

EV Drivers in California

2024 EV DRIVER ANNUAL SURVEY REPORT



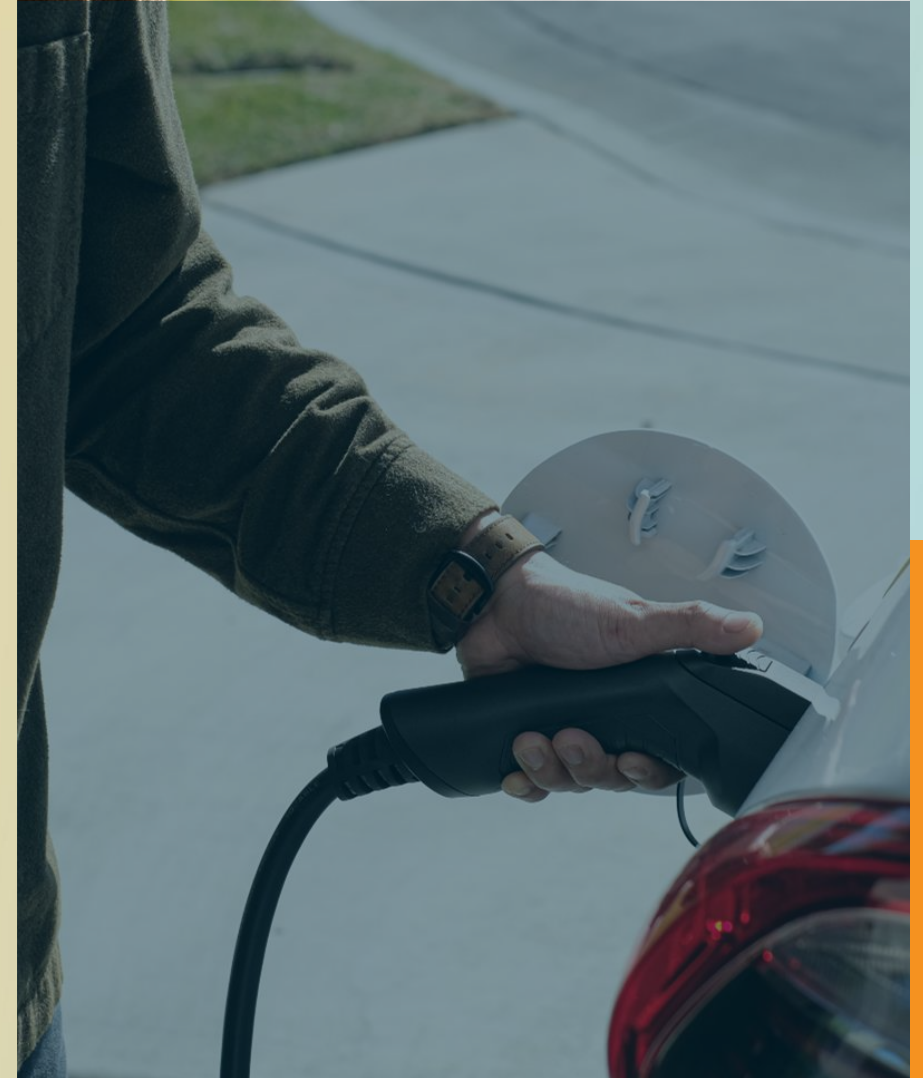
Methodology

Our 2024 EV Driver Annual Survey was fielded from January 2024 to March 2024. This analysis shows the results for all EV drivers who reported that they live in California. In total, this encompasses 786 people. To see the demographics of the survey respondents, please go to [Slide 41](#).

The intent of this report is to show a full picture of the current EV experience in California, in particular:

- What are the most important considerations drivers have when buying an EV?
- What is the likelihood that their next car will be an EV?
- What are some of the biggest concerns that drivers had when they bought an EV? What are some of the biggest concerns now?
- What is the purchasing journey for an EV like?

Please note that all survey respondents self-selected to take the survey.



EV Information



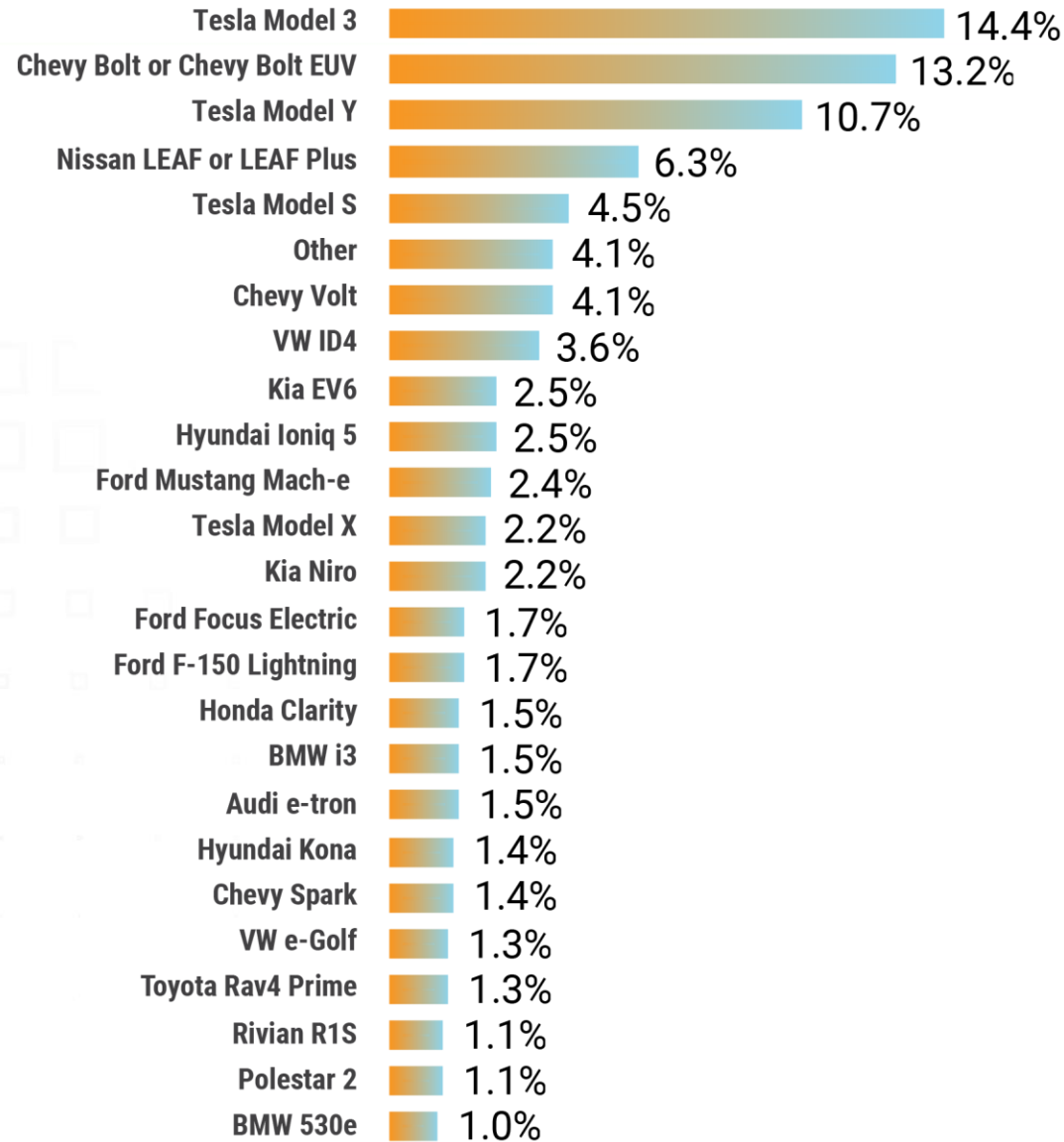
Teslas are the primary EV for one-third of California respondents, with Chevys taking up a sizable portion as well.

