Plug In America | EPRI EVs2Scale 2030

2024 EV ANNUAL SURVEY

POLICY OVERVIEW

EXECUTIVE SUMMARY

This report demonstrates a summary of the results useful for policy stakeholders from the EV driver survey conducted by Plug In America in partnership with EPRI's EVs2Scale2030™ initiative. This survey builds on data collected over the past three years. It taps into electric vehicle (EV) driver networks, using Plug In America's longstanding reputation as a trusted source for both early and new adopters. This survey includes responses from over 4,200 respondents, with more than 3,300 of those respondents being EV drivers. The survey was fielded from January 2024 through March 2024. The intent of this survey was to paint a picture of the respondents' current EV experience in the United States. **Plug In America proactively collected survey data through various channels, prioritizing participant engagement. Although statistically significant, this approach may introduce bias in the results as respondents likely have more EV knowledge. Please consider this when interpreting the survey findings.** This summary picks out results that can be leveraged by policy stakeholders to strategize EV adoption and highlights them.

RESPONDENT DEMOGRAPHIC DASHBOARD

Before we begin looking at some of the factors that can inform policy, it is imperative to understand the respondents' background to better interpret the information.

- Of the 4,224 respondents, **3,527 indicated that they own at least one e-mobility option.**
- Of these owners, **~80% were white, 5% were Asian/Asian American or Pacific Islander, 3% were Black/African American, 2% were multi-racial, 1% were Native American/Alaska Native, 0.14% were South Asian, 0.27% Middle Eastern, and 0.14% were of Hispanic/Latino origin** *(rest declined to specify)*.
- Most EV driver surveyors also lie in an **income bracket higher than the U.S. median household income of ~$67,000** (2023); and about **80% of the respondents who own at least one e-mobility option own single-family homes.**
- About **44% of EV driver surveyors own their homes** and are in the $100k income bucket, and **4% are below the $36k income bucket**.

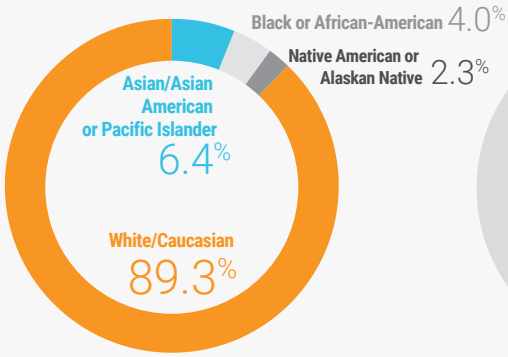
We also analyzed respondents who owned only **micro EVs**:

- **Out of the 138 respondents, 73% were white, 8% were Asian American, 6% were African American, 3% were Native American, and 4% were multi-racial (the rest declined to specify).**
- From this group, **micro EVs also looked like a popular choice among female drivers**. The demographics for all EV and non-EV drivers combined can be found in the survey report.

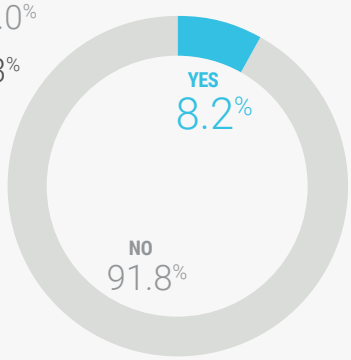
RESPONDENT DEMOGRAPHIC DASHBOARD

RESPONDENTS BY AGE RANGE

18–24	25–34	35–44	45–54	55–64	65–74	75+
1.2%	9.1%	13.4%	15.5%	21.6%	26.8%	12.4%

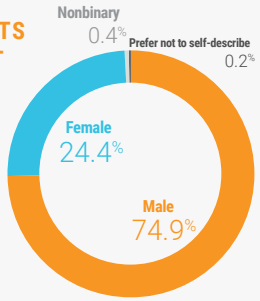


RESPONDENTS BY THEIR RACE/ETHNICITY
(respondents were allowed to choose more than one, so percentages add up to over 100%)



