

Pocket GUIDE

Riding a Bicycle Safely in New York State



WITH AN OVERVIEW OF...

- Riding Bicycles Safely on the Road
- Bicycle Vehicle & Traffic Safety Laws

PERTAINING TO...

E-Bikes & E-Scooters, Bicycle Maintenance, Bike Share, and Tips for Pedestrians





This pocket guide is designed to provide at-a-glance information on bicycle safety. Whether you are an experienced bicyclist, getting back into it, or just starting out, the information may be helpful to you. Read it for yourself, your children or interested friends. The guide was designed to cover a number of important points on riding your bicycle in as safe a manner possible. A range of topics will briefly touch on:

- Maintaining the proper equipment
- NYS rules of the road and traffic law
- Riding confidently in traffic
- E-Bikes, E-Scooters and Bike Share
- Pedestrian Tips
- What to do in a crash
- Resource Links

The New York Cycling Coalition (NYBC) is the only state-wide bicycle advocacy organization in New York State. We provide bicycle safety information and advocate for safer roads and highways, improving public policy, and encouraging New Yorker's to ride comfortably and as safely as possible.



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Governor's Traffic
Safety Committee

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Helmet Fit

Helmets should fit snugly right below the ears and not move

1. Should sit level on your head
2. Two fingers' width between eyebrow and helmet
3. Straps should form a "Y" below the ears
4. No more than two fingers should fit between chin and strap



In New York State, helmets are required for anyone under the age of 14. While not required for adults, we strongly recommend everyone wear a helmet. Children 1-4 must also ride in an approved safety seat. Children under 1 are prohibited from being transported by bicycle. **Note:** Some localities have different laws regarding helmet usage. If in doubt, check with your local authority.

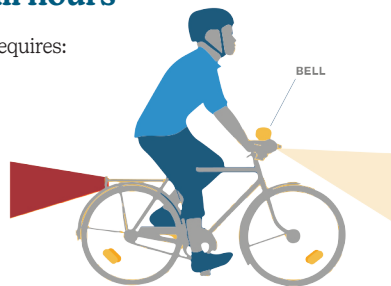
Light and Sound

Be seen and heard at all hours

During hours of darkness, NY State requires:

- White front lights visible from 500 ft. away
- Red rear lights visible from 300 ft. away
- Side reflectors visible from 200 ft. away

NY State also requires the use of a "sound-making device". This can be a bell or a horn. Whistles are not allowed.



What to Wear

You can bicycle in your regular clothes,

but there is also bike-specific clothing that can improve your comfort and safety, especially at night or in extreme weather.



**Watch your pants!
Roll up your pant leg or
use a reflective leg strap
to keep it out of the chain.**

☾ **Night**

Wear bright, reflective clothing.

☁ **Rain**

Wear a bright raincoat to stay dry and improve visibility.

❄ **Cold**

Layers. Wear a wool-based layer if possible. Good socks, gloves and ear warmers to keep your extremities warm.

Locking Up

When possible, take extra precaution by:

- Locking your frame and rear wheel to an immovable object using a U-lock.
- Securing your front wheel with a heavy cable or chain.

If the seat has a quick release, either replace it with a bolt or lock it to your frame with a short chain.



Important Safety Points

Be Predictable, Be Courteous

New York has a wide variety of roads, paths and trails with users of all types.

