

Cycling Handbook

Your **guide** to enjoyable, safer **cycling**

version three | 2017



Why

cycle?

Cycling is fun

Get on your bike, ride and feel the wind on your face.

Cycling is healthy

Riding your bike is an easy way to get healthier.

Cycling is practical and cost-effective

Cycling is often the quickest way for short trips and saves you money.

Cycling is good for the environment

Cycling gets your car off the road and reduces emissions and traffic congestion.

Visit the cycling education page at york.ca/cycling to watch inspiring videos of York Region residents who love to bike.

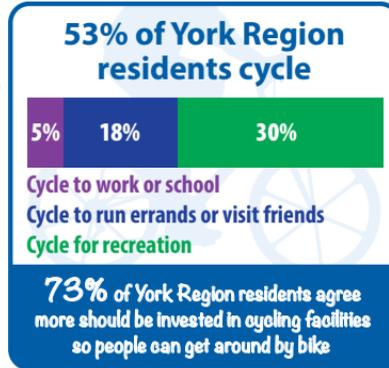


What's inside

This handbook gives you some tips for getting started, minimizing your risks while riding and make cycling more enjoyable. Bicycling for transportation, recreation and fitness has seen enormous growth in recent years. People everywhere are discovering the joy of riding a bike.



Sources: ¹GIS data from 2015 York Region Cycling Map.
²2011 Transportation Tomorrow.



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Selecting your bike

Choose the bike that best suits your needs

Generally, there are four main types of bikes: road, hybrid, cruiser and mountain. Each bike type is designed for a specific use.



Road bike - Good for commuting and long road rides

- Great for riding on pavement
- Skinnier tires give more speed
- Responsive steering



Hybrid bike - Good for commuting and recreation

- Sturdy and comfortable
- Wide range of gearing
- Upright riding position

Selecting your bike

Cruiser bike - Good for short trips, commuting and recreation

- Very upright riding position
- Fewer gears
- Slow and heavy, but stable
- Great for riding in dress clothes
- Easy to get on and off



Mountain bike - Good for all terrain

- Sturdy and comfortable
- Wide range of gearing
- Upright riding position



Getting a good fit



Make sure your bike is the right size and adjusted to fit you properly. While straddling the bike over the highest point of the tube, there should be **2.5 to 5 centimetres** of space between you and bike.

Adjust the seat height so your knee bends slightly and your toes are touching the ground while sitting on the saddle.

Your local bike shop can help you choose and adjust the right bicycle for your needs.



Equipping your bike

Basic bike equipment and accessories

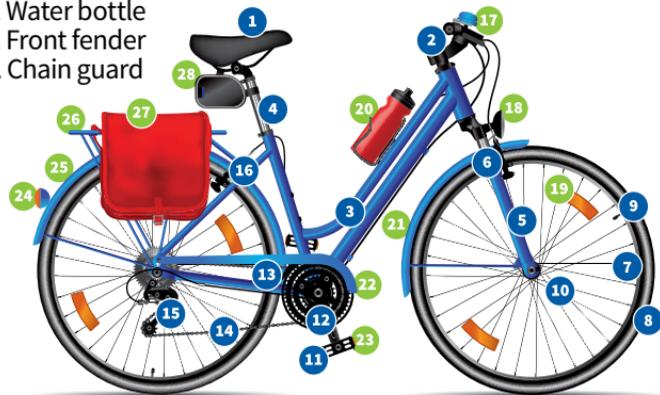
Choosing the right bike that is properly equipped is important. Here is a list of basic equipment and accessories:

Basic equipment

1. Saddle
2. Handle bars
3. Frame
4. Seat post
5. Front fork
6. Front brakes
7. Wheel rim
8. Tire
9. Tire valve
10. Spokes
11. Pedal
12. Crank
13. Front derailleur
14. Chain
15. Rear derailleur
16. Rear brakes

Accessories

17. Bell/Horn
18. Front light
19. Wheel reflector
20. Water bottle
21. Front fender
22. Chain guard
23. Pedal reflector
24. Rear light
25. Rear fender
26. Rear rack
27. Pannier
28. Bike bag (toolkit)



tip

Check with your local bike shop for advice on the best setup for your needs.

