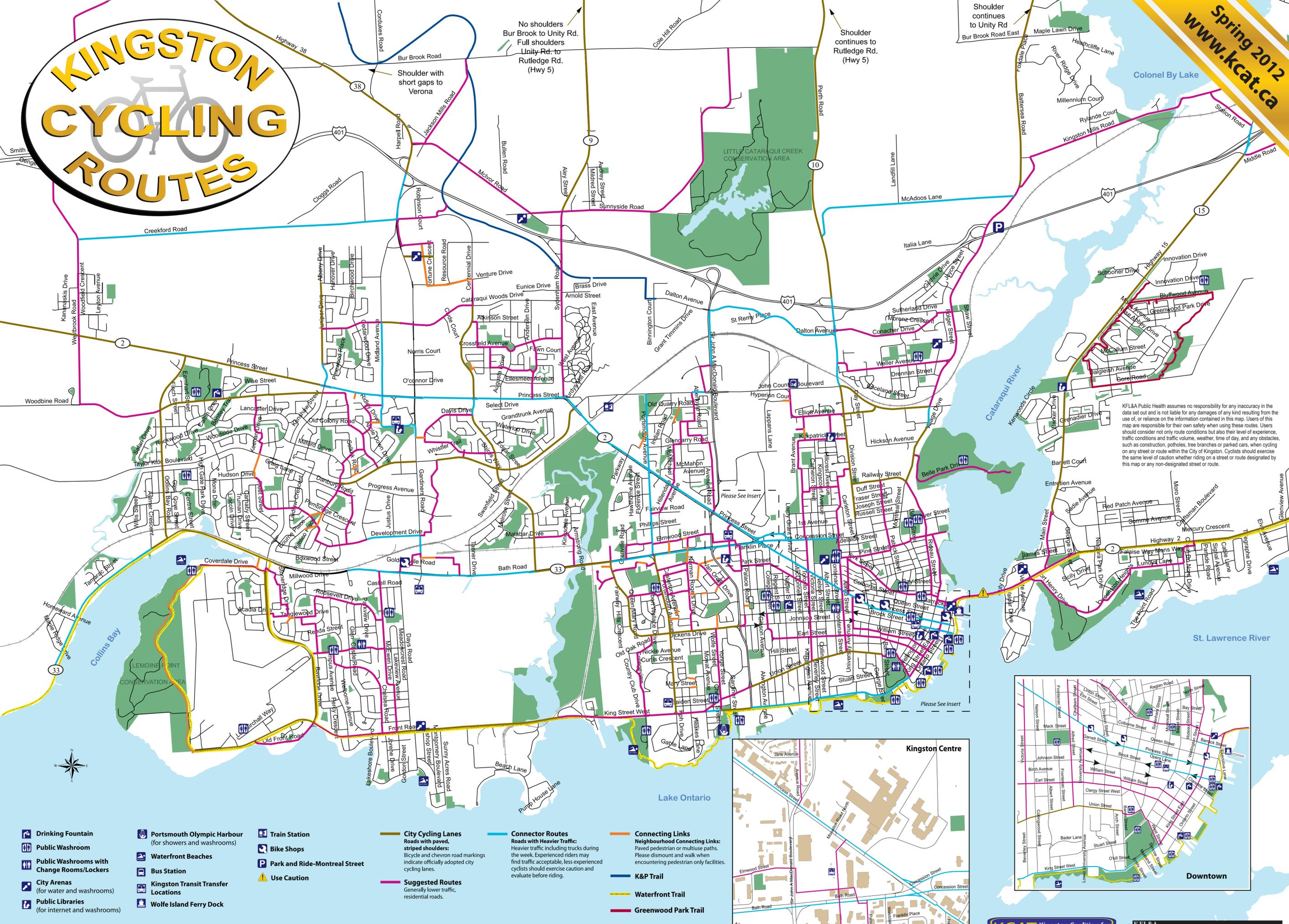


KINGSTON CYCLING ROUTES

Spring 2012
www.kcat.ca



No shoulders
Bur Brook to Unity Rd.
Full shoulders
Unity Rd. to
Rutledge Rd.
(Hwy 5)

