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BY DAVID DARLINGTON

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ARE E-BIKES OUT OF CONTROL?



in e-bike crashes, though, it was 25 percent.

The most alarming difference was the fatality rate. "On a pedal bike, the chance of dying from an injury is about three-tenths of 1 percent," Alfrey says. On an e-bike, the data indicated, it was 11 percent.

These findings are in line with a 2011 study by the University of California, Berkeley, which found that e-bikes were 10 times more likely to cause a fatality than a pedal bike.

Rider Profile	Typical Average Speed (Flat Terrain)	Primary Goal
Beginner / Leisure Rider	10-12 mph (16-19 km/h)	Enjoyment, exploring, light exercise
Daily Commuter	12-15 mph (19-24 km/h)	Utility, reliable transport, avoiding traffic
Intermediate Fitness Rider	15-18 mph (24-29 km/h)	Building endurance, structured training
Advanced Amateur	18-22+ mph (29-35+ km/h)	Competitive performance, group riding
Professional (for context)	25-30+ mph (40-48+ km/h)	Winning races, pushing human limits

The gap between everyday riders and pros is huge. Tour de France cyclists can hold over 25 mph for hours, day after day. Professional riders' sustained efforts highlight the upper limits of human performance. Most pro cyclists average around 25-30 mph on flat stages, while record speeds in sprints exceed 40 mph. These numbers are impressive, but they exist in a completely different world of structured training, teamwork, and aerodynamic precision. World records are even faster, showing why comparing your daily ride to these numbers makes no sense. Use this table as a guide, not a rule book. Average cycling speed by age group can also vary widely — younger riders often recover faster, while older cyclists may trade top speed for endurance and consistency.

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Biking

HOME > RECREATION > **BIKING**

e-bikes

In September 2023, the Park District Board of Directors voted to allow Class I e-Bikes on all trails where regular bikes are allowed, and Class II e-Bikes on all paved Regional Trails. Class 1 e-Bikes are pedal-assist and require pedaling for assistance from the electric motor. Class 2 e-Bikes have a throttle and allow pedal assist but do not require pedaling for assistance from the electric motor.

All e-Bikes must follow the 15 mile-per-hour bike speed limit. Bikers should also remember to slow down around others, call out or ring their bell when passing, and stay on designated trails only.

CLASS 1 E-Bike

In the state of California, the only legal way for a **Class I e-bike** to exceed 20 mph is with pedal power, as the pedal-assisted electric engine is limited to 20 mph, **at which point it shuts off.**

CLASS II E-Bike

In the state of California, the only legal way for a **Class II e-bike** to exceed 20 mph is with pedal power, as the throttle is limited to 20 mph, **at which point it shuts off.**

OBSERVATIONS

- 1) The proposed 15 mph limit is aligned with the practical and statutory limits of both Class I and Class II bike whose respective electricity-induced speed tops at 20 mph, at which point the engine shut off.
- 2) The proposed 15 mph limit is aligned already with the speed of the typical *pedal-powered commuter bicyclist* (12-15 mph) or the *pedal-powered intermediate fitness bicyclist* (15-18 mph).
- 3) The proposed 15 mph limit is aligned already with the 15 mph limit of the East Bay Regional Park District.

on their throttle devices.”

By “throttle devices,” he is referring to Class 2 machines, which have captured an estimated two-thirds of the e-bike market. According to PeopleForBikes, the rationale in 2015 for creating a class for bikes with throttles — which can eliminate even the modest exercise benefits of pedal



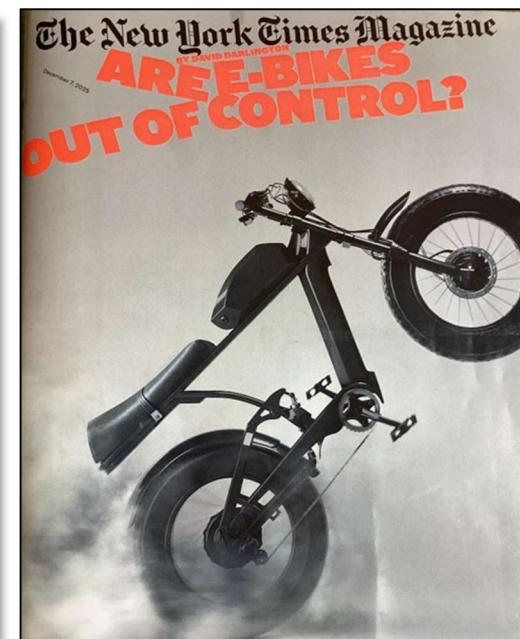
Hacking my E-Bike to go Faster!

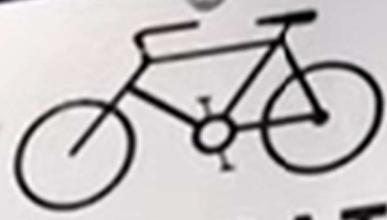
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 Marcus Hutchins 

Walking through how I went about hacking my ebike to remove the factory speed limit restrictions.

To conform with federal law, Class 2 e-bikes have “speed controllers” that keep users under the limit. But these can be circumvented by magnets, dongles, third-party apps, “tuning kits,” wire clippers or even software provided by the manufacturer — unlocking modifications popularly called “jailbreaking.” “You do it by pushing a button or two or entering a code on the display,” Mittelstaedt says. “It’s as easy as changing a setting on your iPhone.”





BIKE PATH

**NO
MOTOR
VEHICLES
OR
MOTORIZED
BICYCLES**

**CLASS 1 & 2 E-BIKES
ONLY**

