EV charging in the US is still a no good, very bad time – and somehow it's getting worse

Electric vehicle owners are overall not satisfied with the reliability of the charging infrastructure available in the US, according to a new survey conducted by JD Power. In some cases, things are looking even worse than last year.

The survey finds that 20 percent of survey takers have, at least once, arrived and departed a charging station without gaining any range on their EV. This is attributable not only to broken charging equipment, but also due to long queues of people waiting to charge.

Using a 1,000-point scale, overall satisfaction with DC fast charging experiences has dropped from 674 down to 654. And for Level 2 charging stations, satisfaction has also decreased this year, from 633 down to 617. These are the lowest scores recorded since JD Power started the survey in 2021.

20 percent of survey takers came and left a station without getting a charge

"The declining customer satisfaction scores for public charging should be concerning to automakers," JD Power's executive director of EV practice Brent Gruber states in a press release.

There are more chargers on the road today compared to a year ago, but there are also more problems, some of which are

unrelated to broken screens and cut cables. “The cost and speed of charging and the availability of things to do while waiting for their vehicle to charge are the least satisfying aspects,” Gruber said.

Locations for chargers are a huge deal to EV owners. People prefer Level 2 chargers near retail areas so they can shop while they wait. Level 2 charging is slow, averaging around 25 miles of range per hour of charging. But EV owners largely use Level 2 for convenience, considering that 80 percent of charging happens at home, according to the US Department of Energy. Drivers tend to prefer seeing DC fast chargers, which average around 100 miles-plus of range per hour, along travel routes.

But EV charging is boring. Some automakers like Tesla include streaming videos and games to alleviate the boredom, but a lack of “things to do while waiting” to charge is a hindrance to the EV experience, according to JD Power. Many spend about 30 minutes charging and prioritize continuing the trip as soon as possible above all else.

People are bored when they stop to charge

The survey also identified the worst place to charge: Miami-Port Saint Lucie-Fort Lauderdale metropolitan area, with a 35 percent chargeless visit rate. That compares to a not-as-bad 29 percent rate in the Seattle-Tacoma, Denver-Aurora, and Dallas-Fort Worth metro areas.

The least-abhorrent place to charge is the Cleveland-Akron-Canton metro area, with just a 12-percent failure rate amongst those who attempted to charge their EVs.

In the case of charging networks, the best Level 2 charger seems to be Volta stations. The company funds its chargers by running ads on big screens and generally doesn’t require an app to activate. Volta users can just plug in, go shopping at the mall or groceries, and come back to a good charge. JD

Power survey takers scored Volta at 665, while Tesla's destination chargers ranked second with 661, followed by ChargePoint at 618, SemaConnect at 578, Electrify America at 542, and Blink ranked last in the list at 535.

Tesla owners remain satisfied with their charging experience, as expected

As expected, Tesla owners remain satisfied with their charging experience. That's largely due to the company's abundant and reliable DC fast-charging Supercharger network that's designed to just plug and charge — earning it a 745 score (compared to 739 last year).

Dissatisfaction and unreliability in charging are turning consumers off to EVs, JD Power argues. Automakers have begun to turn to Tesla's Superchargers for salvation, adopting the company's NACS (North American Charging Standard) plug in their own EVs — but the public charging network still has a lot of room for improvement.

Gruber adds that it's "too early to tell" if opening up the Tesla Supercharger network to other automakers will increase the overall satisfaction of EV charging among owners. And even though Ford, GM, Rivian, Volvo, Polestar, Nissan, Mercedes-Benz, and now, Fisker, are all planning to put the standardized Tesla NACS connectors on their future cars, the timelines aren't concrete. And that can lead to another year of dubious charging experiences for the next survey.

https://www.theverge.com/2023/8/16/23833337/ev-charging-unreliable-worsening-survey-jd-power