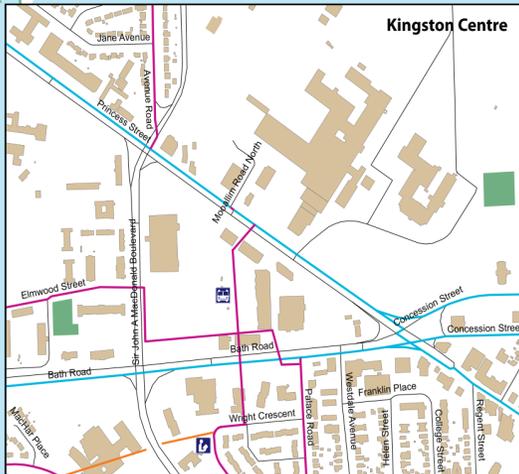
Shoulder continues to
Rutledge Rd.
(Hwy 5)

Shoulder continues to
Unity Rd
Bur Brook Road East

KFL&A Public Health assumes no responsibility for any inaccuracy in the data set out and is not liable for any damages of any kind resulting from the use of, or reliance on the information contained in this map. Users of this map are responsible for their own safety when using these routes. Users should consider not only route conditions but also their level of experience, traffic conditions and traffic volume, weather, time of day, and any obstacles, such as construction, potholes, tree branches or parked cars, when cycling on any street or route within the City of Kingston. Cyclists should exercise the same level of caution whether riding on a street or route designated by this map or any non-designated street or route.

- Drinking Fountain
- Public Washroom
- Public Washrooms with Change Rooms/Lockers
- City Arenas (for water and washrooms)
- Public Libraries (for internet and washrooms)
- Portsmouth Olympic Harbour (for showers and washrooms)
- Waterfront Beaches
- Bus Station
- Kingston Transit Transfer Locations
- Wolfe Island Ferry Dock
- Train Station
- Bike Shops
- Park and Ride-Montreal Street
- Use Caution

- City Cycling Lanes**
Roads with paved, striped shoulders.
Bicycle and chevron road markings indicate officially adopted city cycling lanes.
- Connector Routes**
Roads with Heavier Traffic.
Heavier traffic including trucks during the week. Experienced riders may find traffic acceptable, less experienced cyclists should exercise caution and evaluate before riding.
- Connecting Links**
Neighbourhood Connecting Links:
Paved pedestrian or multiuse paths.
Please dismount and walk when encountering pedestrian only facilities.
- K&P Trail**
- Waterfront Trail**
- Greenwood Park Trail**
- Suggested Routes**
Generally lower traffic, residential roads.



Sources: KCAT 2010, Land Information Ontario 2008, City of Kingston 2009, Statistics Canada 2006



cycling



- ...be equipped
- ...know the rules
- ...watch for hazards
- ...ride responsibly

YOU AND YOUR BIKE

Sizing Your Bike

There is a variety of bicycles on the market to choose from. Whether you're choosing a touring, sport, mountain or hybrid bicycle, it should fit properly, making it easy to control and comfortable to ride.

Check these important fitting points on your bicycle.

Frame Size

Frame size varies by type of bicycle, but as a general rule, you should be able to stand flat-footed over your bike's frame (top tube) with two to five centimetres of space. For a woman's frame bike, when sitting on the seat, the base of the seat should be at least five centimetres above the seat tube when the tips of both feet touch the ground.

Seat and Handlebar Height Adjustment

Seat - Positioning your seat properly will help make your pedalling more efficient and reduce strain on your knees. To ensure your seat is at the correct height, sit on the seat with the balls of your feet on the pedals.

At the bottom of the pedal stroke, your legs should be almost straight with your knees slightly bent.

Handlebars - In a normal riding position, your weight should be evenly balanced, allowing you to rest your hands lightly on the handlebars. You can adjust the tilt of your seat and the height of your handlebars to achieve a good balance of weight.

Your handlebar stem and seat post must be at least five centimetres into the frame. Both usually have a mark that indicates the maximum extension point. Longer seat posts and stems are available if you need them.

Safety Check

Every cyclist needs to know how to tell when their bicycle is unsafe to ride and needs repair.

Keep your bike secure

Always carry a quality bicycle lock when riding and always lock your bike and quick release items like your wheels and seat to something solid.

helmets

In Ontario, it is the law that every cyclist under the age of 18 must wear an approved bicycle helmet.

An approved bicycle helmet can greatly reduce the risk of permanent injury or death in the event of a fall or collision. A helmet works by absorbing the forces of a crash, so if the helmet has been in a collision, it should be replaced even if there is no visible damage.

The best helmet is one that fits properly, is worn correctly and has been manufactured to meet strict safety standards. Look for a safety standards sticker meeting the approval of safety organizations such as the Canadian Standards Association (CSA), Snell, ANSI, ASTM, BSI, CPSC and SAA.

