



# What Are E-Bikes All About?



An e-bike is a regular bike with a battery powering a motor to assist with pedaling. E-bikes are FUN machines that help you get from point A to point B quickly and cost-effectively, while helping the environment and your well-being along the way.

Compared to electric vehicles, e-bikes are 20 times more energy efficient and deliver 30-100 times more miles per pound of battery. They will move you more than 70 times as far as a gas fueled car per pound of CO2 emissions.

# Things To Consider Before Buying Your E-Bike

## Storage/Weight

E-bikes weigh 30-80 pounds. Most owners need space on the ground for storage, without stairs or lifting.

## Where to Buy: Online vs. Local Shop

If you buy from a local shop, you can get sized properly and can test ride bikes. Bikes bought from local shops can have better warranties and are more serviceable when it comes time for repair. Some shops only repair e-bikes they sell, or at least only e-bikes from reputable brands. While you can buy a bike online and have it shipped to your house, these bikes still need to be put together by a bike mechanic.

### **Shop local!**

## Locking

Protect your investment with a substantial lock. Secure the frame and wheels to a stationary object. Register your bike at [bikeindex.org](http://bikeindex.org).

# E-Bikes 101



# What To Consider Before Buying Your E-Bike



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BICYCLE ADVOCATES**

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# E-Bike Basics

## Class 1- Pedal Assist

Class 1 bikes are pedal assist only. They will assist you in pedaling your bike up to a speed of 20mph.

## Class 2- Pedal Assist & Throttle

Class 2 bikes have both pedal assist and a throttle, which provides a speed boost up to 20mph when needed.

## Class 3- Pedal Assist+

Class 3 bikes are pedal assist only, but with a max speed of 28mph. These bikes come equipped with a speedometer and require riders be least 16 years of age and wear a helmet. **Class 3 e-bikes are typically not allowed on trails or bike paths.**

## Maintenance

Some bike shops will only work on e-bikes they sell, or at least only e-bikes from reputable brands. The lowest priced e-bikes may not have replaceable parts or batteries and may be turned away by some mechanics.

## Hub Motor vs Mid-Drive

E-bikes with hub motors in the front or rear wheel are the most common. Mid-drive motors are mounted between the cranks arms. Mid-drive bikes often cost more but offer a more natural feeling ride. Hub motor assistance can feel like a strong tailwind while mid-drive feels like your legs have super powers.

## Pricing

E-bikes have a larger initial investment compared to regular bikes, but a much lower one to any kind of gas-powered transportation. Consumers can find e-bikes online starting around \$800. However, reliable e-bikes that are serviceable, with reliable batteries and components, usually start around \$1,200. For cargo e-bikes and e-bikes with more features or upgraded components, consumers can expect to spend \$2,000 or more.

## Range

The distance you're able to travel on a single charge will vary depending on a number of factors like hills, cargo weight, wind and temperature. Many companies quote +/-40-60 miles on a single charge.

# E-Bikes Are

- Great at climbing hills, beating headwinds, tackling long commutes, hauling kids & loads.
- Safer in traffic thanks to the extra power boost.
- Cheap to ride - less than a penny per mile to charge the battery.
- Easy to park and you can save on parking fees.
- Great at slipping around and through traffic.
- Impressively efficient - equal to 1,000 to 4,000 miles per gallon.
- Good for your health - but won't make you sweat (unless you want to).
- Easy on creaky joints.
- LOTS OF FUN!

SABA is a nonprofit organization dedicated to making our region a safer, healthier, and friendlier place to ride a bike, whether for commuting, recreation, or exercise, for all people, regardless of race, income or ability.

To learn more about our work, events, programs, volunteer opportunities and membership, visit [sacbike.org](http://sacbike.org)



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