RESPONDENTS OF HISPANIC AND/OR LATINO DESCENT

RESPONDENTS BROKEN OUT BY GENDER IDENTITY



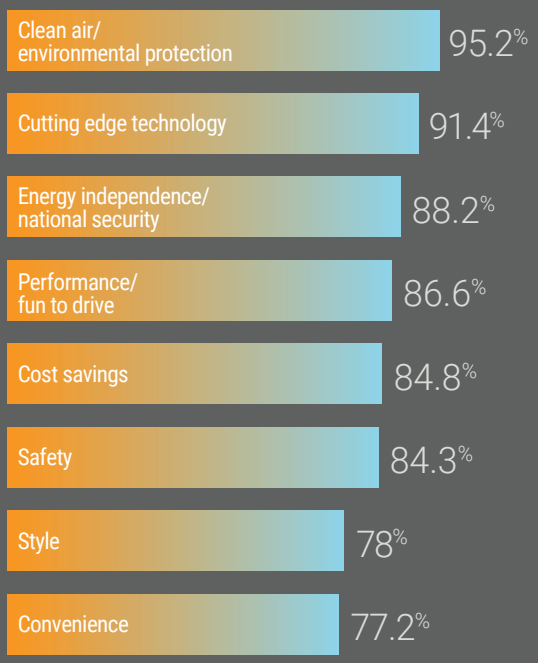
RESPONDENTS BROKEN OUT BY ANNUAL HOUSEHOLD INCOME

Up to $36,000	27.1%
$36,001 to $50,000	21.9%
$50,001 to $75,000	19.6%
$75,001 to $100,000	17.4%
$100,001 to $250,000	17.2%
$250,001 or more	10.0%

