

# ELECTRIC VEHICLES (EV) QUICK FACTS



## WHY PURCHASE AN EV

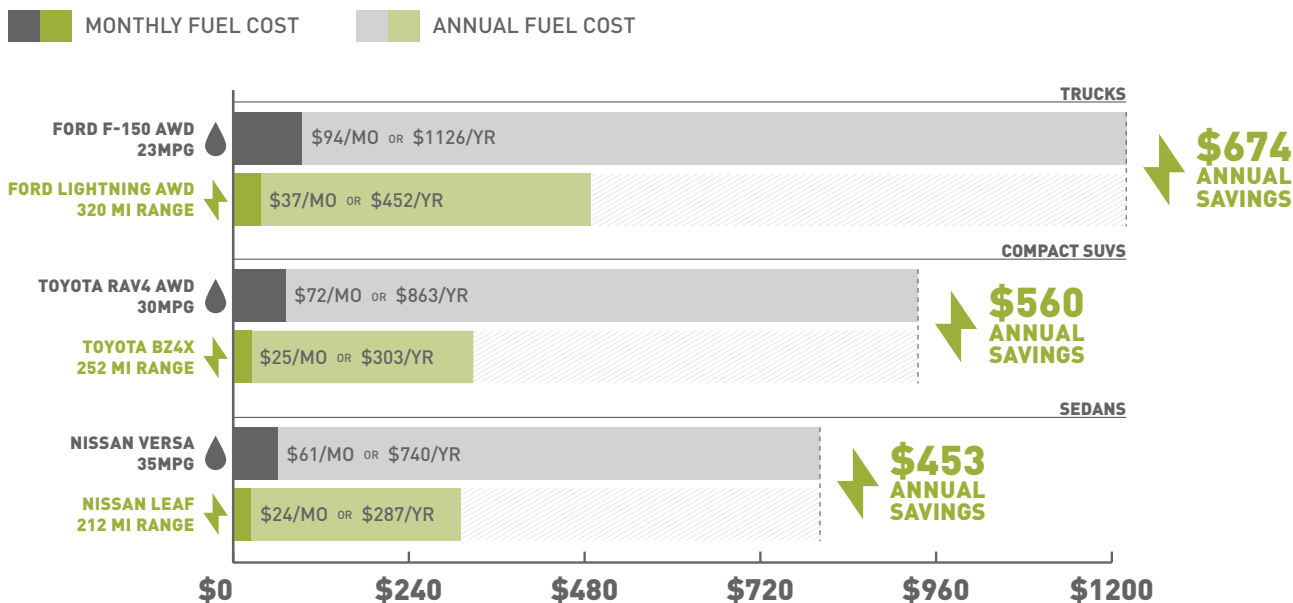
- + EVS ARE ENVIRONMENTALLY FRIENDLY**  
EVs have no direct tailpipe emissions. Electricity is moving toward less emissions with the additions of hydro, solar and wind power, making EVs an increasingly “greener” choice.
- + NEVER GO TO THE GAS STATION AGAIN**  
Electric vehicles do not require gasoline and can be charged at home with a standard 120V outlet or a 240V level 2 charger can be installed for faster, more efficient charging.
- + EV PERFORMANCE BENEFITS**  
Electric motors provide quiet, smooth operation, stronger acceleration and require less maintenance than gasoline-powered internal combustion engines.
- + EV DRIVING RANGE & RECHARGE TIME**  
Depending on the vehicle, an EV’s range can be 80 to 400+ miles on a full charge. The average American’s daily round-trip commute is less than 30 miles. Fully recharging the battery pack can take 4-8 hours. A “fast charge” to 80% capacity can take 30 minutes.\*

\*Source: Idaho National Laboratory, “Plugged In: How Americans Charge Their Electric Vehicles,” [https://afdc.energy.gov/fuels/electricity\\_charging\\_home.html](https://afdc.energy.gov/fuels/electricity_charging_home.html)

**SAVE ON YOUR COMMUTE**

## WESTERN COMMUTERS’ ANNUAL FUEL COST FOR GAS AND ELECTRIC VEHICLES

Residential fuel costs averaged from 2022 [www.eia.gov](http://www.eia.gov) data for CO, NE, NM and WY.



# ELECTRIC VEHICLE CHARGING



## THREE LEVELS OF EV CHARGING

### LEVEL 1: 120-VOLTS

Level 1 uses a standard 120-volt household outlet. It's known as trickle charging because it typically provides 5-7 miles of range per hour. Automakers usually include a Level 1 charger with their plug-in vehicles.

### LEVEL 2: 240-VOLTS

Level 2 uses the same type of outlet as an electric clothes dryer or electric oven. This charger provides 10-60 miles of range per hour, but may require an electrical panel upgrade. Programmable Level 2 chargers can be set to charge when electricity rates are cheaper.

### DCFC: 480-VOLTS

DCFC are public charging stations that can charge EVs to 80% capacity in 30 minutes. Some public charging networks require an app to use.

#### DID YOU KNOW

### ON AVERAGE, 80% OF EV CHARGING OCCURS AT HOME

Charging your electric vehicle requires plugging into a charger connected to the electric grid. There are three major categories of chargers, based on the amount of power the charger can provide: Level 1, Level 2 or Direct Current Fast-Charge (DCFC).

### SMART AND VEHICLE-TO-HOME EV CHARGERS

The majority of charging usually occurs at home, so make sure you're positioned to get the most out of your system. Some basic chargers will supply AC power once connected to your EV. For more money, a smart-charger facilitates programmed charging and/or remote (via mobile app) at times to meet your goals: whether you want to charge when electricity rates are cheapest or to potentially use excess solar from your home's PV system. For those looking to keep the lights on in an electric outage, vehicle-to-home charging enables your EV to supply power to your home. Contact your local utility before investing in a charger to determine the feasibility and potential requirements associated with the current EV charger technology available.

### EV & EV CHARGER INCENTIVES

#### + FEDERAL TAX INCENTIVES

- + Up to \$7,500 for a new EV and up to \$4,000 for used EVs. For brand and model information visit: [www.fueleconomy.gov/feg/taxevb.shtml](http://www.fueleconomy.gov/feg/taxevb.shtml)
- + Up to \$1,000 for a new EV charger installation. For more information visit: [www.irs.gov/credits-deductions/alternative-fuel-vehicle-refueling-property-credit](http://www.irs.gov/credits-deductions/alternative-fuel-vehicle-refueling-property-credit)

#### + STATE TAX INCENTIVES

Contact your state's energy office for information or go to: [afdc.energy.gov/laws/state](http://afdc.energy.gov/laws/state)

#### + LOCAL UTILITY REBATES AND RATES

Your local utility may have an EV program or incentives based on the type of charger you install. Be sure to consult with your power provider before purchasing a charging system.