

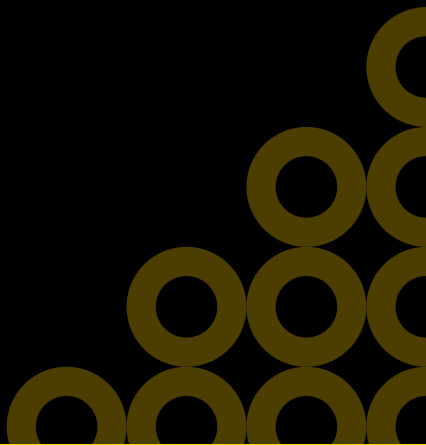


**VALENCIA** 

# The Complete E-Bike Buyer's Guide



*Whether you're looking to commute, ride off-road, or just cruise the neighborhood, this explainer can help you make an informed decision.*



Whether it's neighbors headed to Confluence Park, weekend adventurers tackling trails, or simply an eco-friendly alternative to cars, e-bikes are becoming a staple in Valencia.

*But how do you know which one is right for you?*

**VALENCIA GO™ can help!**

This guide will help you find the perfect e-bike based on your needs and rides. Whether you're looking to commute, ride off-road, or just cruise the neighborhood, this explainer can help you make an informed decision.

Plus, **eligible Valencia homeowners can receive a VALENCIA GO e-bike reimbursement subsidy** for



**50% OF THE PURCHASE OF THEIR E-BIKE, UP TO \$750!**

# E(lectric)-bike basics

## Step-over vs. step-through?

### That top tube makes a difference!

Step-over bikes are the classic look, but not the only way. Go for a **step-through** e-bike if you:

- Ride with cargo often.
- Want to ride in long skirts or restrictive clothing.
- Have difficulty lifting your legs up high.

If you have a need for speed, get a **step-over** e-bike.

### Step-through



+ FITS CARGO

+ LESS RESTRICTIVE

+ MORE ACCESSIBLE

### Step-over



+ SPEEDY

+ CLASSIC STYLE



# The motor

The motor is the heart of your e-bike, making your ride easier with a little (or a lot) extra boost. You'll need to know:

## Motor class: 1, 2, or 3

E-bike motors come in 3 classes. Depending on the class, power may be **pedal-assisted** (only on and pushing forward while you pedal) or **throttle controlled** (activated when you squeeze the handlebars).

- **Class 1:** Pedal-assist only, tops out at 20 mph. Widely allowed in bike lanes.
- **Class 2:** Pedal-assist & throttle tops out at 20 mph. Good for short bursts of speed.
- **Class 3:** Pedal-assist only, tops out at 28 mph. Great for commuters and long-distance riders.

VALENCIA GO can only provide e-bike subsidies to qualified homeowners for the purchase of Class 1, 2, or 3 e-bikes. [Learn more.](#)

## More watts = more power

- **250W:** Most common, sufficient for flat terrain and moderate hills.
- **500W:** More power, ideal for hills and longer rides.
- **750W+:** For off-road and cargo bikes, providing strong torque for steep inclines and heavy loads. **750W** is the maximum e-bike wattage allowed in CA.

## Hub-based vs. crank-based

- **Hub-Based Motors:** Located in the (front or rear) wheel hub. It comes in geared or gearless form.
  - › **Geared Hub Motors:** Common, offers good low-speed torque for efficient commuting and urban riding.
  - › **Gearless Hub Motors:** Quieter, more durable, and efficient at high speeds, but less torque for steep hills.
- **Crank-Based Motors (aka mid-drive):** Located in the crank that connects the pedals, offering balance and higher torque for hilly terrain and longer rides. Typically more expensive.

## The best bike for...

- **Commuting:** Class 1 or 2 e-bike with a geared hub motor (250W).
- **Hilly terrain:** Class 3 e-bike with a mid-drive motor (500W+).
- **Urban rides:** Class 2 e-bike with throttle for quick starts.

---

Always check specific park, trail, and neighborhood regulations on motor wattage and speed limits! These can vary widely in [California](#).

---

# The battery

An e-bike's battery is key to performance, range, and ease of use.

What you need to know:

## ○ The industry standard

E-bikes with 500+ watt motors and 48V+ batteries are a great option for most riders, providing good range and sufficient power.

To ensure your battery is safe, look for [UL 2849 or 2772 certification](#). Underwriter Laboratories tests batteries for risk of overheating and fire and only certifies those with reasonable safety standards.

## ○ Battery types

- **Lithium-ion (Li-ion) batteries** are the most common material.
- Types include **Lithium Cobalt Oxide (LCO)** for compactness, **Lithium Iron Phosphate (LiFePO4)** for durability, and **Lithium Nickel Manganese Cobalt (NMC)**, which balances energy density and lifespan.

## ○ Voltage: 48V vs. 52V

- **48V Batteries:** Common in mid-range e-bikes, offering a balance of power and range.
- **52V Batteries:** Higher power for steeper hills and longer rides but need to be charged more often.

## ○ Storing batteries outside the bike:

### CA REQUIREMENTS

- **Store in a cool, dry place** (32°F to 77°F) away from direct sunlight and heat.
- **Keep charge levels at 40%–60%** for long-term storage.
- **Follow local fire safety regulations** for storing e-bike batteries.
- **Proper disposal:** Recycle batteries at designated facilities; **never** throw them in the trash!

## ○ Staying charged

Follow these tips to help your battery last longer.

### GET A COMPATIBLE CHARGER

- Ensure the voltage, type, and brand of your battery match the charger. Mismatched chargers can damage your battery or start a fire.
- Always use the manufacturer's charger or one designed for your battery.

