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Your Guide to E-Bike Safety

If you can ride a standard bicycle,
you can ride an electric bicycle!



What is an E-Bike?

Electric-bicycles — also known as e-bikes — are generally the same as a standard bicycle, but with an electric motor and battery that add power to the bike, allowing people of more ages and abilities to travel further, faster, even in the most hilly areas.

How Do E-Bikes Work?

There are two main types of e-bikes, and each provide power in different ways:

- » **Pedal-assist e-bikes** provide a boost of power every time the rider pedals. These are commonly used in e-bike share programs.
- » **Throttle-only e-bikes** can add power anytime the rider triggers the throttle, without the need to pedal.

How Are E-Bikes Different From Standard Bikes?

- 1. They are heavier** — move cautiously with the bike when you're on your feet
⚡ Pro-tip: To feel more stable, lower the seat for more foot contact with the ground.
- 2. They are faster** — be conscious of your speed, especially when on shared pathways.
- 3. They are reliant on a battery** — keep an eye on the battery level to ensure there is enough to get you to your destination (or at least a charging outlet!)
- 4. They have age requirements** — riders must be at least 16 years old to ride an e-bike (*BC Regulation*). Some e-bike share services require riders to be at least 18 years old.



How far can one go on a single charge?

It depends! Just like km/L in a car, there are several factors of the battery and trip that affect how far you can travel per charge. Factors may include the battery size, terrain, and load on bike. Current batteries can generally last anywhere from 40-100km on a single charge.

Selecting An Appropriate E-Bike

E-bikes come in a variety of specialties such as city commuters, mountain bikes, cargo carriers, and more; each with their own range of power and price.

Key things to consider when selecting a bike are

- » Your desired carrying capacity (e.g., groceries and/or children!).
- » Your typical trip distance and terrain.
- » And the general level of electric-assistance you want.

If you are exploring purchasing an e-bike, of course you'll want to also consider your budget. Be sure to research potential government incentives and rebate programs in your region.

Safety Equipment

It's the law to ride with the following safety equipment:

Lights

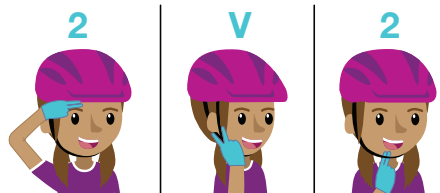
Lights are required when riding in low-light conditions. Use a forward-facing white light and rear-facing red light.

⚡ Pro-tip: Use lights during the day as well as night — it lowers the risk of being hit by 47%.

Helmet

Always wear a helmet when riding a bicycle, and adjust it to fit using the 2V2 rule:

- » **2**-finger gap between the brow and rim of the helmet,
- » **V**-shape straps around both of your ears,
- » **2**-finger gap between the chin and helmet strap.



Is there a speed limit for e-bikes?

Yes. In most cases the maximum speed is 32km/hr (on level ground without pedalling; *BC Regulation*). Some e-bike share services in BC limit the speed of their bikes to 25km/hr.

Safety Tips

- 1. Stay visible** — ride where you can be clearly seen by others, wear bright clothing and use lights.
- 2. Communicate** — use hand signals (see below) for turns and unexpected stops, and use a bell, noisemaker or your voice to warn (e.g., when you're going to pass someone else).
- 3. Be aware** — frequently scan and listen to what is ahead and behind you.
- 4. Limit speed** — be conscious of your own speed compared to speed limits and the pace of others around you.

Safe Battery Handling

E-bikes with lithium-ion batteries should only be charged to 100% when first used, and should be stopped at 80% for subsequent charges. This reduces stress on the cells which helps extend the

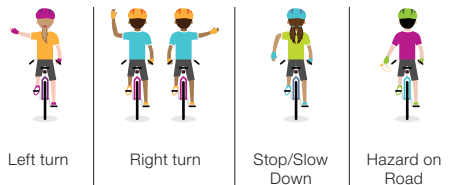
life of the battery. Be sure to store and change your battery in a dry environment at room temperature and protect it from direct sunlight.

Rules of the Road

When riding on streets, people have the same rights and responsibilities on a bicycle as they do in a car.

Key rights & responsibilities:

- » Ride on the right side of roads and pathways.
- » Obey all traffic laws, signs, and signals.
- » Turn on your lights in low-light conditions.
- » Take the lane when appropriate (e.g., when it is unsafe for others to pass).



Can e-bikes ride in the centre of a road lane?

Cyclists, having the same rights as vehicles, are legally allowed to ride on the road and 'take the lane'. This means positioning themselves in the centre of a lane, to avoid hazards or discourage others from passing dangerously.