In total, **33.3%** of California respondents said that a **Tesla vehicle is their primary EV**. The Tesla Model S and Tesla Model Y largely drove this, with about 25% of respondents saying they drive one of these vehicles. The Chevy Bolt was the second most popular vehicle in California, as it is the primary EV for 13.2% of respondents.

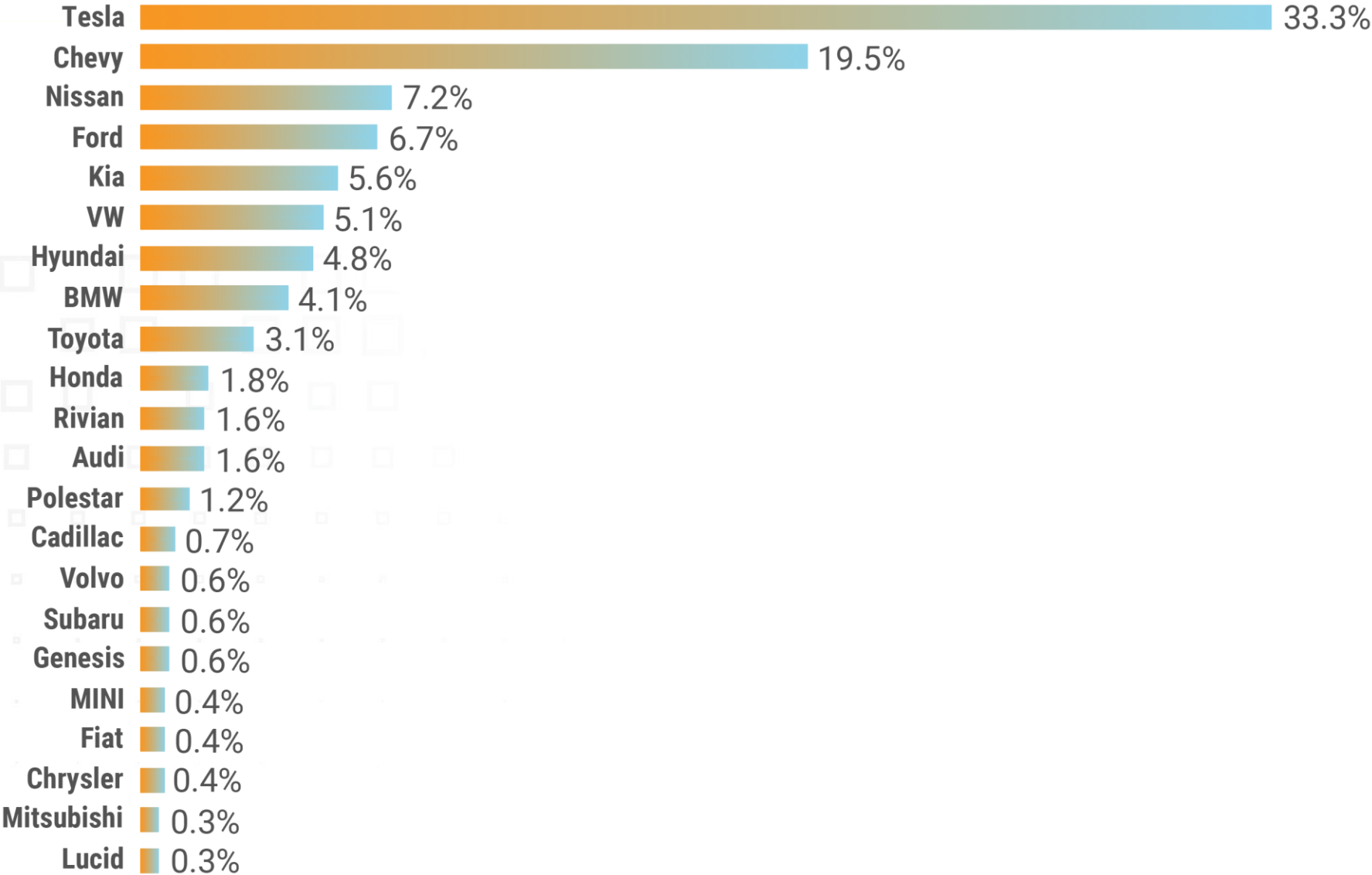
The California sample is mostly made up of drivers with more recent versions of vehicles. **Almost half** of respondents said that they have gotten a **2021 or later model**, with another **28%** having cars with model years **2018-2020**. Earlier versions are still popular, with about 14% of respondents saying their primary EV has a model year of 2016 or earlier.

About **84% of California respondents** indicated that their primary EV is **new**, with the rest saying they bought or leased their primary EV **used**.

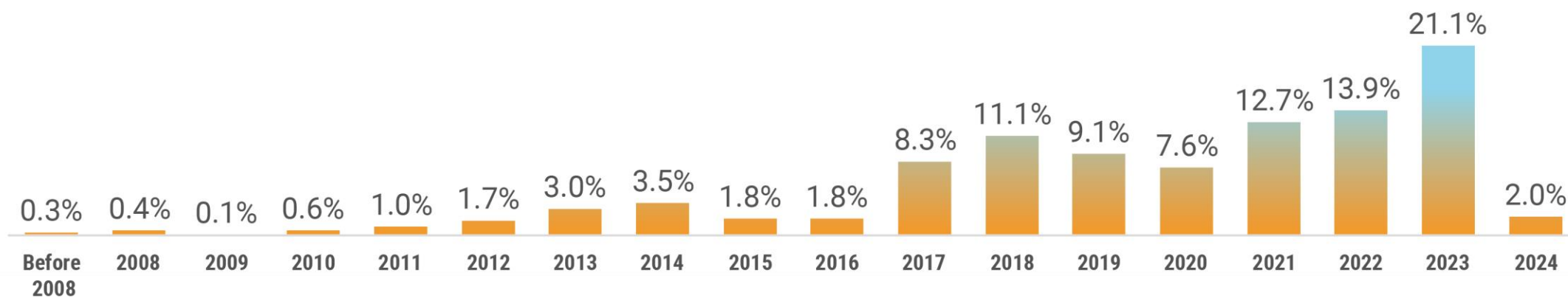
What is the model of your primary EV?