Helmets from other sports such as hockey, baseball, and football are not recommended for cycling. They are designed and tested for different types of impact.

To provide maximum protection, the helmet should fit level and square on your head. It should fit snugly and not slip when you move your head.



WRONG

RIGHT

To check a proper fit:

- There should be two finger widths between your eyebrows and the helmet.
- The straps should be flat against the face.
- The side straps should meet just below the ear making a V-shape under your ear lobe.
- The chin strap should be fastened snugly with enough room to fit one finger between your chin and the strap.
- Use the sizing pads provided with the helmet to adjust the fit.

children

Children are required to wear an approved bicycle helmet when riding in a child carrier or a bicycle trailer.

RIDING WITH CHILDREN

Use care and caution when cycling with young children who are too young to ride themselves. Keep in mind that a bicycle child seat mounted behind the bicycle seat alters your centre of gravity while riding and may increase the risk of losing balance.

Take extra caution when placing and removing the child from the carrier.

Never leave your bike unattended when a child is in the carrier.

An alternative way to carry children is to use a child bicycle trailer towed behind your bicycle. Bike trailers are stable and not prone to tipping. Most trailers are attached either directly to the bike frame or the seat post by means of a U-joint.

electric bikes

What is a powered-assisted bicycle (electric bike/e-bike)?

An e-bike is a bicycle with an added battery-powered electric motor that assists the rider in pedalling and increases the amount of power to the wheel. In some models, the motor can propel the bicycle without pedalling. E-bikes can also be driven like a conventional bicycle without any power assist. The power assist enables the rider to pedal with less effort, to climb hills and ride against the wind more easily. An e-bike is similar to a conventional bike in terms of size, weight, speed and the riding skills required.

Only e-bikes that conform to the federal definition of a power-assisted bicycle can be legally operated on public roads. To meet this definition, the e-bike must have:

- Operable pedals.
- An electric motor that cannot provide power assist at a speed greater than 32 km/hr and a power output that does not exceed 500 watts.
- A label affixed by the manufacturer that states in both English and French that the vehicle is a "power-assisted bicycle" as defined in the federal regulations.



Traffic laws that apply to bicycles also apply to e-bikes. This means that e-bikes are not permitted to travel where bicycles are not allowed, such as controlled-access highways and municipal roads and side-walks where by-laws do not permit bicycles. E-bikes must have a bell and front and rear lights when you ride between one-half hour before sunset

and one-half hour after sunrise.

Operators of e-bikes are not required to hold a driver's licence, to have the e-bike registered or plated or to have motor vehicle insurance.

riding in traffic

Around parked vehicles

Ride in a straight line at least one metre away from parked vehicles. Keep to this line even if the vehicles are far apart to avoid continuous swerving.

YES



NO



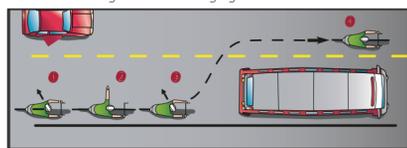
When riding around parked vehicles, cyclists should watch for motorists and passengers who may open their car door into the cyclist's path.

Taking a lane

In urban areas where a curb lane is too narrow to share safely with a motorist, it is legal to take the whole lane by riding in the centre of it. On high-speed roads, it is not safe to take the whole lane. To move left in a lane, shoulder check, signal left and shoulder check again then move to the centre of the lane when it is safe to do so.

Changing lanes

When changing lanes, remember that vehicles in the other lane have the right-of-way. The person moving into a new lane must always wait for an opening. Always shoulder check, signal and shoulder check again before changing lanes.



1. Shoulder check 2. Signal lane change 3. Shoulder check again 4. Change lanes.

Right-turning traffic

Motorists don't always check for bicycles when making right-hand turns, so cyclists need to take extra caution. It's important to leave space around you for a safety cushion (one meter between you and the curb and you and the vehicle).

When a motorist is making a right-hand turn, cyclists can either stay behind the vehicle or pass the right-turning vehicle on the left by shoulder checking, signalling, shoulder checking again and then passing on the left. Never pass a right-turning vehicle on the right.