### AMPS = CHARGING SPEED

- **Higher amps** = Faster charging.
- **Amp Hours (Ah)** = Battery capacity. More Ah means more power, but also longer charging time.



## Pro tips

**Avoid overcharging**—unplug when fully charged.

**Don't always charge to 100%**—stopping at 80% can extend the battery lifespan.

**Charge before long rides** to ensure you've got enough power.

**Avoid draining to 0%**—recharge at 20–30% for better battery health.

**Charge regularly** to 40%–60% while storing long-term.

**Store in a cool, dry place** to preserve battery life.

**Keep connectors clean** to charge the battery faster.

# Tuning up

## ○ How often is maintenance required?

- **Basic Tune-Up:** Every 3-6 months for regular use.
- **Quick Check:** Every 1-2 months for tire pressure, brakes, chain, and battery.

## ○ Tune-ups include:

1. **Tire check:** Inspect for wear and correct inflation.
2. **Brake adjustment:** Check responsiveness.
3. **Chain maintenance:** Clean and lubricate.
4. **Battery check:** Clean terminals and inspect battery connections.
5. **General safety check:** Inspect and test your handlebars, motor, and pedals.

## Repair shops & costs

E-bike services are offered at most bike shops or dedicated e-bike repair centers. Basic tune-ups range from **\$50-\$100**; major repairs can cost **\$100-\$300+**.

Regular tune-ups can help prevent major issues and ensure a safe ride. Some local bike shops to try:

### **BICYCLE JOHN'S**

26635 Valley Center Dr  
Canyon Country, CA 91351  
(661) 254-7300

### **INCYCLE SANTA CLARITA**

23360 Cinema Dr  
Valencia, CA 91355  
(661) 254-4008

### **OPEN TRAILS E-BIKES OF SANTA CLARITA**

22935 Soledad Cyn Rd  
Santa Clarita, CA 91350  
(661) 284-5954

### **SCV CARTS**

*(Aventon e-bikes only)*  
25570 Rye Canyon Rd.  
Suite J  
Santa Clarita, CA 91355  
(661) 388-2648

### **TREK BICYCLE SANTA CLARITA**

26625 Bouquet Canyon Rd  
Santa Clarita, CA 91350  
(661) 414-0088



# Choosing your e-bike: 7 essential questions

The perfect e-bike depends on several factors, including your riding style, terrain, and personal preferences. Use these questions to help you pick:

## 1. What type of e-bike is for you?

- **Snow E-Bikes:** Designed for winter conditions with wider tires for better traction on snow and ice.
- **Mountain E-Bikes:** Built for off-road trails, rugged terrain, and steep inclines.
- **City E-Bikes:** Ideal for smooth pavement, short commutes, and urban environments.
- **Cargo E-Bikes:** Perfect for carrying heavy loads or making deliveries.

In Santa Clarita County, city e-bikes and mountain e-bikes may be the most popular for smooth urban paths and off-road trails.

## 2. Where will you ride?

- **Smooth paths:** A city e-bike with a lighter frame and street tires is best.
- **Hilly terrain:** Try a mountain e-bike or cargo e-bike with a powerful motor (500W+) and mid-drive motor for uphill support.
- **Flat terrain:** A city e-bike with a lighter motor and less complex gearing will get you around.

## 3. How much will you carry?

Make sure the bike can support both your weight and any additional cargo you're bringing. **Cargo e-bikes** typically offer higher weight limits, ideal for carrying heavy loads.



## 4. Can you lift your e-bike?

If you need to carry your bike upstairs or transport it frequently, consider a **lighter e-bike**. Heavier e-bikes, like **mountain bikes** or **cargo bikes**, offer more power but can be difficult to lift.

## 5. How long & how often do you ride?

- **Range:** Use a [range calculator](#) to estimate how far you can travel on a single charge, based on battery size and motor power.

If you plan on long rides, you may need a **larger battery** (52V) to avoid frequent charging.

## 6. How often will you charge up?

- **More frequent charges, shorter rides:** Choose a **lower voltage battery** (48V or below) if you can charge it often. This may be a better fit for you if your rides are shorter.
- **Less frequent charges, longer rides:** If you plan on long rides, you may need a **higher voltage battery** (52V) to avoid frequent charging. Make sure your neighborhood and trails allow a 52V bike!
- **More range:** If you need to ride longer distances between charges, opt for a **higher voltage battery** (52V or more), but be mindful of safety and charging considerations.

## 7. How much help do you want?

- **More assistance:** Choose a **higher wattage motor** (500W+) for more power, especially for hilly areas or carrying cargo.

Consider a **gearless hub motor** for quieter, low-maintenance riding.

# The price tag

You've got your specs down! Before you buy, what else will you need to pay for?

## Safety essentials

- **Helmet:** \$30–\$150 (you always need this!)
- **Bike Lights:** \$20–\$200 (stay visible after dark)
- **Shoes:** \$50–\$150 (for clipless pedals)
- **Elbow/Knee Pads:** \$20–\$50 (optional for off-road riders)

## Maintenance

- **Basic Tune-Ups:** \$50–\$100 every 3–6 months.
- **Tires:** \$30–\$70 each; lasts 1,000–3,000 miles.
- **Patch Kit:** \$5–\$15.
- **Machine Oil:** \$5–\$10 per bottle.
- **Professional Repairs:** \$100–\$300+ for motor or electrical issues. You can perform regular basic maintenance yourself to save money—but you'll need to budget time for it!

## Accessories

- **Water Bottle Holder:** \$10–\$30.
- **Basket/Panniers:** \$20–\$150.



***Happy riding!***