What is the make of your primary EV?

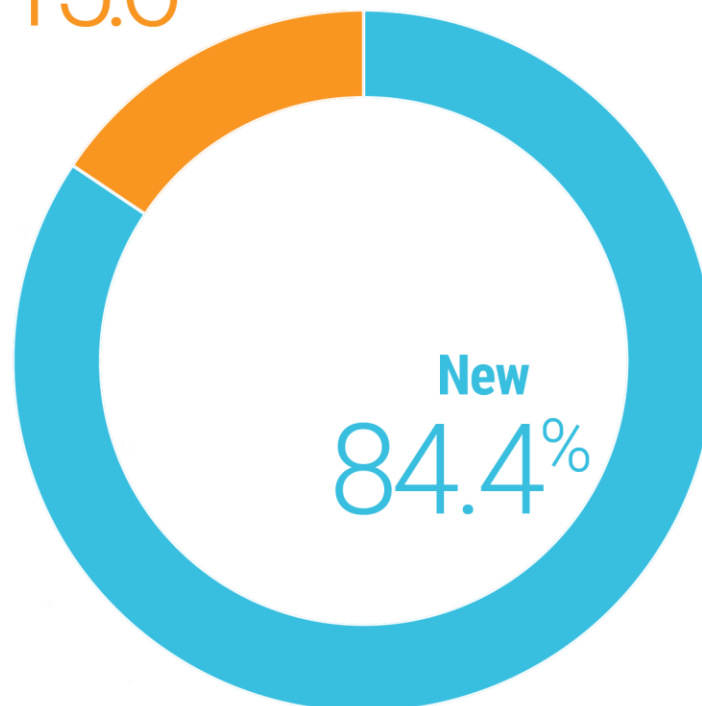


What is the model year of your primary EV?



Did you acquire your primary EV new or used?

Used 15.6%

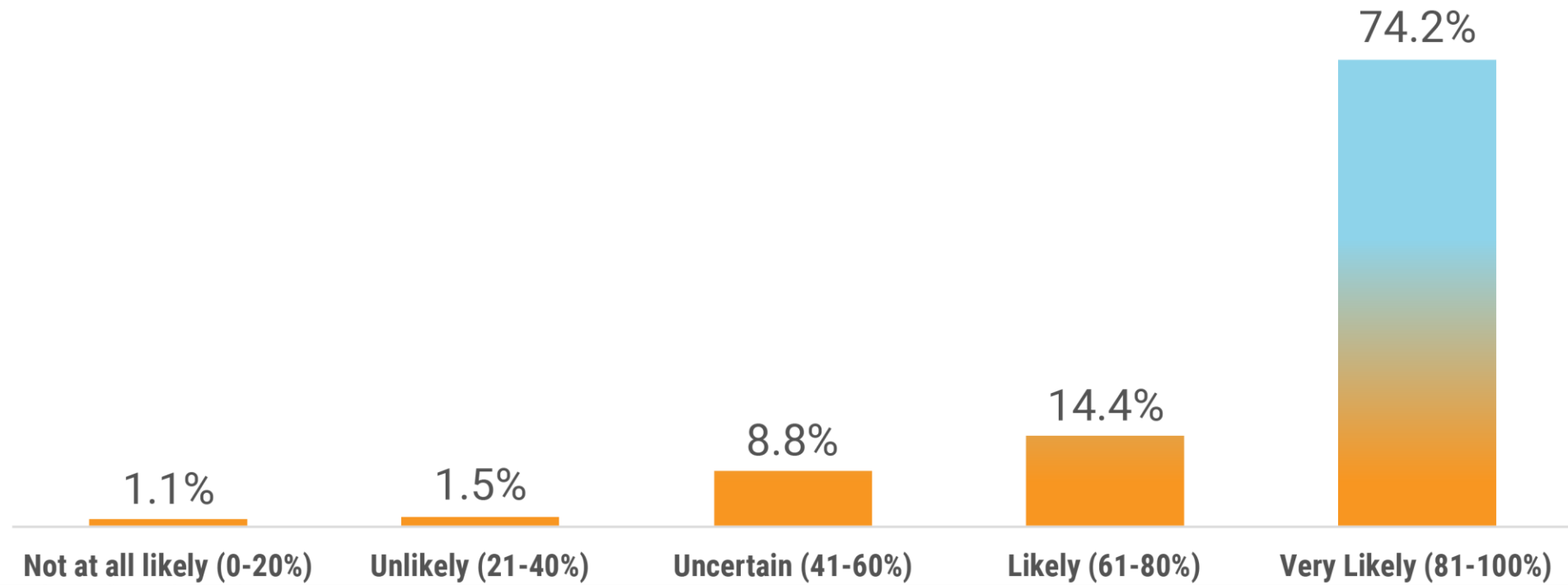


New
84.4%

What Has Influenced EV Purchases in California?



What is the likelihood that your next vehicle purchase will be an EV?



