

CHARGING 101

EVERYTHING YOU NEED TO KNOW ABOUT CHARGING UP



THE BASICS OF CHARGING

So, you're thinking about going electric. Great! The number of charging stations keeps increasing, making getting from point A to point B as easy as 1, 2, 3! Plus, charging is becoming more convenient and faster — you can charge at home, on your road trip, and even at work!

CHARGING LEVELS

LEVEL 1 3–5 miles/hour charge

- Plug into a typical grounded outlet
- All you need is the charging cable that comes with your car
- Great for overnight charging

LEVEL 2 10–25 miles/hour charge

- Ideal for all-electric car charging at home, at work, or on the road
- Recharge in just a few hours
- Fuels via public or home stations and a 240v outlet

LEVEL 3 DC FAST CHARGING 200 miles/hour charge

- Charge up in less than an hour
- Plug shape matters
- The CHAdeMO standard is used by most Japanese and Korean plug-in cars
- The CCS Combo standard is used by most American and European plug-in cars
- Tesla has a fast charging network specific to its cars with a different plug shape

QUICK FACTS

There are over **61,000** public charging stations in the U.S.

Chargers range from simple plug-and-go to **smart chargers** that can be programmed with your car to **start and stop charging** when you choose

The **average commute** for Americans is 32 miles per day²



PUBLIC CHARGING STATIONS IN THE U.S.

HOME CHARGING

In most cases, home charging is cheaper than public charging. You can choose whether to plug in directly to an outlet (**Level 1**) or install a **Level 2** charging station at your home. Typically, home charging stations cost between **\$300 - \$1,000** plus the cost of an electrician to install it. Installations can be performed by any licensed contractor.

PUBLIC CHARGING NETWORKS

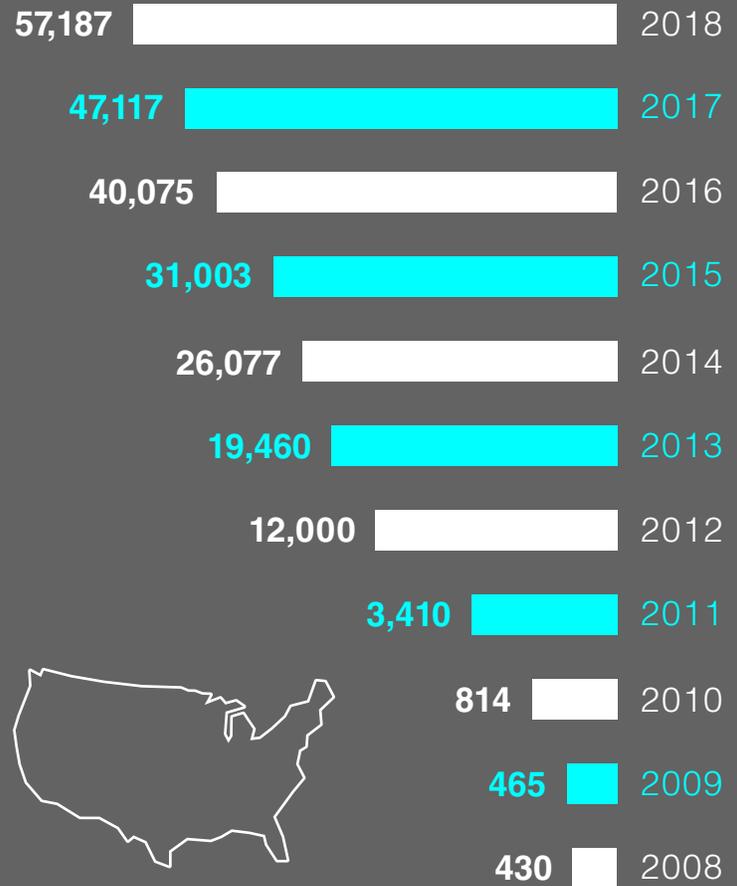
NETWORKS

When charging at a public station, you'll likely use a charger that's serviced by a network. Many have membership programs or subscriptions (you can download the app on your phone) and you can also pay as you go. Rates vary by network – some charge by session, per kWh, by the hour and **some are free**. Membership with these networks usually includes a member discount or if you're not a member you can call the **24-hour customer service** line to pay on the spot.

Blink Charging, ChargePoint, Electrify America, EVgo, Greenlots, and SemaConnect are the most common network providers in the U.S.

FINDING PUBLIC STATIONS

Resources and apps like PlugShare, Chargeway, or the Alternative Fuels Data Center give **real-time information on charging station locations, pricing, nearby amenities, and availability**. Google Maps also now shows charging station locations. Charging stations can be anywhere - at grocery stores and shopping centers, rest stops on the highway, and even at your workplace. You can run errands and grab a meal while you're charging up, plus some charging stations can communicate with your car and phone so you control when charging occurs.



Source: Statista and Alternative Fuels Data Center



¹ Retrieved from: afdc.energy.gov/fuels/electricity_stations

² Retrieved from: itstillruns.com/far-americans-drive-work-average-7446397.html