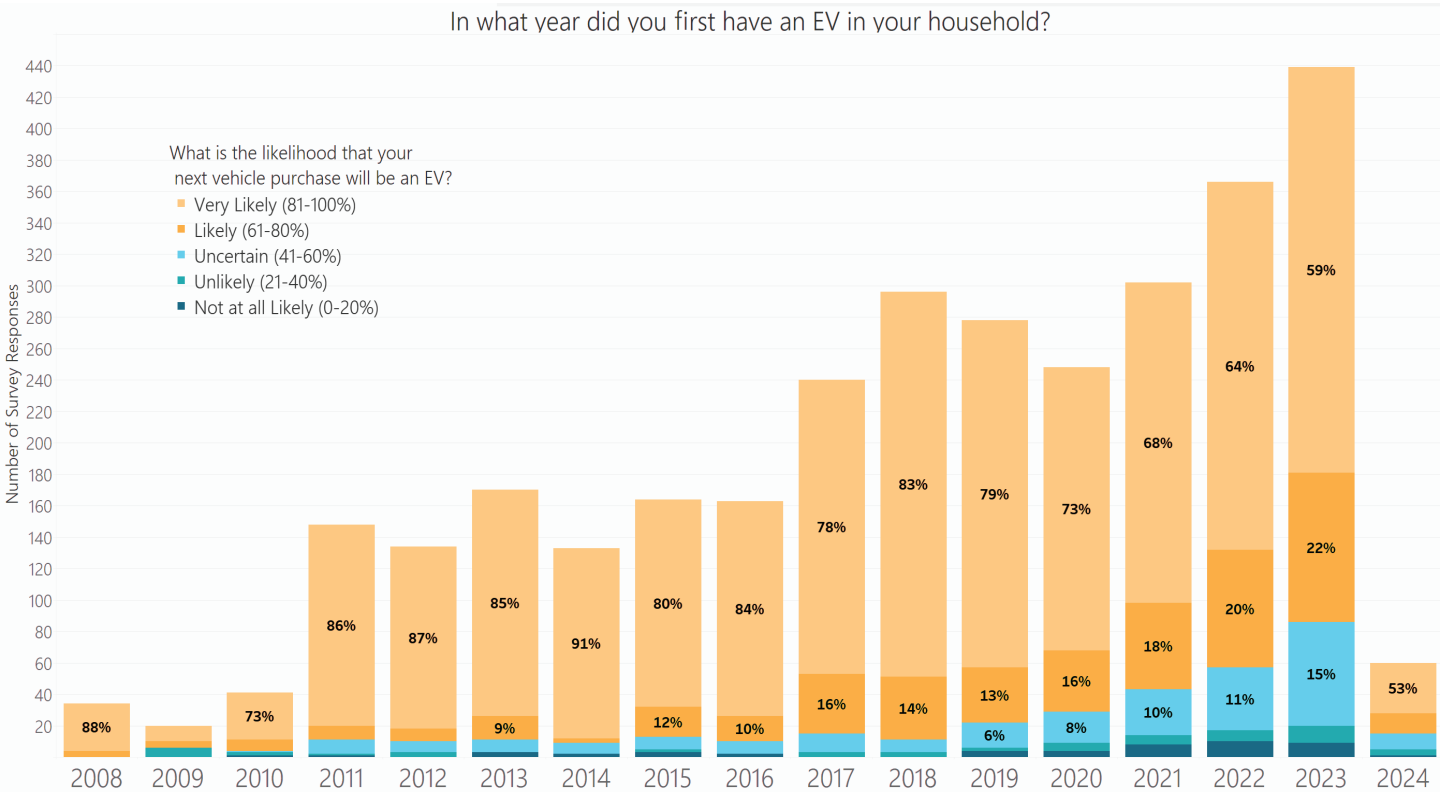
EV PURCHASE

- **Of the 3,350 EV drivers in the survey, 638, or approximately 19%, bought them used.** The Chevy Bolt, Tesla Model 3, Nissan Leaf, Chevy Volt, and Tesla Model S were the most popular used EV models among the surveyors.
- We also looked at what our surveyors thought about non-EV purchases. **Battery and charging concerns remain the hightest worries among non-EV drivers. Cost, technology, vehicle functionality, and lack of information from dealerships were also contributing factors.** Similar to non-EV driver concerns, EV drivers also consider battery and charging issues as the biggest pain points.
- We also examined why the EV driver surveyors opted for a gasoline vehicle after an EV purchase. Other than personal preference, range needs, charging, and cost were some of the significant concerns. Also, two surveyors opted for gasoline cars because of the **lack of ADA accessibility**.
- The majority of EV driver surveyors lie among late-aged white males, but there are some other emergent groups. Non-white racial groups in their late 20s and early 30s were also a significant portion of EV owners in the survey. This trend is consistent with those who own EVs and two- or three-wheeled EVs.
- **About 53.3% of female EV drivers said clean air/environmental protection is their most important purchase consideration.** This percentage was the highest among any demographic group. To draw a comparison, 38.1% of male EV drivers said the same.

Percentage of respondents who said it is likely or very likely their next vehicle will be an EV sorted by what each respondent chose as their most important purchase consideration
(All EV drivers)