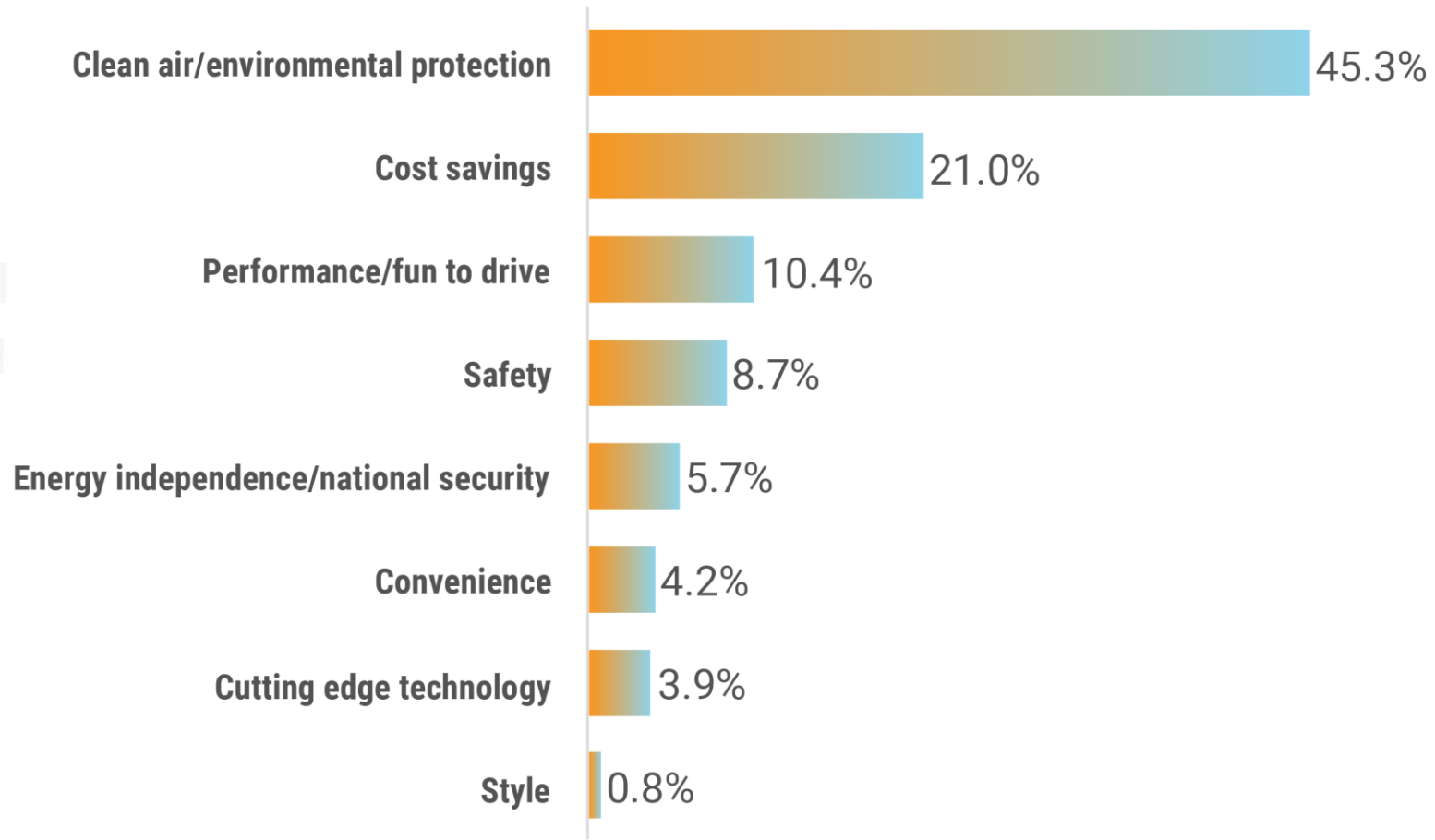
Clean air/environmental protection and cost savings are the most important considerations for California EV drivers.

About 45% of California EV drivers answered that **clean air/environmental protection** is the most important purchase consideration. This is higher than the nationwide percentage of about 41% of EV drivers saying the same.

21% of California EV drivers answered that **cost savings** is their most important purchase consideration. This was slightly higher than the nationwide total, where 19.2% of EV drivers said that cost savings is their most important purchase consideration.

While considerations like **safety** and **convenience** received less than 10% of responses as the most important purchase consideration, it doesn't necessarily mean these are not important to consumers. To see information on how drivers rate each consideration, please go to [slide 12](#).

Which purchase consideration is the most important to you today?



Clean air/environmental protection and safety are critical factors for respondents, while convenience and cost savings are somewhat important.

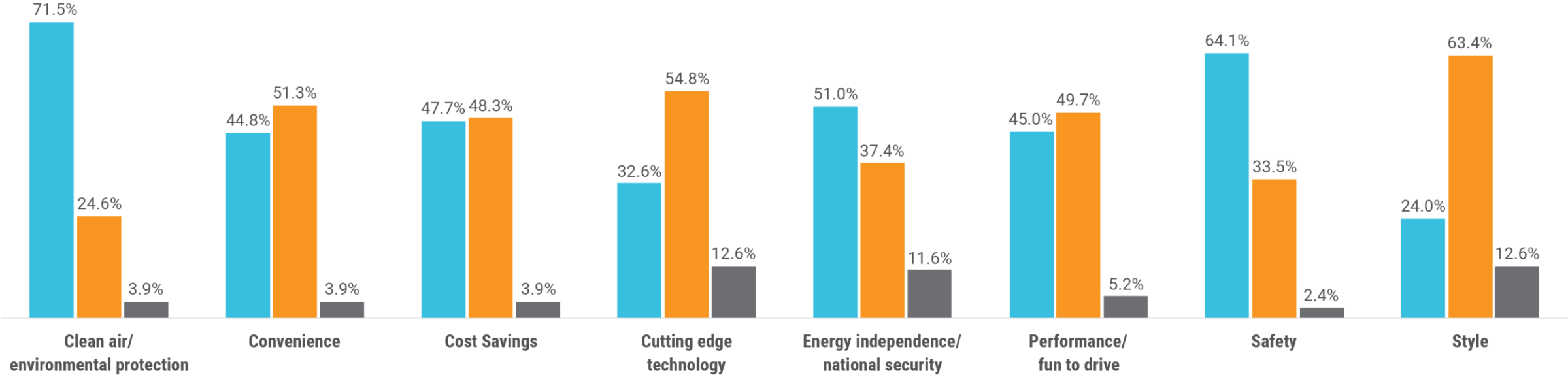
About 72% of California EV drivers said that clean air/environmental protection is a crucial consideration when choosing to drive an EV, and 64.1% of California said the same about safety. This means that these factors are the most likely to be must haves, factors that they are not willing to sacrifice on.

Factors such as convenience, cost savings, cutting edge technology and performance were commonly cited as “somewhat important” considerations. This can be understood as consumers saying these factors would be nice to have, but that they are willing to sacrifice on them if needed.

Notably, these factors were all rarely cited as “not at all important.” Cutting edge technology was the most likely to be cited as such, with 12.6% of California EV drivers saying this. This means that these factors can all play a role in influencing EV purchases, but each one to a different degree than the others.

Please rate the following purchase considerations when choosing to drive an EV.

Crucial Somewhat important Not at all important



For California EV respondents, experience with an EV leads to less concern in almost every aspect.

At the time California EV drivers bought or leased an EV, they were most likely to cite factors like **battery range, price, public charging availability, and battery lifetime** as their biggest concerns. About **7%** of California EV drivers said they had **no concerns** when they first got an EV.