Bike shops are listed on the York Region Cycling Map available at york.ca/cycling

Before making a trip

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Plan your route

Do some exploring to find the best route. You may discover the best route is not necessarily the shortest.

Other considerations:

- Directness
- Terrain
- Traffic volume including trucks
- Paved shoulders
- Pavement condition
- Traffic speeds
- Number of signals or stop signs
- Type of available bicycle facilities

Give yourself enough time

General rule is to plan at least 20 minutes for a 5 kilometre trip. Take your time and enjoy the ride. You'll arrive at your destination fresh, not hot and sweaty; invigorated, not exhausted.

Allow

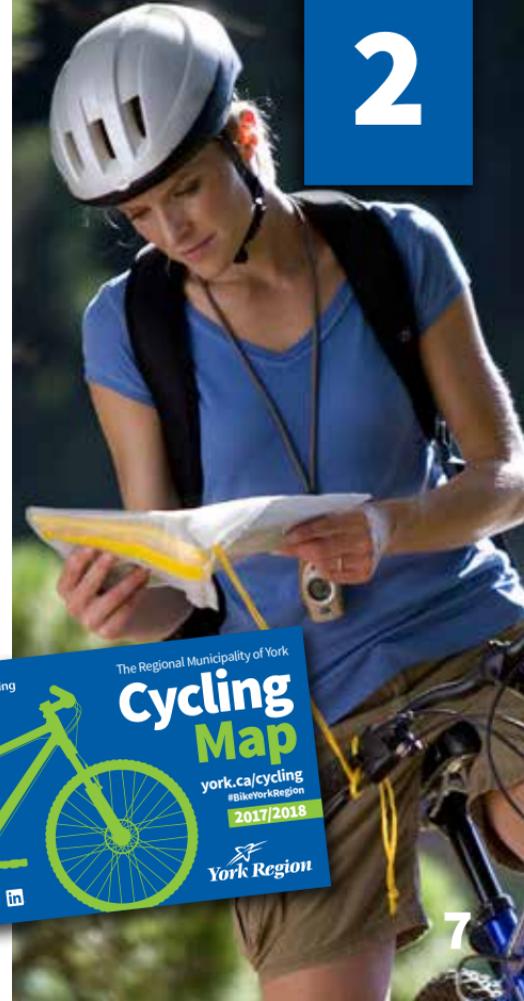


20

MINUTES
to cycle

5

kilometres





Arrive in style

Dress properly

Proper dress for cycling is a function of the purpose of your ride, the weather and how you want to look when you get to your destination. For many trips, regular street clothes are fine.

Remember to pack a change of clothes on bad weather or hot days.

Pack a change of clothes

You can pack a change of clothes in a backpack or saddle bag. You can also store your change of clothes at work.



Dress for the weather. Clothing should be bright in colour or reflective and moisture-wicking.

Be safe, be seen

Be visible

It is important you take steps to enhance your visibility. Wear light, bright colored and/or reflective material. Use front and rear lights, as required by law, when riding at night.

tips for being seen

- Use a flashing red LED rear light; it is more visible than a steady red light
- Wear light coloured clothing
- Wear a safety vest or jacket with reflective material
- Use a front headlight
- Wear a pants strap with reflective material
- Use spoke and pedal reflectors on your bike
- Wear a strobe light on your arm





abc Quick Check Maintenance

Major maintenance can be left to the professionals, but there are things you should always check before you get on your bike and ride off.

a is for air:

- Inflate tires to the rated pressure as indicated on the sidewall of the tire; a bicycle pump is recommended
- Use a pressure gauge to ensure proper tire pressure; bicycle tires need to be re-inflated more often than car tires and properly inflated tires reduce the chance of flats
- Check for damage to tire tread and sidewall; replace tire if worn

b is for brakes:

- Rotate wheels to check that nothing is rubbing
- Inspect brake pads; replace if there is less than 6 mm of pad left
- Check adjustment of brake levers; when applied, there should be at least 25 mm between each lever and the handlebar

abc Quick Check Maintenance

C is for cranks, chain and cassette:

- Chain should be clean, lubricated and quiet — not chattering, squeaking, or squealing; use a bicycle chain lubricant
- If your chain skips while riding, you might need a new chain, a new cassette or an adjustment
- Make sure your crank bolts are tight

Quick is for quick releases:

- Wheels need to be tight, with hub quick-release levers fully engaged
- Hub quick releases should point back to ensure nothing catches
- Inspect brake quick releases to ensure they are engaged

Check is for check it over:

- Inspect bike for loose or broken parts; tighten, replace or fix them
- Make sure your helmet is properly fitted and positioned
- Take a quick ride to check if derailleurs and brakes are working





Be prepared

Carry a small bicycle repair kit

It's a good idea to carry a repair kit, that includes:

- Bicycle tire pump
- Puncture repair kit
- Lightweight wrenches
- Plastic tape
- Tire levers/irons
- Hex keys
- Spare bicycle inner tubes
- Snap-on chain link



Fixing a flat tire:

- 1. Remove the wheel.** Once the wheel is off, insert a tire lever between the tire bead and the rim and push down. Work the lever around the rim until the tire pops off.
- 2. Remove the old tube and check the tire inside and out for debris** that could puncture the new tube.
- 3. Inflate the new tube just enough to give it shape.** Insert it into the tire, push the stem through the rim and roll the tire back on.
- 4. Pump up the tube slowly, until the bead seats evenly around the rim** then inflate to the tire's recommended pressure.

Safety first

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Always wear a helmet!

Studies have shown in the event of a crash, a helmet will greatly reduce your chances of a serious brain injury. Every cyclist under the age of 18 must wear an approved helmet.

Bicycles are vehicles too

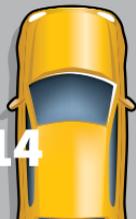
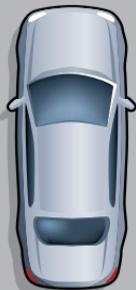
According to the *Ontario Highway Traffic Act*, bicycles are vehicles. Cyclists have the same rights and responsibilities as motorists and are subject to the same traffic laws, signs and signals.



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← 1m →



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Cycling with traffic

Ride on the right in the direction of traffic

Ride in the same direction as other traffic. Riding facing traffic is not only illegal, but dramatically increases the risk of a collision.

Ride in a straight line

Ride with your head up and keep looking one-and-a-half to two-blocks forward. Being able to ride in a straight line under varying conditions is the key to riding safely in traffic. Practice following a painted line as closely as possible at different speeds. Riding in a straight line makes you predictable to other road users. Also practice cycling in a straight line while looking over your shoulders, both to the right and to the left.

Remember that a mirror does not replace the need to shoulder check in any circumstances.

1m Passing Law - The new law require drivers to keep at least one metre between the motor vehicle and the bicycle when passing cyclists on Ontario roads, where possible. The penalty is a \$100 set fine and two demerit points.

Cycling with traffic

Hand signals

Always make hand signals well in advance of any turn or stop.

Turning or stopping sequence:

1. Shoulder check
2. Hand signal
3. With both hands on the handlebars, shoulder check again before making the turn or stop

Stopping

Using both brakes will reduce the tendency for the rear wheel to skid and will increase stability. Always keep both hands on the handlebars when applying the brakes. You will need considerably greater stopping distances during wet conditions.

Bicycle Hand Signals

(Shown from rear)



Left turn **Stop** **Right turn**



Cycling with traffic

Making a left turn

There are two ways to make left turns at the intersection on a bicycle.

1) Turn as a vehicle

As you approach the intersection, look over your left shoulder for traffic, signal your turn and when clear, move over to the left side of the lane (on a two-lane road), or into the left lane or the centre-turn lane.

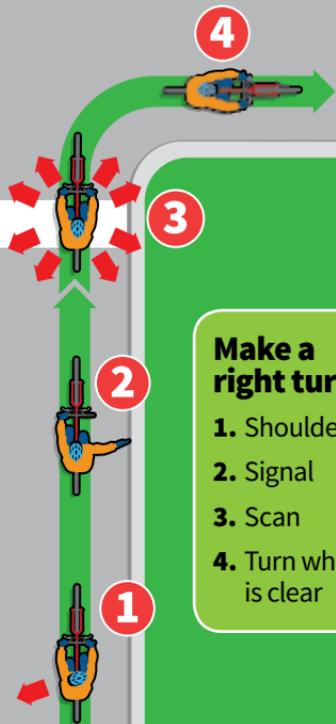
You should be positioned so cars going straight through cannot pass you on your left. Yield to oncoming traffic before turning. If you are riding in a bike lane or on a road with several lanes, you need to look and signal each time you change lanes.