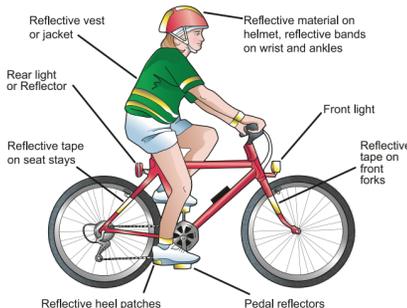
Going through intersections

Intersections are where many collisions occur, so stay alert. Any point where the paths of two vehicles can cross is a potential intersection. Often residential areas contain many mini-intersections where driveways and alleys enter streets. Stay at least one metre from curbs in residential areas so that drivers about to enter the road can see you, and you can see them.

At intersections, it is usually better to take the lane before the intersection so that right-turning motorists stay behind you.

be seen & heard

Because bicycles are one of the smallest vehicles on the road, it is important for cyclists to be as visible as possible to other road users at all times.



Lighting

By law your bicycle must have a white front light and a red rear light or reflector when you ride between one-half hour before sunset and one-half hour after sunrise. As well, the law requires white reflective strips on the front forks and red reflective strips on the rear stays (seat stays).

Clothing

Clothing can improve or reduce visibility. Yellow and white stand out best at night; dark colours are difficult to see. Pedal reflectors and reflective material on wrists, ankles, heels, clothing and helmets help others see you.

Dawn and dusk

When riding directly into or away from the sun at these times, leave extra room and be ready for sudden stops or swerves by traffic around you. Be particularly alert at intersections and scan carefully.

Be heard

Bicycles are very quiet vehicles, so it is important to warn other cyclists and pedestrians of your approach. By law, all bikes must have a working bell or horn to announce your approach. At times it is just as effective and more courteous to shout something like "passing on the left" when overtaking other cyclists and pedestrians.

handling skills

Selecting the right gear

Handling skills are easier to learn in a low easy gear where the legs can rotate quickly. Fast leg rotation provides better balance, less fatigue and more speed. It also reduces knee strain.

Shifting gears

The basic rules for gear use are:

- Shift into a low, easy gear before you stop.
- Use low, easy gears when going up hills. Shift into lower gears before you begin to work too hard.
- Use higher, harder gears when you begin to bounce on the seat from pedalling too fast.
- On the level, use a gear that gives you fast, easy leg spin – about 70 to 100 rpm.
- Avoid pedalling slowly and pushing hard in your highest gears.

Strait line riding

Riding in a straight line is the key to riding safely in traffic. Practise by following a painted line in a parking lot. Try not to move your upper body as you pedal – let your legs do the work.

Shoulder checking

Shoulder checking involves looking back over your shoulder to see what the traffic behind you is doing. This manoeuvre is vital for making safe turns in traffic. It is also difficult to do without wandering from a straight path. Practise riding in a straight line while checking behind you over both shoulders.

Sequence practice

Practise shoulder checking before signalling to make turns. Practise shoulder checking, signalling and shoulder checking again before moving, when changing lanes or position within a lane.

Emergency handling skills

The first step in collision prevention is to scan the road ahead for potential hazards. Steer clear of debris and holes in the pavement, and learn to anticipate errors by motorists, pedestrians and other cyclists. Don't assume they see you. No matter how skilled or careful a rider you are, you will encounter hazards that leave you little time to react.

Braking

Quick stops can be crucial in an emergency. Caution is required when braking quickly to ensure you don't flip over your handlebars. Keep a space cushion around your bike to ensure you have time to react and stop safely. In wet weather, it takes longer to stop, so be sure to leave more room.

Credit: Ministry of Transportation of Ontario

Right-of-way

Right-of-way determines who goes through an intersection first. Before proceeding into an intersection, give way to pedestrians and vehicles already in the intersection or approaching the intersection so closely that it would be hazardous for you to proceed.

The following outlines the right-of-way at intersections with and without traffic controls.

Without traffic controls

When you approach an intersection without traffic control signals, stop signs or yield signs at the same time as another vehicle, you must yield the right-of-way to the vehicle approaching from the right.

All-way stop

At intersections with all-way stop signs, the first vehicle to come to a complete stop should have the right-of-way. If two vehicles arrive at an intersection and stop simultaneously, the vehicle on the right has the right-of-way. Putting your foot on the ground indicates you are stopping and yielding.

Moving through traffic signal intersections

There are two rules for safely crossing intersections:

1. Watch for vehicles turning across your path and be prepared to avoid them.
2. Always watch for traffic signal changes and be prepared to stop if you are not yet in the intersection.

Right turns

To make a right-hand turn, get to the right-most lane, since you must turn from the right-hand curb side to the right-hand curb side. Shoulder check for overtaking traffic, then signal the turn. Scan the intersection for pedestrians, who have the right-of-way, and wait for them to clear your path. You must also stop for red traffic signals and stop signs before turning.