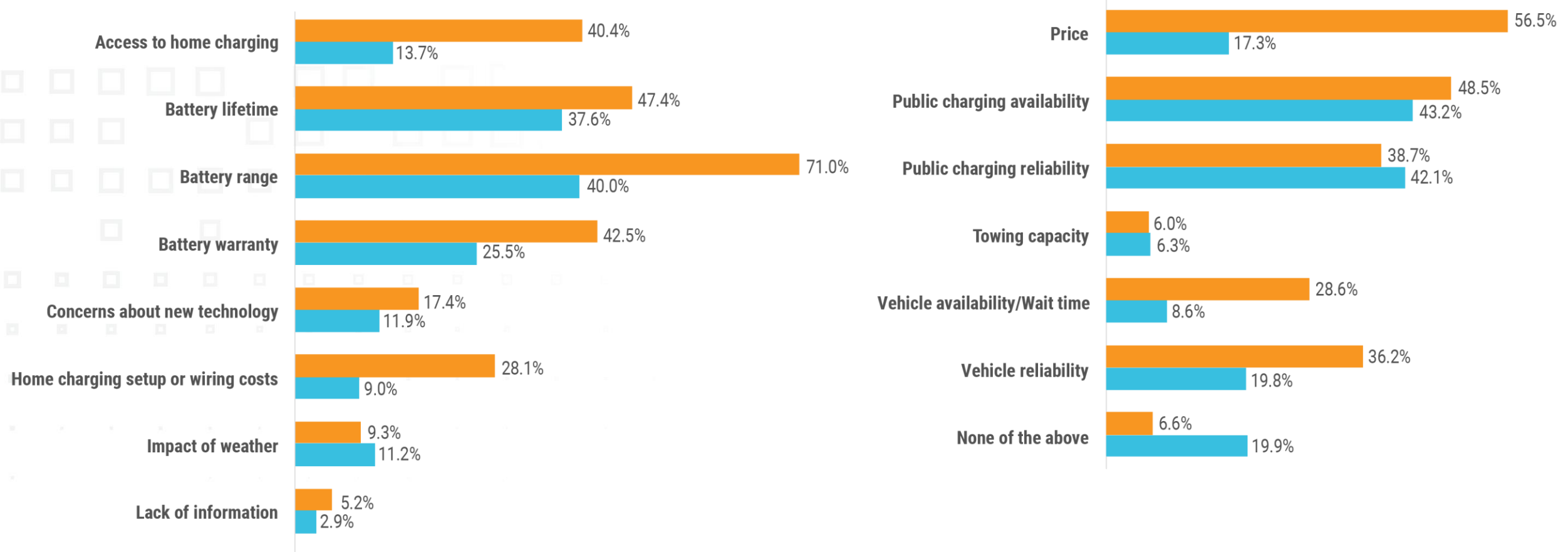
Now, California EV drivers are less likely to report concern in almost every single aspect we asked about. Factors like **access to home charging, price, and vehicle availability** saw the most significant drops. Meanwhile, **40% or fewer** of consumers reported concern about factors like **battery range, battery lifetime, and vehicle reliability**.

Three factors actually saw **increases in concern**, albeit small ones. Consumers were **more likely** to report concern about **impact of weather, public charging reliability, and towing capacity** after daily driving. Notably, **public charging availability** also only saw a small decrease and came through as the **most likely concern** after experience with an EV.

Which of the following were concerns for you...

at the time you bought or leased an EV

now that you own or lease an EV



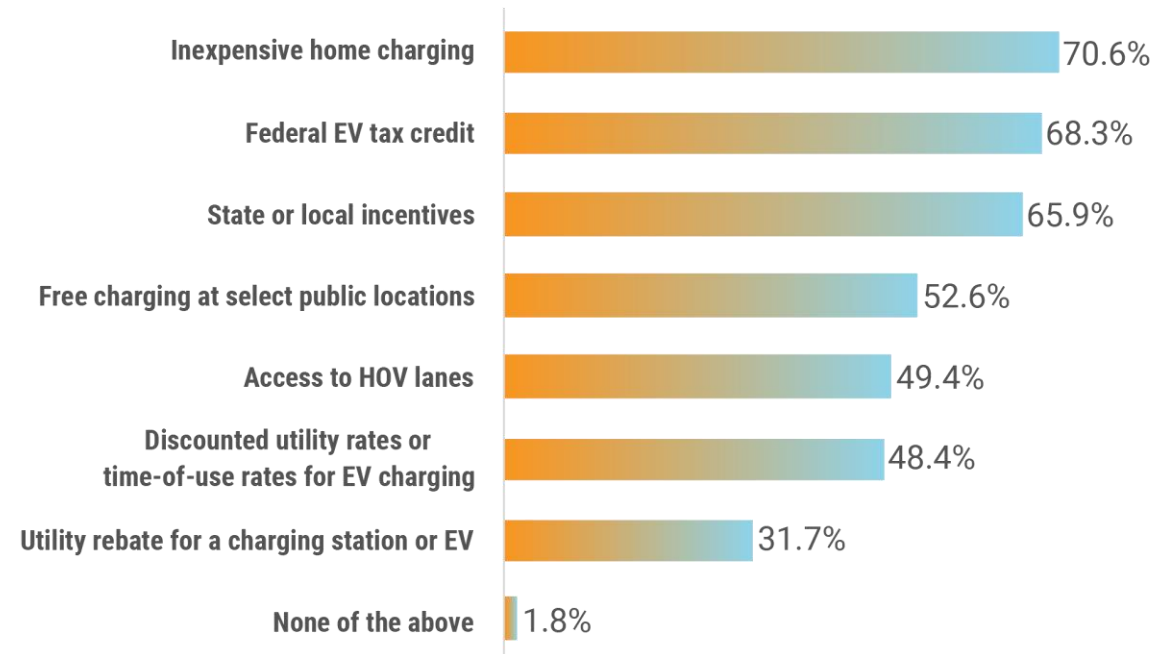
Inexpensive home charging, the federal EV tax credit and local incentives are the most popular incentives in CA.

Over 65% of California EV drivers said that they use have used inexpensive home charging, the federal EV tax credit, and state or local incentives as an EV driver.

Less than 2% of California EV drivers said they use none of the listed incentives, down from about 5% nationwide. This suggests a more advanced and educated EV market.