Plan Your Trip






Planning your route beforehand will make your bike ride safer, quicker, and more suited to your abilities. To plan a route:

- » Determine the purpose of your ride.
- » Take into consideration a few key factors, both internal (e.g., skill, fitness) and external (e.g., weather, infrastructure).
- » Choose a map or mapping tool to draw your route.






Find more maps at bikehub.ca/maps.

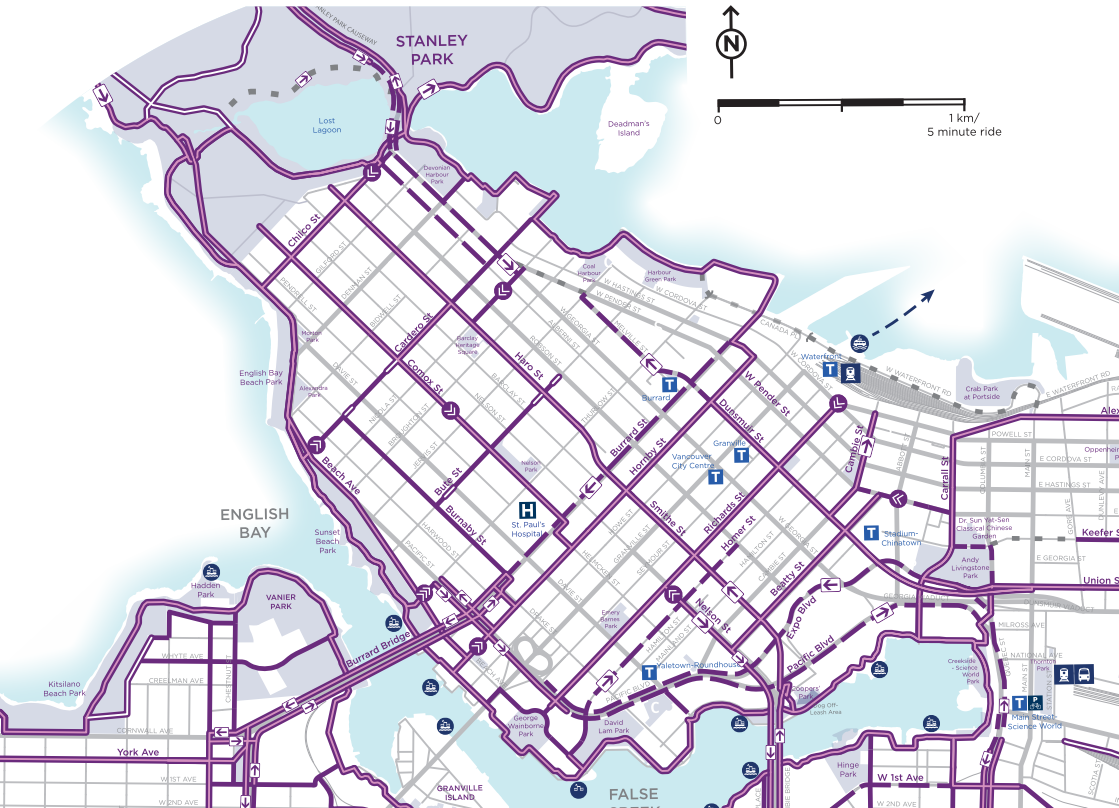
Downtown Vancouver bike routes

Bike Routes

-  Connected AAA Network
-  Protected Bike Lane
-  Local Street Bikeway
-  Painted Bike Lane
-  Shared Use Lane

Legend

-  Moderate Uphill Route
-  Steep Uphill Route
-  One Way Bike Route
-  Temporary Closure
(Broadway Subway construction:
follow signs for detours)
-  SkyTrain Station/Bus Loop



Get Ready To Ride!

HUB Cycling's StreetWise Cycling Online

StreetWise Cycling Online is a self-guided educational resource that helps adult riders build and reinforce the knowledge and skills needed to bike with confidence.

Learn more and create a free account at www.bikehub.ca/swco

HUB Cycling's Videos

Learn more about e-biking with these additional resources.

- » [Intro to E-Biking](#)
- » [E-Bike Etiquette](#)

Evolve E-Bike Share

Meet Evolve E-Bike Share, the newest member of the Evo mobility family, created by BCAA. Evolve is a turn-key, zero-emission public e-bike share program that is currently operating in Whistler. It's also available for private businesses in Metro Vancouver and Victoria.

Here's how to join Evolve for a fun ride in Whistler:

1. [Download the Evo App](#) and sign up (select "e-bike only" for a simplified process).
2. Find an available e-bike from the app and unlock it. **You need to be at least 18 years old to hop on an Evolve E-Bike.*
3. Ride as long as you'd like and return it to any approved Evolve Parking Zone.



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