Never make a left turn from the right side of the road, even if you are in a bike lane.

Make a left turn

1. Shoulder check
2. Signal
3. Shoulder check
4. Go to centre of turning lane, stop and proceed when safe to do so
5. Proceed to receiving lane
6. Shoulder check, signal and move to the right side of the road or curb lane

Cycling with traffic



Make a right turn

1. Shoulder check
2. Signal
3. Scan
4. Turn when path is clear

Making a right turn

Select the right-most lane from which you can make a right turn. As you approach the intersection, signal your intention to turn. Stay in the basic lane position and proceed around the corner. If a car arrives first, let the motorist make the right turn before you.

When to take a lane:

If there is no shoulder or bike lane and the curb lane is narrow (i.e. when the right wheel track of most traffic is less than a metre from the curb), cyclists may choose to take the whole lane by riding in the centre of it.

On high-speed roads, it may not be safe to take the whole lane. It is important to cycle within your confidence limits and comfort when dealing with heavy or high-speed traffic.

Cycling with traffic

Sharrows

The word “Sharrow” is short-form for “shared lane pavement marking”.

This pavement marking includes a bicycle symbol and two white chevrons. They are used to indicate where cyclists should ride in a travel lane.

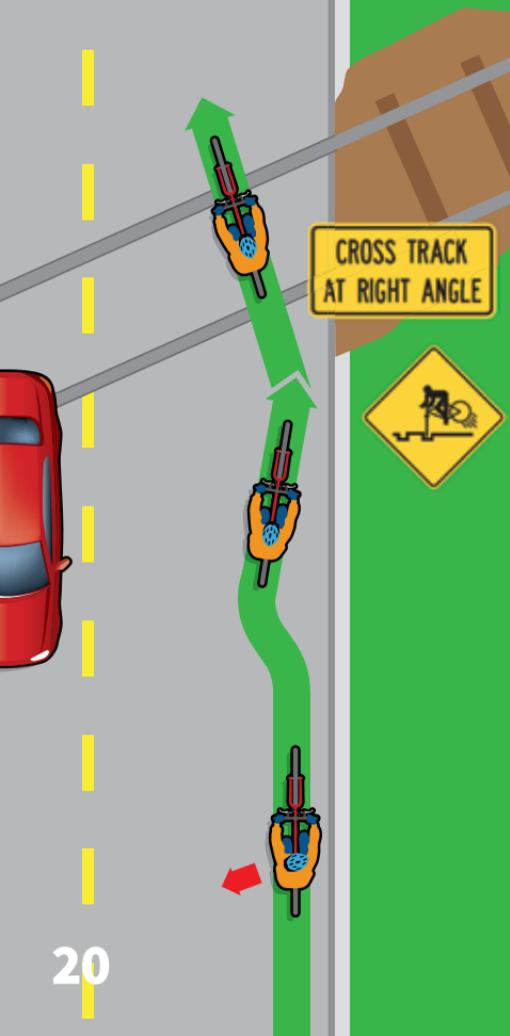
Note: Sharrows are **not** separated bike lanes.



Cycling with traffic

Railway tracks

- Cross railroad tracks carefully
- Watch for uneven pavement and grooves that could catch a wheel
- Keep control of your bicycle; one way is to rise up from your saddle and bend your arms and legs so your body acts like a shock absorber
- If the tracks cross the road at a sharp angle, change your course so you cross them at closer to a right angle; avoid swerving suddenly as this can cause you to fall or veer into traffic
- Another option is to dismount and walk your bike across the tracks