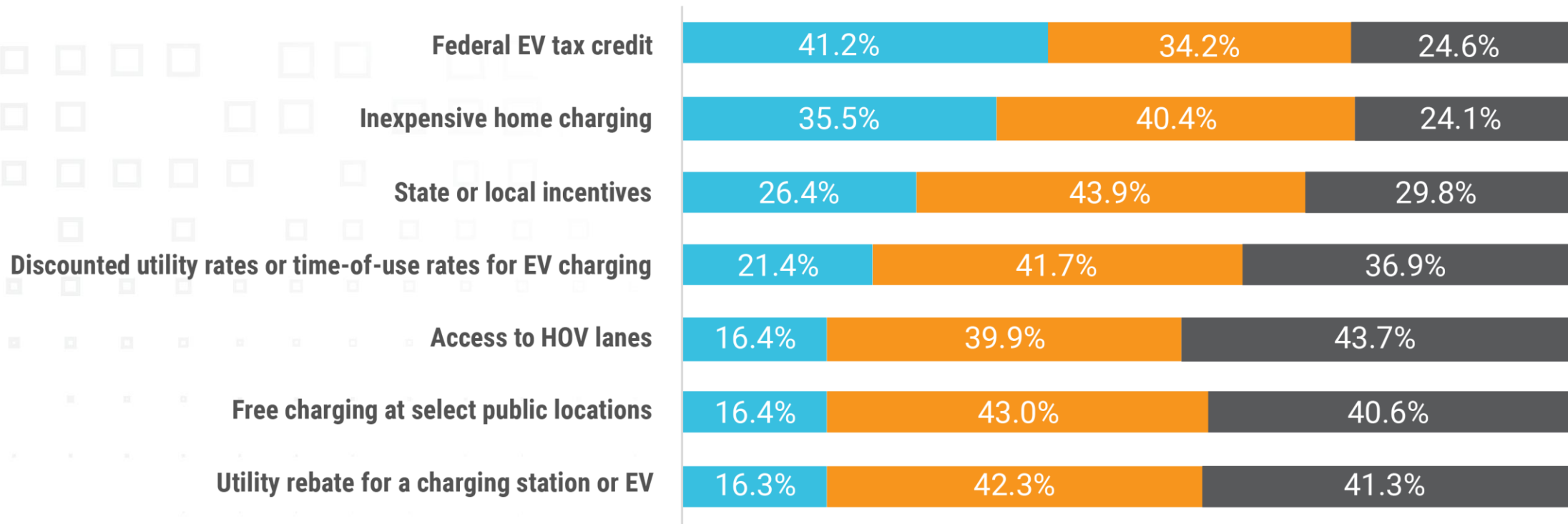
When asked which incentives were most influential in their decision to get an EV, consumers responded similarly. The federal tax credit and inexpensive home charging were cited as the most critical.

Which of the following did you or do you use as an EV driver?



How influential were the below in your decision to purchase or lease an EV?

■ Critical ■ Moderately Influential ■ Not influential



EV Charging in California



Home charging is by far the most common source of charging for EV drivers, while public chargers provide a source of power when needed.

Over 80% of California EV drivers are charging at home at least once a week, with almost 40% saying they do so daily. Home charging is the most common resource for the California EV drivers in our survey, with only 7.3% of respondents saying they don't have access to EV charging at their home residence.

Work chargers can provide another source of charging, especially for those who don't have the ability to do so at home. About 6% of our respondents said they use work chargers daily, with another 11% saying they use them weekly. However, almost 70% of respondents said that they never use work chargers.

DC fast chargers and Level 2 public chargers are most commonly used on a spare basis. Over 40% of respondents answered that they use each rarely. Almost a quarter of California EV drivers said they use DC fast chargers on a monthly basis, while only about 13% said the same about Level 2 public chargers.

How often do you charge at the following locations, on average?

■ Daily ■ Weekly ■ Monthly ■ Rarely ■ Never

Home

38.6%

44.6%

4.2%

5.3%

7.3%

Work

5.8%

11.4%

3.9%

9.8%

69.1%

DC fast charging or Supercharger

2.4%

14.2%

24.4%

40.8%

18.2%

Level two public charging

2.4%

11.6%

12.8%

42.2%

31.0%

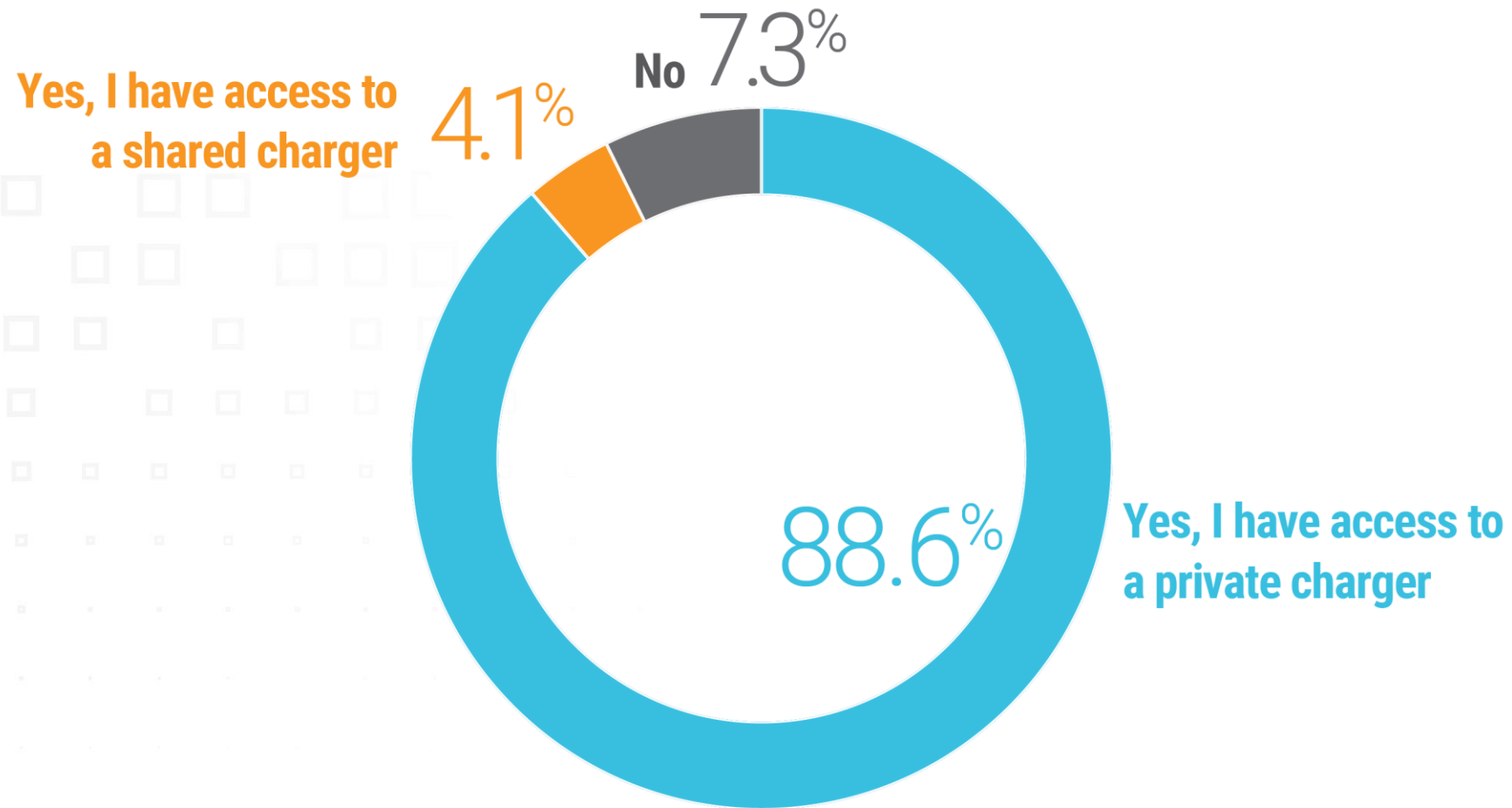
California respondents use home chargers frequently and find the installation process to be rather easy

