive to its citizens and environment.



Georgia Department of Transportation

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