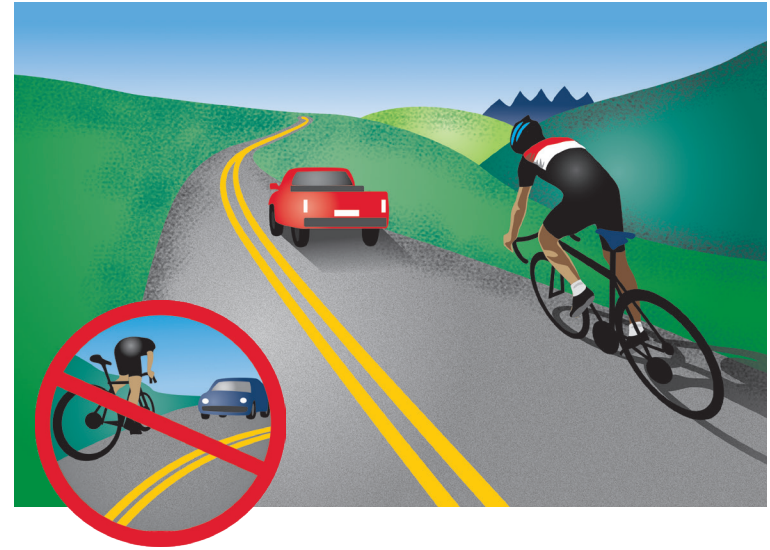
Bicyclists, pedestrians, motorists, horseback riders and more are all trying to use New York's complex network. It is important that we respect each other. Being predictable is the first part of courtesy. By following the rules and communicating our intentions through signals and eye contact, we help other users know what to expect.



At times others may not be predictable or courteous. It is important to avoid escalating these instances by using hand gestures, shouting, or being otherwise aggressive. Take a deep breath. Even pull over to compose yourself.

On the other hand, most people are courteous. It's nice to acknowledge each other with a nod or a wave, if possible.

Ride with Traffic



Bicyclists should always maintain a safe distance between traffic and curbs, while holding a predictable line

- ALWAYS ride on the right side of the road.
- Riding on the left is dangerous and against NYS law.
- Position Yourself to See and Be Seen (See also pages 10 & 12)
- Scan and Signal (See details on page 13)

The Importance of Intersections

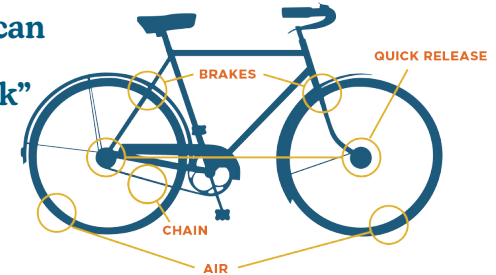
A significant number of bicycle crashes happen at intersections. Below are a few key considerations when riding through intersections.

- Slow down and always be cautious at intersections.
- Bicyclists must follow the same rules as cars and must abide by all signage and traffic lights.
- Remember that riding close to the curb is often not safe for Bicyclists in intersections.
- Bicyclists should claim the correct lane when preparing to ride through an intersection. Please see examples of claiming a lane in the riding section of this guide for more detail.
- When preparing to position for a lane change, a bicyclist should turn his/her head to scan what is beside him/her and behind, and/or use a mirror using the proper hand signals.



Staying Safe is as Easy as ABC

Before each ride, we recommend the League of American Bicyclists' "ABC QuickCheck" method of inspecting your bike.



A is for Air

Squeeze your tires. If they feel soft, give them some air.

B is for Brakes

Check your pads. If they're worn, replace them. Squeeze your levers. There should be about one inch between the lever and your handlebar when squeezing hard.

C is for Chain, Crank, & Cassette

Spin your pedals backwards a few times to make sure your chain is free of rust and gunk. Feel for skipping as you turn the cranks.

Quick Release

If you have quick releases, make sure they are securely closed and positioned so nothing will get caught on them.

Check

At the beginning of your ride, pay special attention. Listen for clicks, grinding, or rubbing noises that might mean there's a problem.

If you discover a problem, fix what you are able to, and go to your local bike shop for the rest. Regular tune-ups will help keep your bike safe and fun to ride.

Be Prepared, Seen and Predictable

Be Seen

- Ride where other road users can see you.
- Wear bright or reflective clothing.
- Use a front white light and a rear red light at night.
- New bikes come with spoke reflectors and it is recommended that you keep them on your bike.
- Use a bell or other sound-making device (not a whistle) that can be heard from at least 100 feet away.
- Do not ride on sidewalks.

Be Prepared

- Know your route.
- Watch for turning vehicles.
- Avoid the "Door Zone".
- Carry tools and make sure your bicycle is in good condition.
- Wear your helmet.

Be Predictable

- Use hand signals to communicate your intentions.
- Ride in a straight line. Don't swerve between parked cars.
- Look back before turning or changing lanes.
- Make eye contact with other drivers.
- Stay alert and try to anticipate what others are trying to do.



