

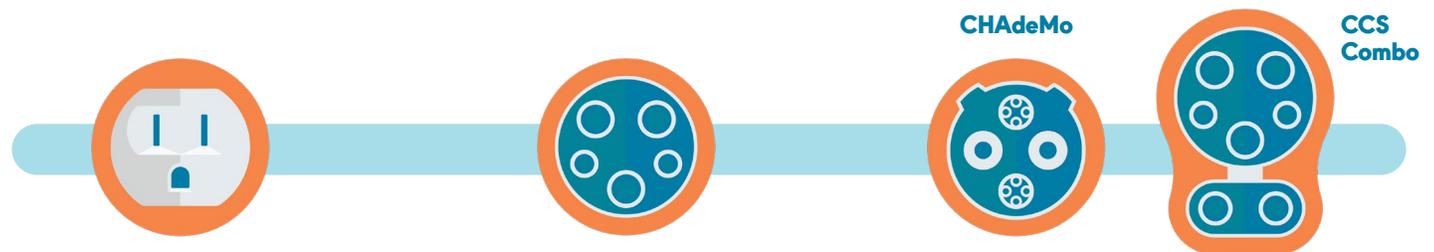
# CHARGING 101

## 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

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

#### Level 2

- 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

#### DC Fast Charging (Level 3)

- 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.<sup>1</sup>

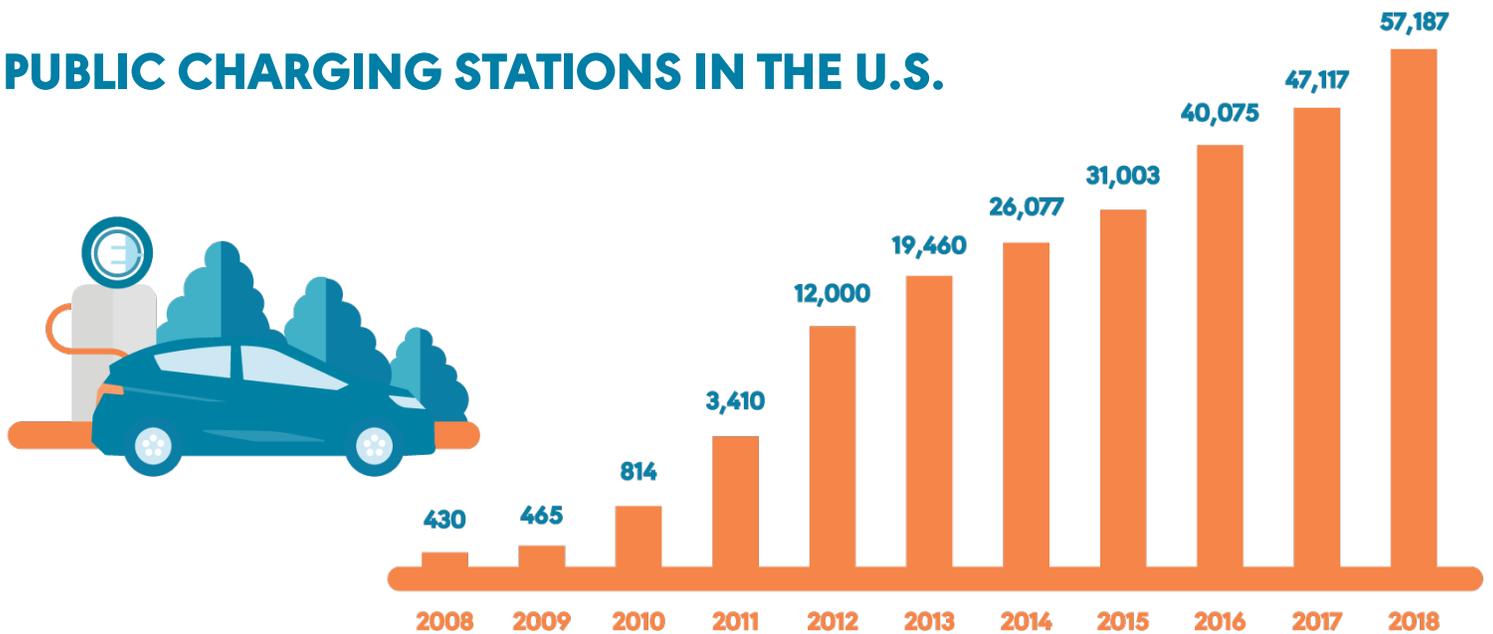


Chargers range from simple plug-and-go to **smart chargers** that can be programmed with your car to **start and stop charging when you choose**



The **average commute** for Americans is 32 miles per day.<sup>2</sup>

# PUBLIC CHARGING STATIONS IN THE U.S.



Source: Statista and Alternative Fuels Data Center

## 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. Check with your utility or a local energy conservation organization for recommendations on contractors and electricians who can install your station.

## 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.

<sup>1</sup> Retrieved from: [Alternative Fuels Data Center at afdc.energy.gov/fuels/electricity\\_stations](http://afdc.energy.gov/fuels/electricity_stations)

<sup>2</sup> Retrieved from: [itstillruns.com/far-americans-drive-work-average-7446397.html](http://itstillruns.com/far-americans-drive-work-average-7446397.html)