Almost 89% of our respondents answered that they have **access to a private home charger**, with another 4.1% answering that they have access to a shared home charger. Among these respondents, **80% say they have access to a Level 2 home charger** while **26% say they have access to a Level 1 home charger**.

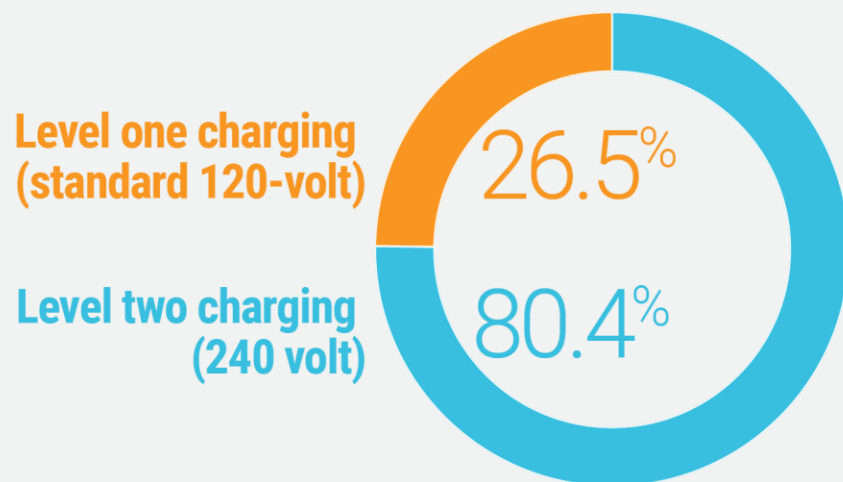
Home charger installation was convenient for those who had to install home chargers. **About 84%** said that **home charger installation was easy**, with **52%** of those saying it was **very easy**. Only 3% of California respondents who had to go through a home charger installation said it was difficult.

California respondents are most likely to charge overnight, with over 70% of respondents saying that's when they charge at home. However, **many would be willing to change the hours at which they charge for discounted rates**.

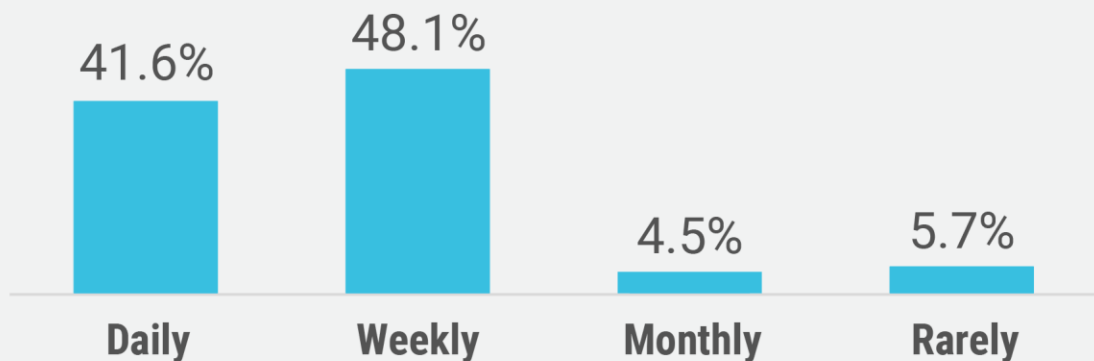
Do you have access to EV charging at home?



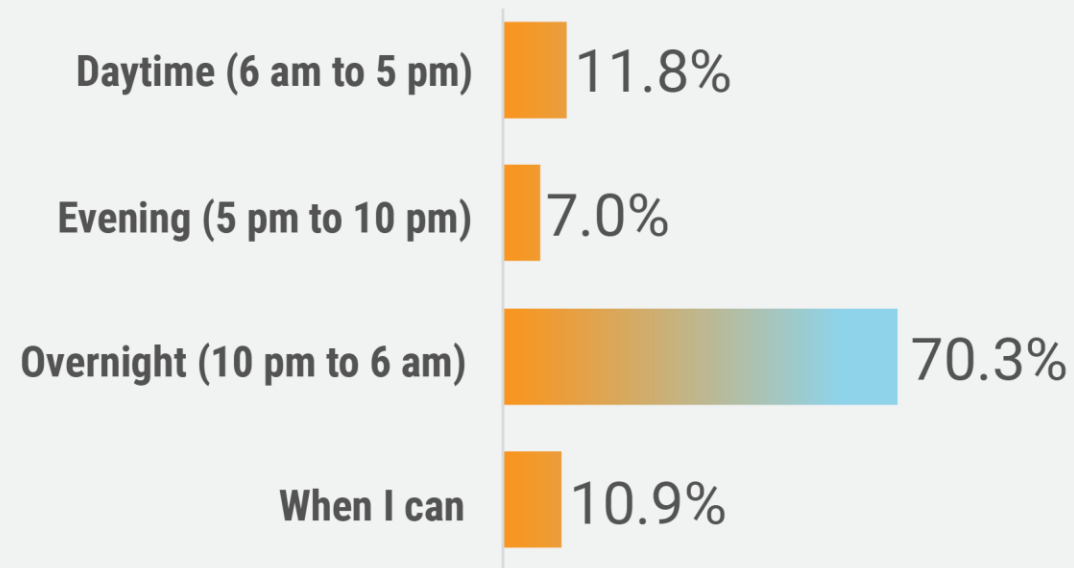
What type of home charger do you use?