Obey New York State Traffic Law

In New York State, any person operating a bicycle "shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle."

- Bicyclists **MUST** follow the same traffic laws as drivers of motor vehicles.
- Obey all traffic signals and signs.
- Ride with traffic.
- Use rightmost lane intended for your direction of travel.

Equipment

All bicycles in New York State must be equipped with the following:



A bell or other sound-making device (not a whistle) that can be heard from at least 100 feet away.



A brake capable of making the bike skid on dry, level pavement.



A front white light that is visible from at least 500 ft. and a red rear light that is visible from at least 300 ft., if biking after daylight hours.



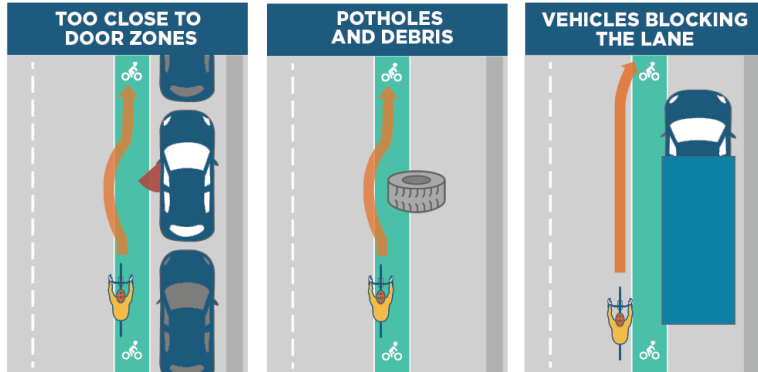
Spoke reflectors or reflective tires that are visible from at least 200 ft.

Road Position

A guiding principle of traffic law is that **slower traffic must keep to the right except in certain conditions.**

Bicyclists must use the bike lane if it is available and safe to do so.

Sometimes bike lanes are not safe. Below are a few reasons why:



If no safe bike lane is available, bicycles should be operated on the shoulder or as far right as is practical.

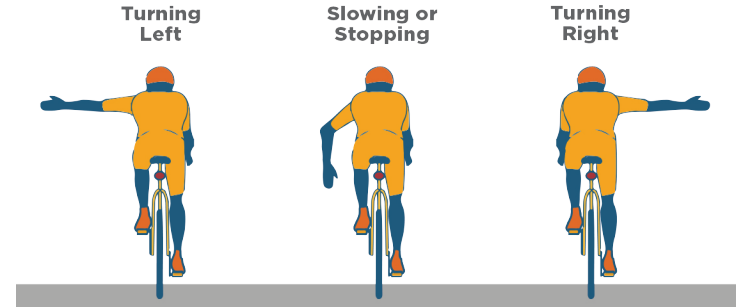
Conditions that make it unsafe to ride far to the right include:

- Lane too narrow to share safely
- Surface hazards such as debris or potholes

Bicyclists can also come out of a lane to prepare for a turn.

Signaling

Always let others know when you are turning, changing lanes, or stopping.

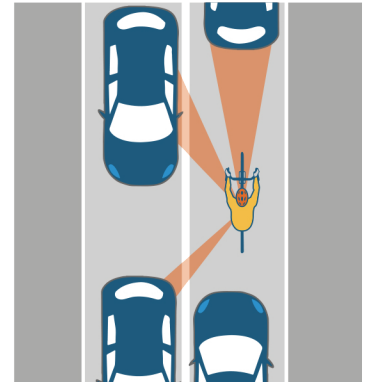


Alternately, you can also signal a right turn by holding your left hand upward with a 90° upward bend to your left elbow.