EV PURCHASE

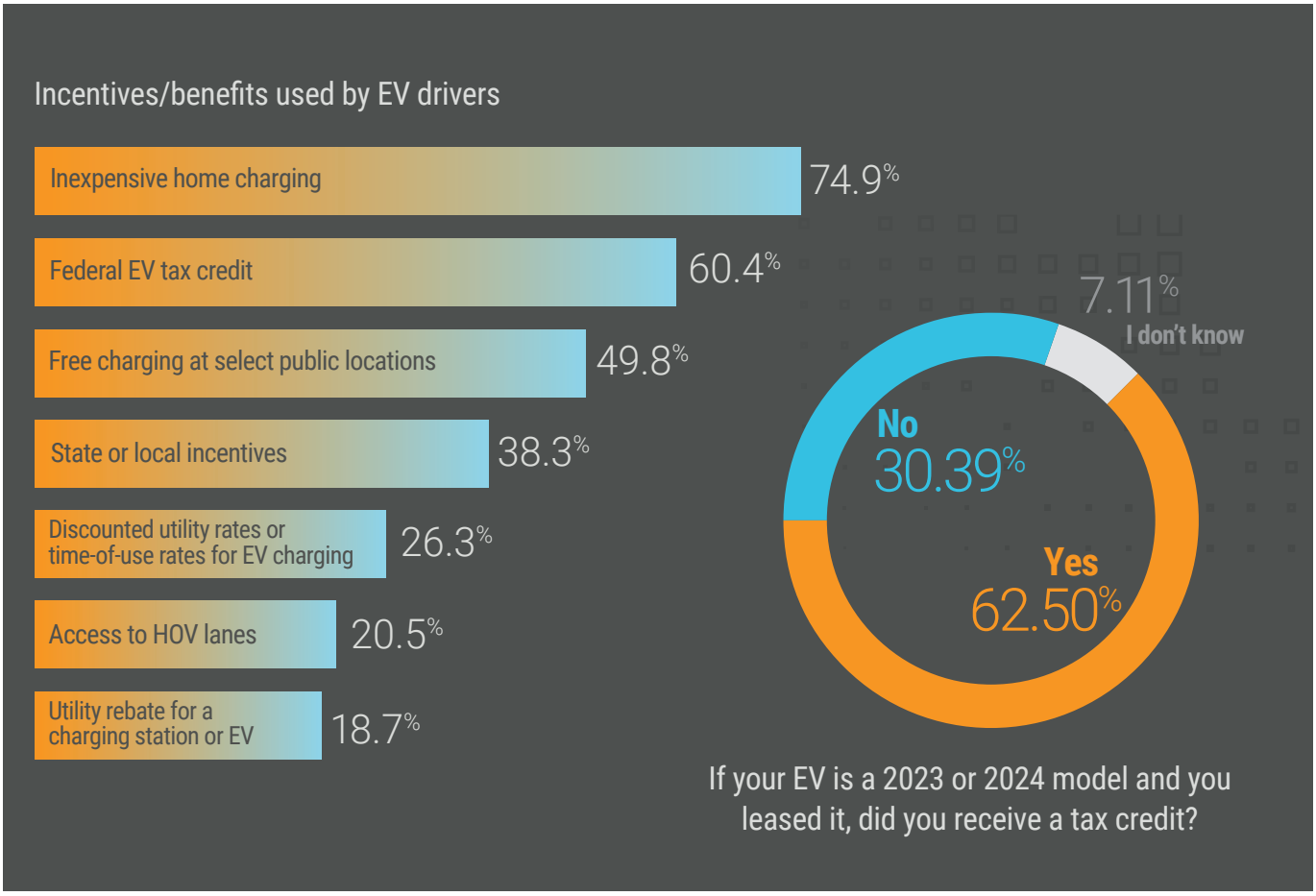


CHARGING

- **About 95% of the EV driver surveyors had access to EV charging at home, whether shared or private.** Of those who did not have access to chargers, the majority charged at public stations at a weekly frequency. About 25% of EV driver surveyors who had private chargers also used public DCFC stations at a monthly frequency.
- **Tesla drivers are much more likely to use DC fast charging, with only 5% saying they never use it.** On the other hand, about 27% of respondents who drive cars from other manufacturers say they never use public fast charging.

UTILITY RATES + BENEFITS

- Of respondents who first bought or leased an EV in 2023 or 2024, **64% said that they used the federal EV tax credit, while 53% of those who bought or leased an EV since 2020 have used it.**
- State/local incentives were **most influential in CA, MD, MA, NJ, NY & OR**.
- Access to HOV lanes was influential in EV purchase/lease for drivers in lower-income and multi-unit homes.



TAKEAWAYS

- Used EV ownership needs to be incentivized more to accelerate in the coming years to attract more late-stage adopters.
- Charging and battery issues still remain concerning factors for most. EV models should be encouraged to develop more affordable and accessible options.
- The survey shows an interest in EVs from younger, female and people of color drivers, which should be incentivized and studied more as they can become the next wave of late-stage EV adopters.
- Incentive/rebate education needs to be improved to raise consumer awareness.