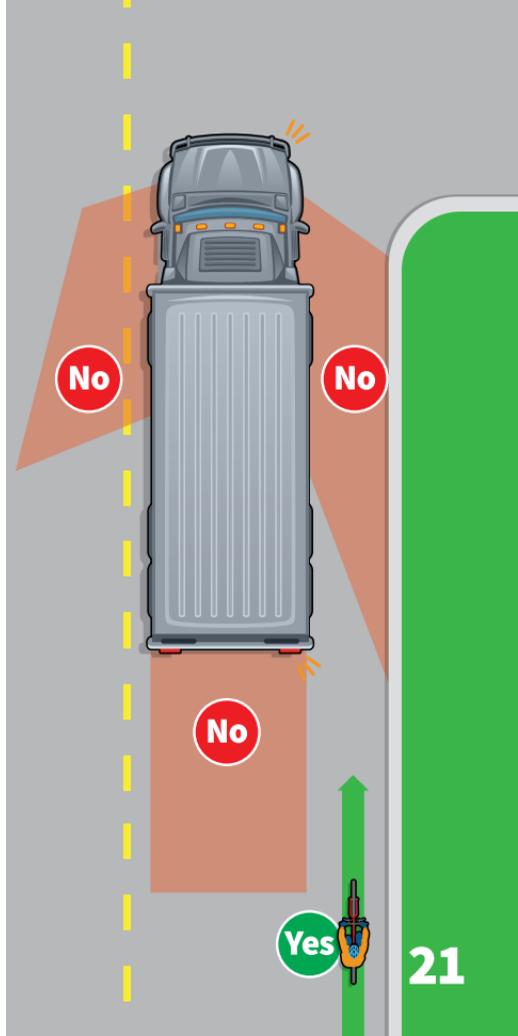
Cycling with traffic

Trucks and buses - avoid their blind spots

Drivers of large vehicles have large blind spots where they are unable to see cyclists. If you cannot see the driver in their mirrors, they cannot see you. Avoid riding in these blind spots and only pass slow moving vehicles on the left.

In urban areas watch for right-turning buses and tractor-trailers since their length and rear overhang require more space than you might expect. Large vehicles will often move toward the left lane in preparation for a right turn. Never pass on the right unless you have a lane to yourself and are positive they are not preparing for a right turn.

The most dangerous point in a turn is when the tractor has made the turn but the trailer has not.



Cycling with traffic

Roundabouts

- Keep to the right if you will take the first exit
- Ride in the inside lane if you are going past the first exit; because of the roundabout's left curve, cars go straight to turn right

Cyclists who always keep to the right will tell you roundabouts are very dangerous. On the other hand, you'll find it surprisingly easy to ride around by taking the lane. Drivers don't go very fast there since they follow the curve.

Cycling with traffic

Parked vehicles

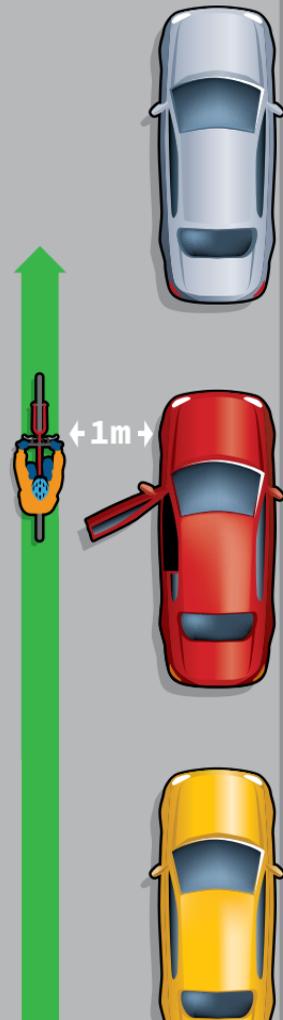
Ride far enough away from parked cars so you don't risk being hit by an opening car door (dooring). Ride no closer than one metre from parked cars to avoid being hit by an opening door. The doors of some vehicle types can swing far into your lane.

Passing on the left

When overtaking slower moving traffic or cyclists, you must pass on their left and should allow at least one metre of clearance. When passing other cyclists, warn them in advance by voice or bell.

Penalties for dooring:

Getting hit by a car door on your commute to work is no fun, but for many cyclists in cities it's a too regular occurrence. It can also be deadly – and now the province will take it as seriously as distracted driving, increasing fines to a maximum of \$1,000 and three demerit points.