Scanning

Before changing lanes or turning, always:

- Look over your shoulder
- Look up ahead
- Signal your turn
- Look again
- Then make your move once safe to do so

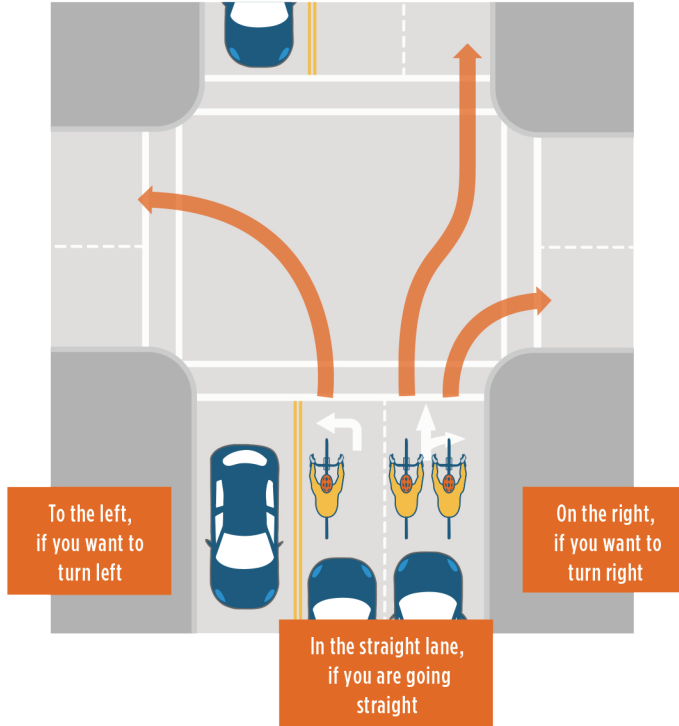


Remember: Scan, Signal, Scan Again, Make Your Move

Lane Positioning

Position yourself in the lane with respect to your destination direction.

When going straight, bicyclists should be positioned in the center of the rightmost lane that allows them to proceed straight.

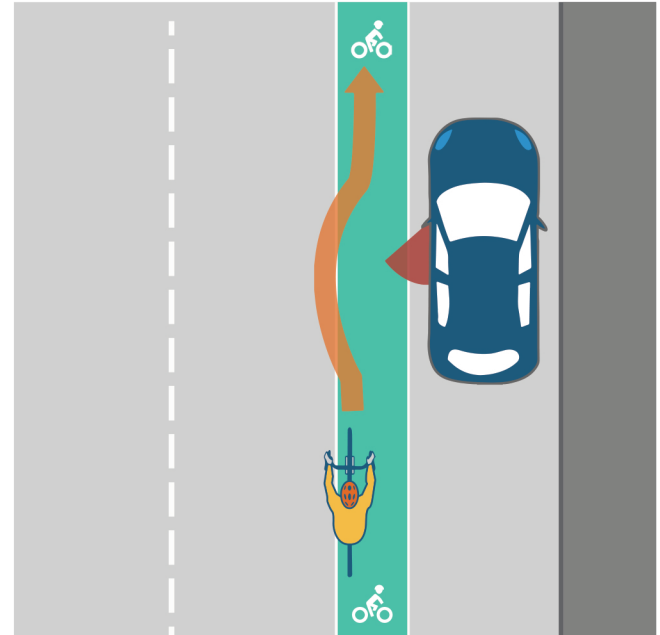


Door Zone

To avoid the door zone:

- Leave at least three feet between you and parked cars.
- Watch for people opening their doors.

When maneuvering around a door zone, make your move well before you are up to a car's rear bumper. It is safer and more predictable that way.

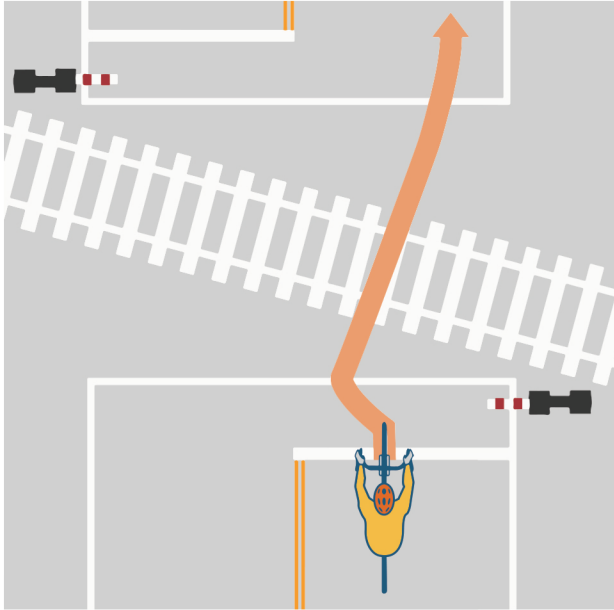


Railroad Tracks

Always proceed with caution and make sure the track is clear. Walking your bicycle is the safest way to cross railroad tracks.

