

FACT SHEET

ELECTRIC VEHICLE OWNERSHIP: Cost, Attitudes and Behaviors



Background

According to previous AAA research, 40 million Americans have expressed interest in purchasing an electric vehicle, yet sales figures show that adoption is moving at a sluggish pace. Misperceptions of electric vehicles such as higher purchase price, lack of choice and range anxiety have kept many consumers from making the switch. Automakers, however, have been discontinuing gas-powered models in order to make room for more electric vehicles in their fleets.

AAA conducted research to determine the specific costs of select new compact electric vehicles and how those compare to similar gas-powered models. The study also sought to understand the behaviors of electric vehicle owners and to see if experience eases anxiety and improves overall perception of these vehicles.

Key Findings

Ownership Characteristics

- Of those surveyed, 71% say they have not previously owned an electric vehicle.
- The majority of electric vehicle owners (96%) say they would buy or lease one again the next time they are in the market for a new car.

Buyer Concerns

- Nine in ten (91%) electric vehicle owners say they had at least one concern prior to purchasing their car. Insufficient range and finding a place to charge were among the most common. Electric vehicle ownership had a positive impact on easing these concerns:
 - Eight in ten (77%) of those originally concerned about insufficient range became less or no longer concerned.
 - Seven in ten (70%) of those originally concerned about lack of places to charge became less or no longer concerned.



Driving/Charging Habits

- Two in five owners (43%) say they drive more now than when they owned a gas-powered car. On average, electric vehicle owners drive 39 miles per day.
- Three-quarters (78%) have one or more gas-powered cars in the household as well, yet they report doing a majority of their driving (87%) in their electric vehicle.
- On average, electric vehicle owners do three-fourths (75%) of their charging at home.
- The majority of electric vehicle owners (95%) have never run out of a charge.

Ownership Costs

- Electric vehicles do not require as much maintenance as gas-powered cars since they do not need oil changes or air-filter replacements. If maintained according to the automakers' recommendations, electric vehicles cost \$949 per year, which is \$330 less than a gas-powered car.
- Over five years and 75,000 miles of driving, the cost to own a new compact electric vehicle is \$7,704/annually, which is \$590 or 8% more per year than a comparable gas-powered car.
- The electricity required to drive 15,000 miles/year in an electric vehicle costs an average of \$546, while the amount of gas required to drive the same distance costs \$1,255, or 130% more.

Methodology

The electric vehicle and internal combustion engine driving costs in this study were established using the proprietary methodology employed for AAA's Your Driving Costs (YDC) project. The 2019 electric vehicle models selected for this study were: Chevrolet Bolt (LT), Hyundai Ionic Electric (Base), Kia Soul EV (+), Nissan Leaf (SV) and Volkswagen eGolf (SE). The 2019 internal combustion engine vehicles selected for the comparison were: Chevrolet Cruze (LS), Honda Civic (LX), Hyundai Elantra (SE), Nissan Sentra (SV) and Toyota Corolla (SE). This methodology models the purchase of a new vehicle for personal use over a period of five years and 75,000 miles. A copy of the 2019 AAA Your Driving Costs brochure with the latest study results is available at bit.ly/35I5GG8.

The survey of electric vehicle owners was conducted using a consumer panel maintained by a third-party electric vehicle research firm. The online panel consists of more than 40,000 electric vehicles owners, weighted to balance drivers by vehicle type, make and model. In total, 1,090 surveys with plug-in electric vehicle (PEV) owners were completed during a 24-hour period on October 1, 2019.

AAA Recommendations:

Vehicle ownership, whether electric or gas-powered, is a personal choice that should take many factors into consideration. For consumers who are interested in electric vehicles, AAA recommends visiting a dealership, test driving one and asking as many questions as possible to make an informed decision.