Electric bikes

Electric Bikes or E-bikes

- E-Bikes have a battery that provides a boost to your own pedal power up to 32 km/h, so you can ride farther and faster with less effort.
- You can ride an e-bike where a regular bicycle can go, unlike motor-assisted “scooter-style” bicycles
- You must be 16 or older and wear a helmet
- Fly up hills, haul a heavy load, take the long way home, and do it all without breaking a sweat, thanks to the smooth, exhilarating power of electric assist.

For more information about e-bikes in Ontario, please visit:

<http://www.mto.gov.on.ca/english/driver/electric-bicycles-faq.shtml>



Trail etiquette

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Riding on multi-use pathway or trail

A well planned and well designed shared-use path should help reduce some of the problems associated with sidewalks for bicycle riding.

If they are narrower, maneuvering around other path users can be problematic. Keep in mind, multi-use trails do eventually intersect with roadways; the more roadways they cross, the more potential conflicts with motor vehicle traffic.

tips for riding on shared-use paths

- Be alert, courteous, cautious and forgiving
- Ride on the right, pass on the left
- Don't stop on the trail - pull off the trail when you stop
- Share the trail
- Communicate with others when you pass, cross intersecting roads or other trails





Bikes and transit

Combine different modes of transportation

Bicycle to the bus stop, station, or park-n-ride, lock your bike and ride transit to your destination. Bike racks are generally available at bus stations. Or, take your bicycle on the bus with you. YRT/Viva has bike racks on all buses and the bikes ride for free!

The latest information is available here:

www.yrt.ca/en/ridingwithus/bikenbus.asp

How to Bike 'n' Bus on YRT/Viva

Loading your bike

- 1. Get ready.** Prepare your bicycle for the bike rack by removing any water bottles or loose items that may fall off while the bus is in motion. As the bus approaches, let the driver know you intend to use the bike rack. You can do this by making eye contact with the driver and pointing to your bike and the rack.

Bikes and transit

How to Bike 'n' Bus on YRT/Viva (continued)

- 2. Lower the rack.** Hold on to your bike with one hand and use your free hand to squeeze the handle at the top of the rack. Squeezing the handle will unlock the rack and it can then be lowered for use. If the rack is already lowered, move onto the next step.
- 3. Load your bike** from the front or curb/platform side of the bus. Lift your bike into one of the rack's two wheel trays. A label tells you where the front wheel goes. The trays are far apart from each other to make loading and unloading easy if there is another bike there.
- 4. Secure the front wheel.** Secure your bike by pulling the spring-loaded support arm out and over the front tire.

Reminder: The loading and unloading of children's bikes should be done by the accompanying adult.

Visit YRT/Viva's YouTube Channel and watch

How to Bike 'n' Bus on YRT/Viva.

York Region **Cycling Handbook** | Your **guide** to enjoyable, safer **cycling**



Cycling with children

What parents should know

In most instances, the only bicycle safety education children will receive is from their parents. Since children perceive traffic situations differently than adults, it's important for parents to teach them the dangers of traffic. With proper training, bicycle riding can be a safe, healthy and fun activity for the whole family to share.

Transporting Children

There are some good options for transporting children by bicycle, including trailers, child seats and trailer cycles.



Bike security

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York Region Bicycle Theft Prevention Program

- Register your bike with York Regional Police and you will be contacted if your bike is recovered
- Take a photo of your bike
- Keep original sales receipts and record serial number
- Keep records of upgrades and new components



For more information visit yrp.ca/en/services/bike-registration.asp

Parking

Thieves will steal an entire bicycle or they may steal parts or items attached to the bike that are not securely fastened.