If riding across tracks:

- Do so at a 90-degree angle to avoid getting your wheels caught in the tracks.
- When crossing, coast, remain vertical and avoid turning or braking.



E-Bikes and E-Scooters

Operating E-Bikes and E-Scooters Legally and Safely in New York State

E-Bike and E-Scooter Definition

Bicycle with Electric Assist: Multiple classes of bicycles with an electric motor with lithium batteries that need recharging and care, and operable pedals. A bicycle with electric assist doesn't qualify for a registration as a motorcycle, limited use motorcycle, moped, or ATV, and does not require insurance. A bicycle with electric assist is no more than 36 inches wide, has an electric motor up to 750 watts, is equipped with operable pedals, meeting the equipment and manufacturing requirements for bicycles adopted by the Consumer Product Safety Commission, and meeting the requirements of one out of three of the following three designated New York State classes of E-Bikes.

Electric Scooter: Every type of device weighing less than 100 hundred pounds that has handlebars, a floorboard or a seat that could be stood or sat upon by the operator, and an electric motor that can be powered by an electric motor and/or human power and which has a maximum speed of no more than 20 mph in New York State (15 mph in New York City).

E-Bike Classes

- **E-Bike Class 1:** Class one bicycles with electric assist have an electric motor that provides assistance only when the operator is pedaling, and ceases to provide assistance when the E-Bike reaches 20 mph.
- **E-Bike Class 2:** Class two bicycles with electric assist have an electric motor that may be used exclusively to propel such bicycle, and is not capable of providing assistance when such bicycle reaches 20 mph.
- **E-Bike Class 3:** For use in New York City only. Class three bicycles with electric assist have an electric motor that may be used exclusively to propel such bicycle, and is not capable of providing assistance when such bicycle reaches 25 mph.

Classification Label

By June 1, 2022, all E-Bikes and E-Scooters in New York State should have a manufacturer's label prominently affixed to the E-Bike or E-Scooter with key classification information regarding the wattage of the electric motor, maximum speed with electric assist, and, if an E-Bike, whether it is classified as an E-Bike class 1, 2, or 3.

NOTE: Devices such as mopeds, electric skateboards, segways, hoverboards, and electric unicycles are not considered E-Bikes or E-Scooters and may be illegal to operate on the highways in New York State or subject to other laws or regulations.

Lawful Operation of E-Bikes and E-Scooters:

- **E-Bikes and E-Scooters** are granted all of the rights and are subject to all of the duties applicable to the driver of a motor vehicle and the rider of a bicycle.
- **Operating an E-Bike or E-Scooter is not uniform throughout New York State** as cities and towns have extensive local authority, including the ability to prohibit E-Bikes or E-Scooters, require helmets, or wear reflective clothing. Consult with your local jurisdiction if you have questions on laws and ordinances in your area.
- **Helmets are not always required, but are recommended.** However, helmets are required for 16 and 17-year-olds operating an E-Scooter and Class 3 E-Bike operators in New York City.
- **Operators of E-Bikes and E-Scooters** must be at least 16 years old.
- **E-Bike operators** may carry passengers.
- **E-Bikes and E-Scooters are required to use bike lanes** wherever possible, and cannot operate on roads with speed limits of over 30 mph.
- **When operating on trails or bike paths,** consult with your local municipal or park authorities on their regulations, as they may differ.
- **You cannot operate E-Bikes or E-Scooters on sidewalks** except as authorized by local law or ordinance.



- **E-Bike operators must ride in single file** and cannot double up as traditional bicycles can.
- **E-Bikes are required** to have a front white light and a rear red light after sunset.

