



E-Bike FAQs

Electric bicycles
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What's an e-bike?

An e-bike is just like other bicycles except that e-bikes use an electric motor to go faster, more easily than other bikes. Some require pedaling but others have a throttle to accelerate without pedaling.

Who might want to ride an e-bike?

E-bikes are good for anyone who might appreciate a little extra help with their trip. E-bikes provide accessibility for commuters with health issues and relief for parents hauling kids, anyone hauling groceries or trailers, and touring enthusiasts who are getting older or want to keep up with faster, stronger, or younger friends.

Do I have to wear a helmet?

Yes, California law states that all e-bike riders must wear a helmet.

How fast do e-bikes go?

Class 1 and Class 2 e-bikes go as fast as 20 mph and can be ridden anywhere bikes are legal, including bike paths. Class 3 bikes go as fast as 28mph and are not allowed on bike paths. Bike lanes adjacent to or parallel to roads are okay for all e-bikes. You must be at least 16 years old to ride a Class 3 e-bike. E-bikes do not belong on sidewalks.

Are e-bikes safe?

Yes, but be sure to wear a helmet and leave plenty of space for pedestrians, other bikes, and cars, which are unlikely to correctly anticipate your speed.

Can I convert an existing bike to an e-bike?

Yes, while e-bikes are manufactured with integrated motors, you can also convert almost any existing bicycle to an e-bike.

What are the different types of motor mounts?

Hub system e-bikes have a motor incorporated into the hub of the back wheel that powers the wheel directly, which is good for higher power and higher torque applications. Mid drive e-bikes have a motor tucked between the back tire and the gear that powers the chain.

How do I charge an e-bike?

E-bikes are plugged into standard 110V outlets using a charging device that looks like a laptop charger. Charge times vary by make and model but on average it takes about 1 to 5 hours.

How far do e-bikes go on a charge?

Range also varies by make and model but the average is about 20 to 40 miles.

How much do e-bikes cost?

E-bike cost varies by make and model but the range is about \$1,500-\$7,000. E-bikes have been around long enough that used models are also available. Check Craigslist and local Facebook groups.

Are there incentives for e-bikes?

CalBike's budget request for \$10 million for e-bike purchase incentives was included in the budget approved by the legislature and the governor July 2021. CalBike is working with the California Air Resources Board (CARB) to help outline the program. Visit the [California Bicycling Coalition](#) for more info.

Where can I buy an e-bike locally?

e-bike dealers in Davis include Ken's Bike and Ski, Freewheeler, and B & L, as well as Practical Cycle Transportation Co. located in Old Sacramento.

Why are e-bikes so cool? They are fast, easy to use, and affordable (consider searching for a used e-bike). E-bikes allow those with barriers like physical disabilities, aging legs, or health issues to keep up with friends and family and keep out of cars.

Other resources

Cool Davis: Is There an e-Bike in Your Future? <https://www.cooldavis.org/2019/05/10/is-there-an-ebike-in-your-future/>

Lawrence Berkley e-bike FAQs

<https://commute.lbl.gov/resource/bike/e-bike-faqs/>

TREK e-bike FAQs

https://www.trekbikes.com/us/en_US/ebike_faq/

Electric Bike Report FAQs <https://electricbikereport.com/electric-bike-frequently-asked-questions/>

Transportation Research and Education Center (TREC) <https://trec.pdx.edu/>