- Always lock your bike when it is left unattended, even for a short period of time, in your garage or on a porch



Bike security

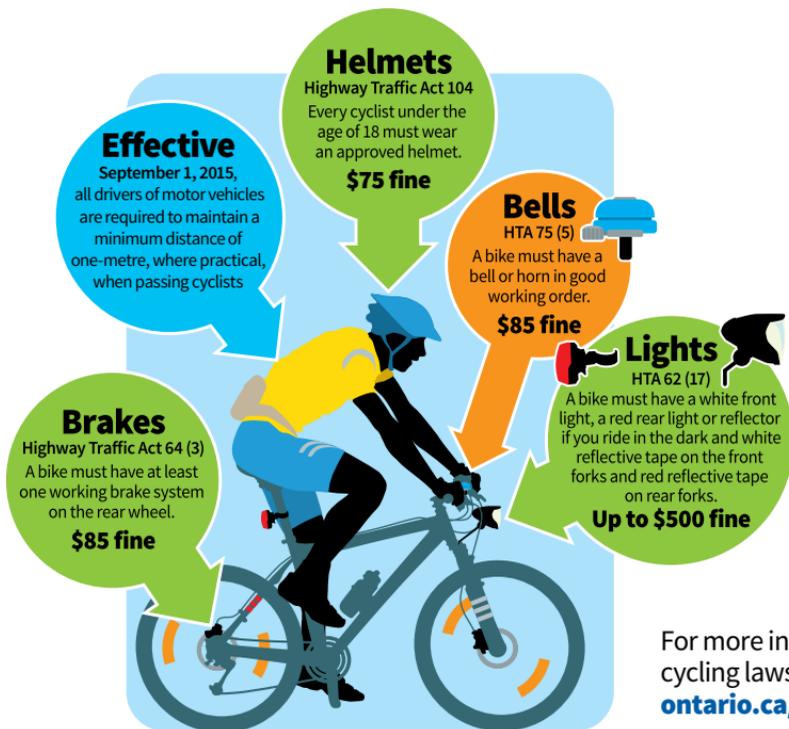
Parking (continued)

- Lock both wheels and the frame to a bike rack or fixed object; if you only lock one wheel, your bike can be quickly detached and carried away
- If you don't use the quick release seat or wheels, replace them with standard bolts
- Take anything else not securely fastened with you
- Consider riding an inexpensive bicycle for everyday use and short trips



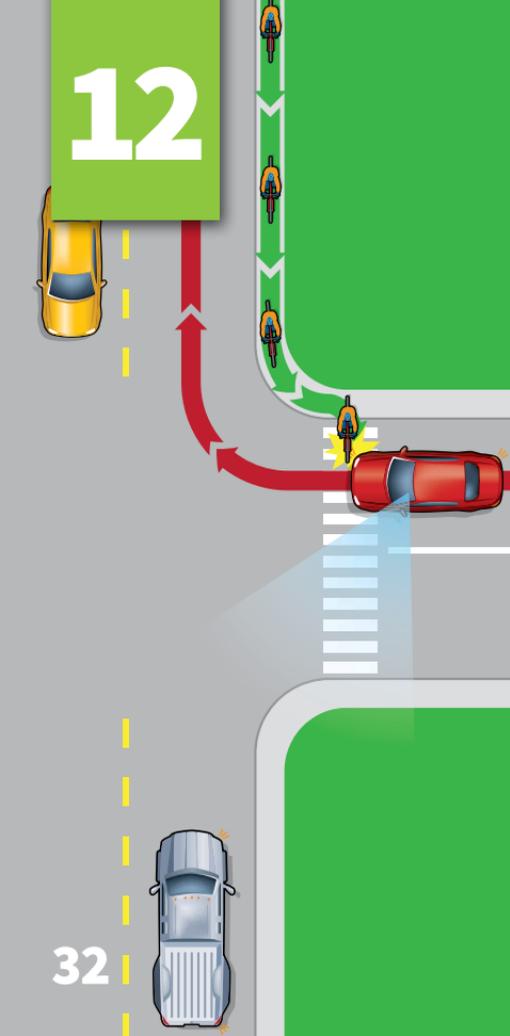
Cycling and the law

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For more information on cycling laws in Ontario, visit ontario.ca/cycling





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Sidewalk cycling

Riding on the sidewalk

Riding on the sidewalk can seem like a good option, especially on busier roads. The fact is many collisions occur when a cyclist is using the sidewalk. Motorists crossing intersections or driveways do not usually look for cyclists on the sidewalk. Riding on the sidewalk also puts pedestrians at greater risk.