Important Summary Points of the Law to Remember

- **E-Bikes and E-Scooters are faster and heavier than traditional pedal bikes and should be respected.** New or returning operators of E-Bikes and E-Scooters are encouraged to practice in a safe environment in order to get comfortable with the power, controls and weight of their E-Bike or E-Scooter before operating in traffic. Be smart and safe. Learn to control your device before you get on the road.
- **To be legal, the maximum wattage of the electric assist motor of an E-Bike can be up to, and no more than, 750 watts.** Note that manufacturers, particularly those who sell directly on-line, sometimes advertise and promote E-Bikes with a motor wattage and estimated maximum speed that exceeds the authorized limits within each E-Bike class. If you own or are contemplating owning an E-Bike whose electric assist motor watts and speed exceed the specifications within each E-Bike class, then the E-Bike would not be legal to operate in New York State.
- **Be aware that E-Bikes and E-Scooters cannot be operated on roads with posted speed limits over 30 mph.** Operating E-Bikes and E-Scooters on roads posted more than 30 mph is not legal and has implications as to where some operators may choose to ride.

Safety and Operation Tips for New Riders: Learning to Ride Comfortably and in Control

Safety Considerations to Be Aware of...

E-Bikes and E-Scooters are different from traditional bicycles and scooters. These differences include:

- **Electric Motors and Increased Speed** - E-Bikes and E-Scooters have electric motors that in combination with pedaling power make them potentially faster than traditional bicycles.
The average bicyclist rides around 10-13 mph. E-Bikes can ride faster, and often do, legally up to 20 mph with class 1 and 2 E-Bikes, and 25 mph with class 3 E-Bikes in NYC. E-Scooters can legally ride up to 15 mph in NYC, and 20 mph in the state.

While E-Bikes come with electric motor wattage designations, generally from 250w to the legal limit of 750w, most E-Bikes actually have different levels of torque/power and can feel different.

The sensation of e-assisted acceleration along with higher cruising speeds requires practice before you take to the road to be comfortable and in control. A significant number of E-Bike and E-Scooter crashes happen on the first or second attempted ride. New riders can also fall by themselves or run into obstacles more often than experienced E-Bike or E-Scooter riders.

- **Weight and Handling** - They weigh substantially more than traditional bicycles and are generally not as responsive if it's necessary to evasively turn or brake quickly.

- **Controls** - They can have varying types of controls for speed and come with gear selection, as well as front /rear brakes, the function of which requires familiarity to synchronize and operate safely.

Be smart and cautious while orienting to an E-Bike and E-Scooter. The Consumer Product Safety Commission completed a national study that found that E-Bikes crashed more than traditional bikes, and that there were more people who suffered internal injuries that required hospitalization and surgery. E-Bikes were also more likely to hit pedestrians. E-Scooters also experienced a higher likelihood of head injury than E-Bikes, often because these riders wore helmets less frequently than E-Bike riders. We strongly recommend wearing a helmet to improve your safety.

Know Your E-Bike and E-Scooter Before You Ride on the Road:

- **Observe how battery storage** information works and make sure it is charged.
- **Position your seat and handlebars** where they are most comfortable and efficient. E-Bikes come in fewer sizes than traditional bicycles and are generally built to accommodate riders through seat and handlebar adjustments.
- **Get accustomed** to the controls and speed using a quiet parking lot or road.
- **Get a feel for the brakes** by squeezing the brake levers. Use both brakes when slowing down or stopping. Be aware that the left brake for the front brakes can be more grippy for stopping.
- **Observe how the throttle** or speed setting works. There are usually multiple speed settings from no e-assistance to max e-assistance.
- **Pick up the rear wheel** and practice shifting the gears. Start in the easiest gear that is comfortable.
- **Helmets** are not always required, but are recommended. However, helmets are required for 16 and 17-year-olds operating an E-Scooter and Class 3 E-Bike operators in New York City.

