

**VERRA
MOBILITY™**

STATE OF ELECTRIC VEHICLES: 2023 REPORT ON SMART MOBILITY

As EVs become more popular alternatives to gas vehicles, consumers are considering a ‘try before buy’ approach to address charging concerns and misconceptions about maintenance challenges.



RAPIDLY GROWING EV MARKET

Electric vehicles (EVs) are becoming more popular in the U.S., accounting for more than 7% of all new light vehicles registered in January 2023, according to vehicle registration [data from Experian](#). The nearly 88,000 EVs registered that month represents a 74% year-over-year increase.

EVs also present a significant opportunity for the rental car industry and other vehicle-sharing services. The EV rental car market was valued at \$9.13 billion in 2021 and is expected to reach \$20.42 billion by 2027, according to research by [Modor Intelligence](#).

To examine the opportunities and challenges surrounding EVs, Verra Mobility conducted a survey of 2,000 Americans aged 25 and older about their perceptions and concerns regarding EVs.

The survey found that 78% of Americans would consider renting an EV as a way to ‘test drive’ the technology before making a purchase.

OPTIMISM AND OPPORTUNITY

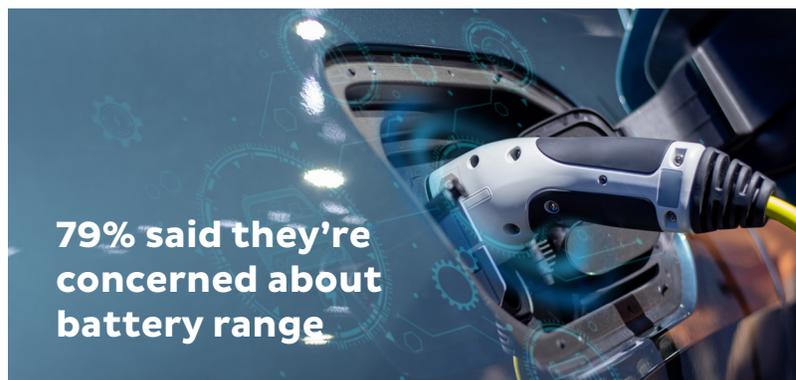
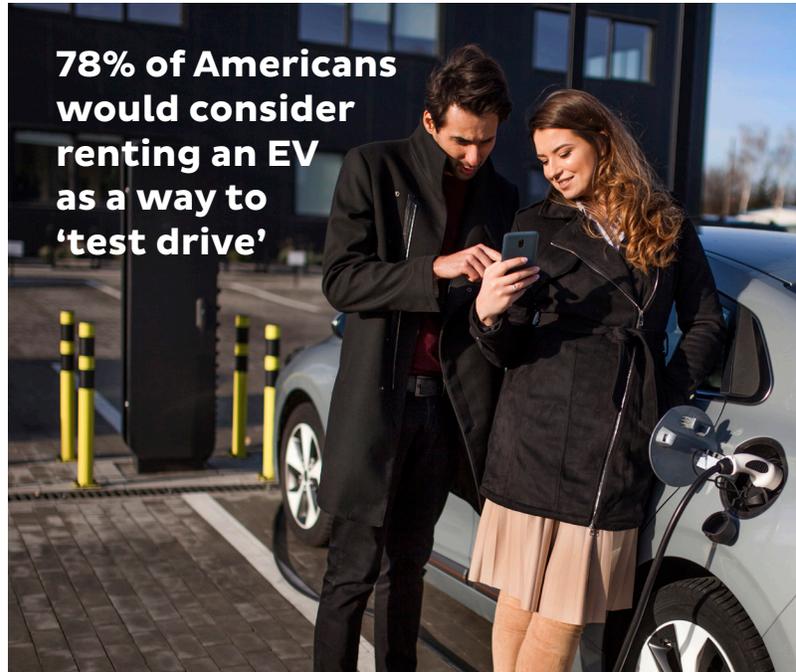
Consumers believe EVs are a more environmentally friendly option. According to Verra Mobility’s survey, **67% of Americans believe EVs are good for the environment.**

In addition, drivers do not appear to have safety concerns regarding EV technology. Nearly **78% of respondents thought EVs were either safer or as equally safe** as gas-powered vehicles.