Keep in mind, cars may move into the bike lane or to the right side of your lane prior to making a right turn. Stay behind or pass on the left. Never pass a right-turning car on the right side.

Left turns

There are two basic ways to turn left at an intersection, depending on your cycling skills and the volume and speed of traffic.

1. **Pedestrian turn** – Walk the bike across the pedestrian crosswalk.
2. **Veicular turn** – This is the most convenient way to turn left except where traffic is so congested that it is difficult to get into position before the turn. Vehicular style turns can be relatively simple on quiet residential streets but they require more cycling skill on multi-lane roads.

Multi-lane left turns

Two possibilities exist: moving to a dedicated left turn lane, and using multiple left turn lanes. Both require the cyclist to move over lane by lane to get to the appropriate turning position. These manoeuvres can be quite complex and require specific cycling skills.

A cyclist must be able to shoulder check without swerving, judge gaps in traffic, signal intentions to motorists, shoulder check and move decisively and quickly when safe to do so. You can develop these skills by practising on quiet streets first. As you gain confidence and skill you will find it easier to turn left on busier streets.

Dedicated turn lane – Move lane by lane to the dedicated turn lane using your lane-changing skills. Wait to turn at the centre of the left turn lane. Go when the oncoming traffic is clear and the traffic signal is green.

Multiple left turn lanes – When more than one left turn lane exists, use your lane-changing skills to move over lane by lane to get to the lane at the extreme left. Take the centre of the lane. If all traffic must turn left and the lane is wide, you may ride on the right side of the lane.

Completing a left turn

Always complete your turn into the equivalent of the lane you turned from. Once the turn is complete, use your lane-changing skills to move over lane by lane to the right, as close to the curb as is appropriate for the road conditions.

weather hazards

Wet weather makes roads slippery and cyclists need to take extra caution when riding in wet conditions.

Braking – Most bicycle brakes work poorly in the rain. If you have steel rims, ride slowly and allow extra time for braking. Brake hard only after your brakes start to grab. Aluminium and alloy rims provide the best wet weather braking.

Cornering – You have less traction on wet roads, so corner slowly with little leaning.

Puddles – Avoid puddles if possible, or go through them slowly.

Metal, paint and wood – Metal plates, service covers, tracks and painted lines are all very slippery when wet. Slow down and corner carefully on all such surfaces.

Visibility – Visibility can be poor in wet weather. Wear bright outer garments so that drivers can see you better.

cycling & the law

A bicycle is a vehicle under the Ontario Highway Traffic Act (HTA). This means that, as a bicyclist, you have the same rights and responsibilities to obey all traffic laws as other road users. Cyclists charged for disobeying traffic laws will be subject to a minimum set fine and a Victim Surcharge fine of \$20.00 for most offences (please note set fines below are subject to change).

The following are key sections of the HTA concerning cyclists.

HTA 144/136 – Traffic signals and signs – stop for red lights and stop signs and comply with all other signs. **Set fine: \$85.00**

HTA 153 – One way streets – ride in the designated direction on one-way streets. **Set fine: \$85.00**

HTA 147 – Slow moving traffic travel on right side – any vehicle moving slower than the normal traffic speed should drive in the right-hand lane, or as close as practicable to the right edge of the road except when preparing to turn left or when passing another vehicle. For cyclists, you must ride far enough out from the curb to maintain a straight line, clear of sewer grates, debris, potholes, and parked car doors. You may occupy any part of a lane when your safety warrants it. Never compromise your safety for the convenience of a motorist behind you. **Set fine: \$85.00**

HTA 142 – Signalling a turn – before turning, look behind you and signal your turn. Cyclists can use their right arm to signal a right turn. **Set fine: \$85.00**

HTA 140/144(29) – Crosswalks – stop for pedestrians at crosswalks and walk your bike when crossing at a crosswalk. **Set fine: \$85.00**

HTA 166 – Streetcars – stop two metres behind streetcar doors and wait until passengers have boarded or departed and reached the curb. **Set fine: \$85.00**

HTA 175 (12) – Stopped school buses – stop for stopped school buses when the upper alternating red lights are flashing and the stop arm is out. **Set fine: \$400**

SIGNS AND TRAFFIC SIGNALS

Key traffic signs and signals for cyclists

- Bicycles are permitted on this road.
- No bicycles allowed on this road.
- Stop and wait until the way is clear before entering the intersection.
- Yield to traffic in the intersection or close to it. Stop if necessary and go only when the way is clear.
- Roadwork ahead. The speed limit and lanes may be reduced.
- Railway crossing ahead. The sign also shows the angle at which the railway tracks cross the road.