Practice Tips for E-Bikes and E-Scooters:

- **Practice on a flat** surface away from traffic.
- **Step through or over** your E-Bike while placing your feet flat on the ground. Move the E-Bike side to side to feel the balance points.
- **Start with no pedal assist** and in a low gear. Just pedal to feel the weight of the E-Bike.
- **Start and stop** in a straight line. Get a feel for the brakes.
- **Engage the power** at the lowest level and ride slowly turning the handlebars right and left. The pedal assist power typically kicks in at the second pedal revolution.
- **Apply incrementally** more power and practice accelerating and stopping.
- **Practice turning** using different arcs.
- **When you have gone through the power band** and the range of gears and feel in control, then consider riding on the road.

Practice Tips for E- Scooters:

- **Use the same** approach as E-Bikes.
- **Place a strong leg** on the foot board.
- **Start with physically pushing off** with your leg before engaging the lowest power setting.
- **Practice slow, shallow turns** at first. Be aware that E-Scooters can feel more tippy than traditional bicycles because of a higher center of gravity, and are more sensitive to cracks in pavement and other road obstacles.
- **E-Scooters should ride on** roads and bike paths, and not on sidewalks, unless designated by your locality.



Tips for First Rides on the Road:

- **Choose a flat and quiet** road to start on.
- **Try to remain seated.** Standing on the pedals is more unstable.
- **Start with power** at a low level and ride in low assist as much as possible.
- **Ride in a predictable line,** no swerving.
- **Scan ahead.** Reduce power when coming up on turns and intersections.
- **Control the bike** before increasing speed.
- **Anticipate stopping earlier** because of the increased weight of the E-Bike.
- **Be respectful to pedestrians** and traditional bicyclists when passing by telling them “behind you” or “on your left.” Be courteous.

Important Summary Points:

- **Ride in compliance with NYS Vehicle and Traffic Laws** for bicycles. The laws with the addition of class 1, 2, or 3 designation for E-Bikes for traditional bicycles and E-Bikes are the same. In NYS E-Bikes are considered bicycles.
- **Know your E-Bike and E-Scooter's controls,** practice riding before choosing a comfortable road to start riding in traffic.
- **Be conservative** in your first few rides in traffic. Use low power and progress to higher assist power and speeds.



Bike Share

You may have seen them popping up in your community or other parts of the state. Small brightly colored fleets of rental bicycles available to the public.

Usually positioned at high traffic areas in strategic locations, Bike Shares offer sturdy and somewhat heavy bicycles to rent that can be ridden for your riding pleasure, or to get to a destination like work or school.

Renters typically download an app with your basic information and credit/debit that will allow you to unlock the bike and pay for your rental. Some rentals may ask a few safety questions before you get started. The bikes are equipped with geo-tracking so the owners/management will know where their equipment is at all times.

- Rental costs are pennies per minute. Be aware that rental costs can vary depending on where you rent from.
- Some Bike Shares also offer E-Bikes.
- Bikes and Scooters will all have brakes whose operation should be familiar to you.
- Bikes commonly come with simple 3-speed gearing systems.
- Adjustments to fit the frame are generally easy with the ability to raise and lower the seat with no need for tools.
- Always return your bike to a proper location.



Sharing a Multi-Use Trail

Multi-Use trails are spread across NY, can vary in length and difficulty, and are often connected to other trails. Remember that they are not only intended for bicyclists, but also for walkers and joggers.

- Exercise caution when coming up on others such as slow riders, families with children of all ages on bikes, and dog walkers. All merit your attention.
- Trails are typically well marked with trail directions and striping that separate traffic going both ways. Pay attention to caution and stop signs and anticipate that the trails you are on might be intersected by a road with cars.
- Ride to the right and pass traffic on your left. When over passing someone in front use your bicycle bell, and/or clearly say "passing on your left".
- Be considerate and don't startle the party in front of you by going too fast or being too loud.
- Multi-Use trails are for all people.