MISCONCEPTIONS AND CONCERNS

Despite optimism about the eco-friendly upside, Americans are still concerned with the vehicle’s battery being able to sustain a charge for their travels, also known as ‘range anxiety.’

- **79%** of participants expressed concerns about range anxiety and charging EVs.



Survey respondents also have high expectations regarding the distance they expect to travel before needed to recharge an EV.

While range anxiety is a top issue for drivers, other concerns could be considered misconceptions regarding the upkeep and maintenance of modern EVs.

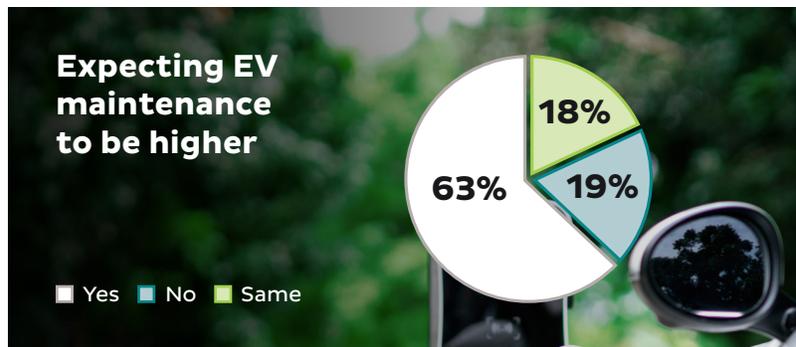
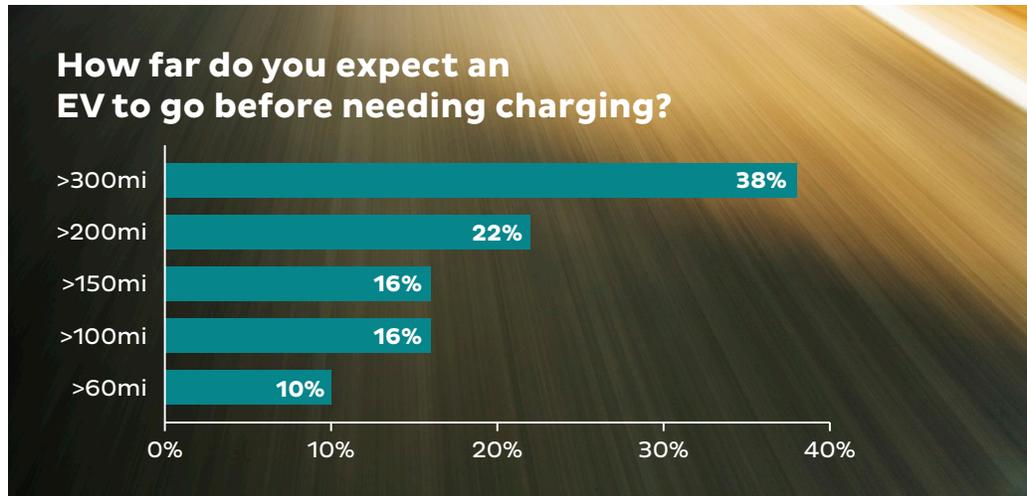
“Driving an EV isn’t intuitive for many people. There’s anxiety around the unknown, like maintenance, locating charging stations on their trip and how to pay to recharge,” said Steve Lalla, executive vice president of commercial services at Verra Mobility. “Renting an EV is a helpful way to get drivers more comfortable and alleviate concerns. Consumers are becoming more curious about testing out EVs, and these vehicles present business travelers with opportunities to support their own companies’ sustainability efforts. Our survey findings and Verra Mobility’s own research illustrate opportunities for the industry to help consumers understand and become more comfortable with the nuances of driving electric.”

- **63%** of survey participants expect maintenance costs to be higher with EVs.
- **43%** believed their chances of needing roadside assistance would be higher with an EV compared to a gas vehicle.

Third-party research, however, indicates the opposite to be true regarding maintenance. [A study by Car & Driver](#) found that in many cases, EVs can be the less-costly option for vehicle owners. For example, EVs can be cheaper to maintain as they do not require regular oil changes or routine engine upkeep.