DEALING WITH TRUCKS AND BUSES

Blind spots

Bus and truck drivers have large blind spots where they are unable to see passing vehicles, particularly bicycles. It is extremely important to stay out of the blind spots. Trucks and buses are wider than most passenger vehicles and occupy more space on the road, meaning cyclists should never share a lane with them. Always watch for trucks and buses that may make a right-hand turn in front of you.

If you can see the eyes of the driver in their mirror, they can see you. Try to catch the driver's attention, or stay well ahead of or well behind their vehicle.

Trucks and turning

Cyclists need to take extra care when entering intersections with trucks. Trucks have large blind spots and may not be able to spot cyclists when making right-hand turns. An experienced truck driver will use lane closure (crowd the curb) to shut down the lane to bikes and small vehicles before making a right turn. They then must swing out away from the curb to allow the truck's rear wheels to complete the turn. Not all truck drivers practise this technique, so always take extra care and watch for right-turning trucks.

Position yourself in front or behind a truck near intersections. The experienced cyclist may choose to pass on the left in the passing lane. If you sit between the curb and a truck at an intersection, you lose the comfort space needed to get out of the way if the truck starts to turn.

School buses

When the upper red lights of a stopped school bus are flashing and the flashing stop arm is extended, traffic in both directions must stop. If you are coming from behind the bus, stop at least 20 metres away, and a safe distance when approaching from the opposite direction.

The only exception is if you are on a road divided by a median strip. In this case, only vehicles approaching a school bus from behind must stop.

You may not proceed until the bus resumes motion or the red signal lights have stopped flashing and the stop arm is retracted. Failing to stop for a school bus is against the law, and if charged, you could be subject to a fine of \$400 to \$2,000. This law applies on all roads and to all drivers, including bicyclists.

Travelling in groups

There are a few safety tips to keep in mind when travelling in groups.

Ride in single file on two-lane roads or when traffic is heavy on multi-lane roads.

Keep at least one metre apart from other cyclists in the group and keep several lengths apart when going downhill at high speed.

If you are travelling in a large group, break up into smaller groups of about four to six. Keep about one kilometre between groups to allow traffic to pass.



hand signals

Signalling

Making signals requires being able to ride with only one hand on the handlebars. Because it is very easy to go off course when riding one-handed, practise signalling while riding along a straight line. Keep both hands on the handlebars while actually turning. It's also important to practise shoulder checking before signalling to make turns.



LEFT TURN: Left arm out



STOP: Left arm out, down, palm back



RIGHT TURN: Left arm out, up (photo above) OR Right arm out (photo right)



1-800-268-4686
Wolfe Island Ferry Schedule Message Line:
www.mto.gov.on.ca/english/traveller/ferry/

Kingston Area Ferry Information:

Ferries...
Call 1-888-842-7245.
The Bike Train service between Toronto-Ottawa and Montreal is provided by VIA Rail. For schedules and

select passenger rail trains to destinations across Ontario, making cycling holidays easy and accessible.

The Bike Train Initiative introduces bike racks onboard

now equipped with a convenient rack to store bicycles. The steel racks are designed for easy loading and unloading. It can be raised and lowered with one hand and will securely hold two bikes with wheels as small as 16 inches.

Trains...

Rack and Roll! Every Kingston Transit bus is now equipped with a convenient rack to store bicycles. The steel racks are designed for easy loading and unloading. It can be raised and lowered with one hand and will securely hold two bikes with wheels as small as 16 inches.

www.cityofkingston.ca/tripplanner

Kingston Transit

Buses...

Plan your trip...

KINGSTON cycling ROUTES



Get to know the trails of Kingston, Frontenac and Lennox & Addington! Recreational trails in the region are here to be enjoyed by you and your family.

... VISIT ...
www.trails-at-a-glance.ca

Celebrate the exquisite natural areas that surround us.

walk • hike • bike • swim • paddle
geocache • skate • snowshoe

VISIT www.kcat.ca

– a showcase of initiatives across the city dedicated to promoting a more active Kingston



Do you cross the LaSalle Causeway by bicycle or motor vehicle?

CYCLISTS:
Ride in the centre of the lane

MOTORISTS:
Do not pass cyclists