What to Do in a Crash Situation

If you are involved in a crash on a public highway, you are required to:

- **Report the crash** to the Department of Motor Vehicles within 10 days.
- **If anyone over the age of 18 is involved in a crash, they must stop at the scene of the crash and provide their name and address to others involved.** [Section 605, 1240]

NYBC recommends:

- **If you are injured, get medical treatment right away.** Your health is the first priority.
- **Call 911 and report the crash.** Even if not injured, call the police and wait for them to take a report.
- If you are physically able, collect your own crash data. Don't rely on the police to perform a proper and complete investigation.
- Obtain vehicle information, driver's name, vehicle owner's name and the license plate.
- If there are witnesses, get their contact information as well. You may be very surprised that the witness information may not be found on the police report when you pick it up a few days later.
- If the driver will provide it, get the insurance company who insures the vehicle. You will need this information if you are injured and medical bills have to be paid.
- Take photos with your phone. Photograph the crash scene, car(s), the bike(s), and conditions that may have contributed to the crash. These can be very useful down the road.
- **Do not be afraid to go to a hospital because you don't have health insurance** or you are worried about being stuck with an ambulance or Emergency Room bill. If you secured valid auto insurance from the driver, these expenses, among others, will be covered.

Find a list of further resources online at:

www.NYBC.net/bike-law-resources

Email us at nybc@nybc.net for more information

Pedestrian Tips

Walk Where it is Safe

- **Ideally, use sidewalks** if they are provided and they are safe to use.
- **If a sidewalk is not available**, walk against traffic.
Walking against traffic allows you to make eye contact with drivers and helps you to make quick decisions if necessary. Keep children and animals on your left side, away from traffic.

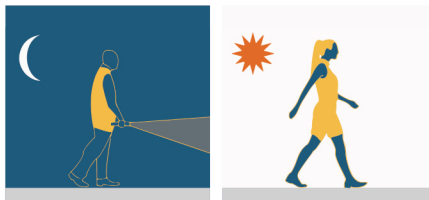
Crossing

- **Always use a crosswalk** if provided.
Make eye contact with drivers, especially drivers who may be making a right on red turn.
- **If a crosswalk isn't available**, use a location with as few obstructions as possible.
Avoid stepping out from between parked cars. Wait for a sufficient gap in traffic.



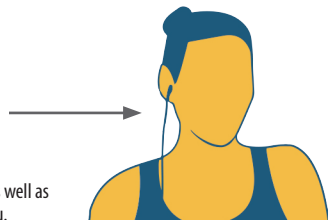
Be Visible

- **Wear reflective clothing at night** and carry a lit flashlight in your hand.
- **Whenever possible** stay in well-lit areas, especially when crossing the street.
- **During the daytime**, wear brightly colored clothes.



Avoid Distractions

- **If you need to use your phone:**
 - Stop
 - Step out of the way of other pedestrians
 - Then use your phone in a safe area
- **If you must wear earbuds**, only wear one in the ear that is away from traffic.
- **Headphones prevent you from hearing** oncoming traffic as well as cyclists or other pedestrians that may be attempting to pass you.



Resources

STATE

New York Bicycling Coalition:
www.nybc.net

Governor's Traffic Safety Committee:
www.safeny.ny.gov

NYS Department of Transportation
www.dot.ny.gov

NYS Department of Environmental Conservation
www.dec.ny.gov/outdoor/101033.html

Empire State Trail
www.empiretrail.ny.gov

Parks & Trails New York
www.ptny.org

511NY Rideshare - Biking and Micromobility
<https://511nyrideshare.org/biking>

REGIONAL

Bike New York
www.bike.nyc

Bike Walk Tompkins
www.bikewalktompkins.org

GObike
www.gobikebuffalo.org

Rochester Reconnect
www.reconnectrochester.org

Transportation Alternatives
<https://www.transalt.org>

NATIONAL

Federal, State, Metropolitan and Local Agencies:
www.nybc.net/nys-transportation-agencies

Amtrak, Bring Your Bicycle Onboard
www.amtrak.com/bring-your-bicycle-onboard

People for Bikes:
www.peopleforbikes.org

League of American Bicyclists:
www.bikeleague.org

Adventure Cycling Association:
www.adventurecycling.org

INTERNATIONAL

Global Cycling Network:
www.globalcyclingnetwork.com

For more in depth information on the topics covered in this pocket guide visit www.nybc.net for an additional series of downloadable guides.



Pocket GUIDE

2023 Edition



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**Governor's Traffic
Safety Committee**

Funded by the National Highway Traffic Safety Administration with a grant from the New York State Governor's Traffic Safety Committee

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