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– Steve Lalla, Executive Vice President, Verra Mobility



'TRY BEFORE YOU BUY'

One popular option for people considering purchasing an EV is to test out the experience by renting one. Verra Mobility's survey found **78%** of Americans thought this was a good idea if they were in the market to purchase.

Of those who had rented an EV, 64% would consider buying an EV based on their driving experience.

Despite the popularity, survey respondents still have concerns about charging, which include range anxiety, the location of charging stations and the charging process itself.

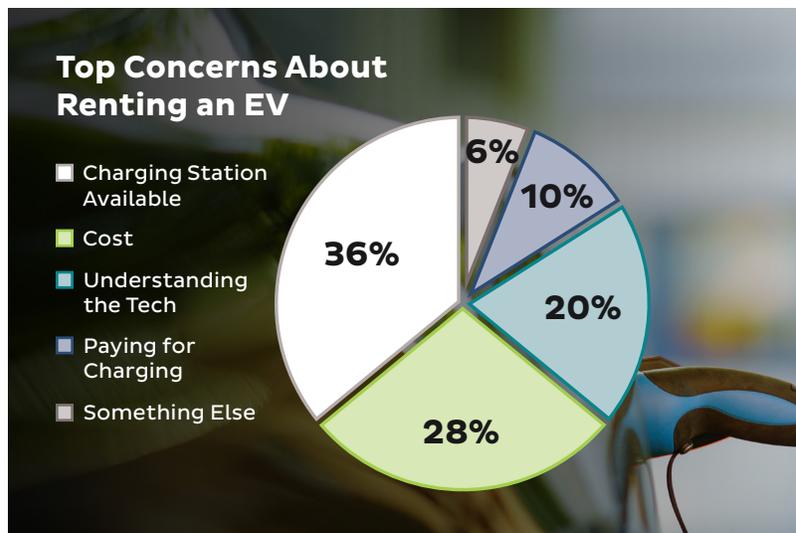
As renting an EV is a popular option, rental car companies can help customers address concerns about the technology.

- **85%** of survey respondents said they would, or they did, conduct their own research on how to operate and charge the vehicle before renting an EV for the first time.
- **64%** said they would not know how to charge an EV if renting one the next day.

Charging remains a top concern for renters and factors into their decision to rent an EV with cost ranking as the second most common concern.

Drivers are accustomed to refueling their gas vehicles at gas stations before returning their rental car to avoid refueling fees. Drivers typically can expect a gas station close to or on their way to the rental car return center. However, EV charging stations, particularly those that can rapidly recharge the car, are not always conveniently located near rental car centers.

- **60%** of respondents would prefer an EV charging station near the rental car return center.
- **69%** surveyed said they would return their EV for another vehicle if their rental was not at least 2/3 charged when they picked it up.



“Our research illustrates opportunities for the industry to help consumers understand and become more comfortable with the nuances of driving electric.”

– Steve Lalla, Executive Vice President, Verra Mobility

SURVEY METHODOLOGY

The data was derived from a survey by Verra Mobility conducted online via Pollfish (www.pollfish.com) on April 28, 2023. The survey was completed by 2,000 Americans aged 25 and older with 59% of the respondents identifying as female and 41% as male. Of the respondents, 39% said they had driven an EV previously.

All decimals in this report are rounded to the nearest percentage point, which may lead to certain numerical totals adding up to slightly more or less than 100%.

ABOUT VERRA MOBILITY

Verra Mobility Corporation (NASDAQ: VRRM) is a leading provider of smart mobility technology solutions that make transportation safer, smarter and more connected. The company sits at the center of the mobility ecosystem, bringing together vehicles, hardware, software, data and people to enable safe, efficient solutions for customers globally. Verra Mobility's transportation safety systems and parking management solutions protect lives, improve urban and motorway mobility and support healthier communities. The company also solves complex payment, utilization and compliance challenges for fleet owners and rental car companies. Headquartered in Arizona, Verra Mobility operates in North America, Europe, Asia and Australia.

[Verra Mobility's Commercial Services business](#) provides integrated toll and violation management solutions and title and registration services for rental car companies, fleet management companies, corporate fleets, rental car operators, OEMs, car dealerships and financial institutions.

For more information, please visit www.verramobility.com.