Is riding on the sidewalk legal? It depends on your municipality's bylaws. Children are usually permitted to ride on the sidewalk because they ride at a slower speed and lack the skills and judgement to ride on the road. If you choose to ride on the sidewalk, moderate your speed and use extra caution.

Collisions from riding on sidewalks occur at intersections and are caused by riding against traffic direction.

For more information, contact your local municipality.

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Protected bike lanes

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What are protected bike lanes?

Protected bike lanes, also called cycle tracks, are next-generation bikeways currently being built in York Region and around the world.

They use physical barriers to separate bike lanes from both cars and sidewalks, creating safe, inviting spaces for people to bike.

Where will they be located in York Region?

- **2nd Concession** – Green Lane to Doane Road **Now OPEN**
- **Yonge Street (Newmarket)** – Savage Road to Green Lane
- **Yonge Street (Richmond Hill)** – Elgin Mills Road to 19th/Gamble Road
- **Highway 7 (Vaughan)** – Highway 400 to Pine Valley Drive
- **Centre Street** - Highway 7 to Bathurst Street
- **Bathurst Street (Vaughan)** - Centre Street to Highway 407
- **Highway 7 (Markham)** – Town Centre Blvd to Sciberras Road **Now OPEN**



Useful Websites

York Region Transit/Viva
yrt.ca

Smart Commute
smartcommute.ca

York Regional Police
yrp.ca

CAA
bikesafety.caa.ca

MTO
ontario.ca/cycling

Cycling resources

York Region Interactive Cycling Map

Cyclists can also create their own custom cycling route with the York Region Interactive Cycling Map. York Region's interactive cycling map helps cyclists plan their bicycle trips. Knowing the existing cycling routes will help cyclists find the best route, save time and improve the comfort of their ride.

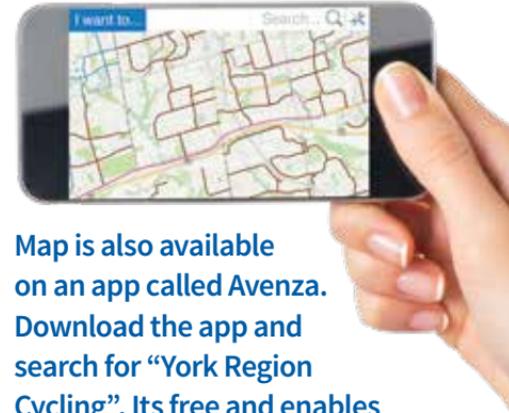
For more information, please visit: york.ca/cycling

Contact Information

Contact us to request a printed map, or for more information contact Access York:

Telephone: 1-866-512-6228

Email: accessyork@york.ca



Map is also available on an app called Avenza. Download the app and search for "York Region Cycling". Its free and enables you to download maps for offline use. It doesn't use data. Use your devices built in GPS to track your location on the map and navigate York Region on the go.

Cycling resources

Form a Bicycle User Group (BUG) at your workplace

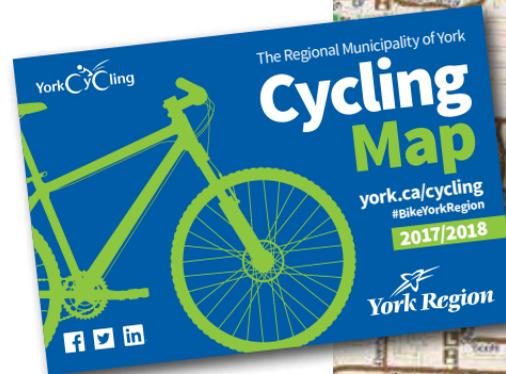
A BUG can bring like-minded cyclists together to share information and encourage more people at your workplace to ride. Contact York Region for more information about how to get a BUG started in your workplace or community.

York Region Cycling Map

Free printed copies of the York Region Cycling Map are available: area municipal offices, libraries, chambers of commerce and bike shops.

Now Available!

- York Region Trail Guide
- York Region Bicycle Tour Map



Sign up for a free cycling e-newsletter to stay up to date on what's happening in York Region

york.ca/cyclingnews

The Regional Municipality of York

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york.ca/cycling



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