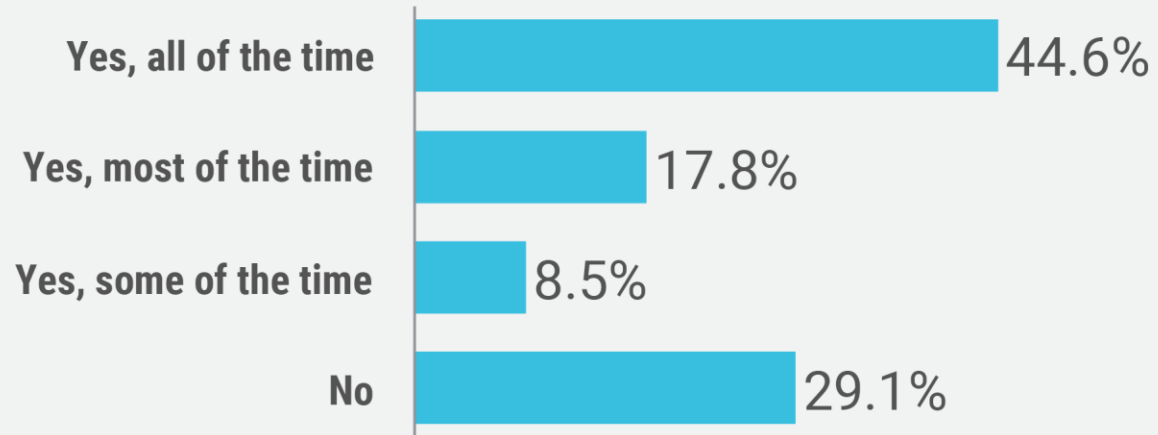
How often do you charge at home?



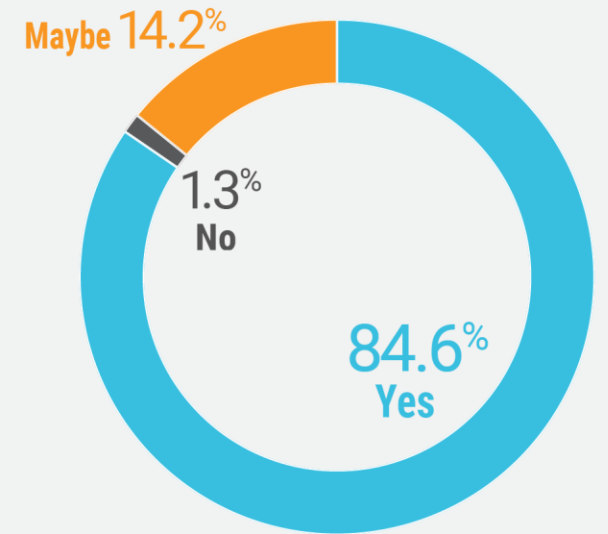
What time of day do you most frequently charge at home?



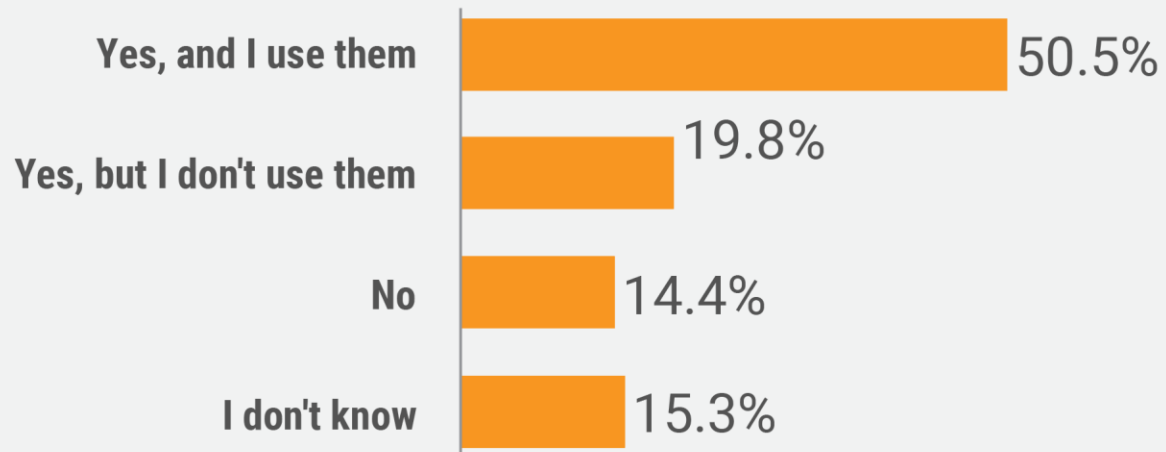
Do you use a schedule charging feature to control the time of day at which you charge?



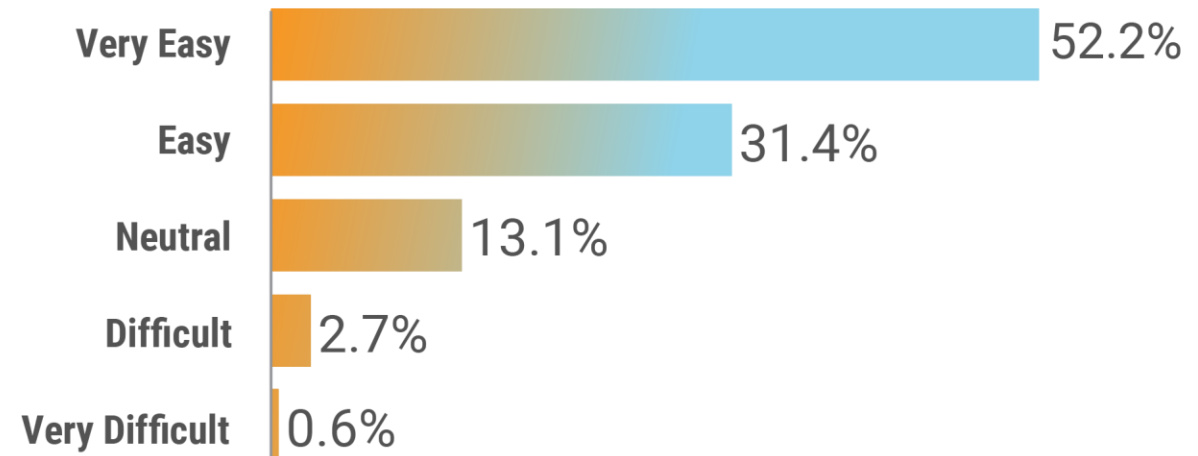
Would you be willing to change which hours you charge at home in order to receive discounted electricity rates?



Does your local electric utility offer special rates for home EV charging?



How has your experience been installing or using home charging?



The greatest charging concerns for California drivers over the past year are reliability and availability.

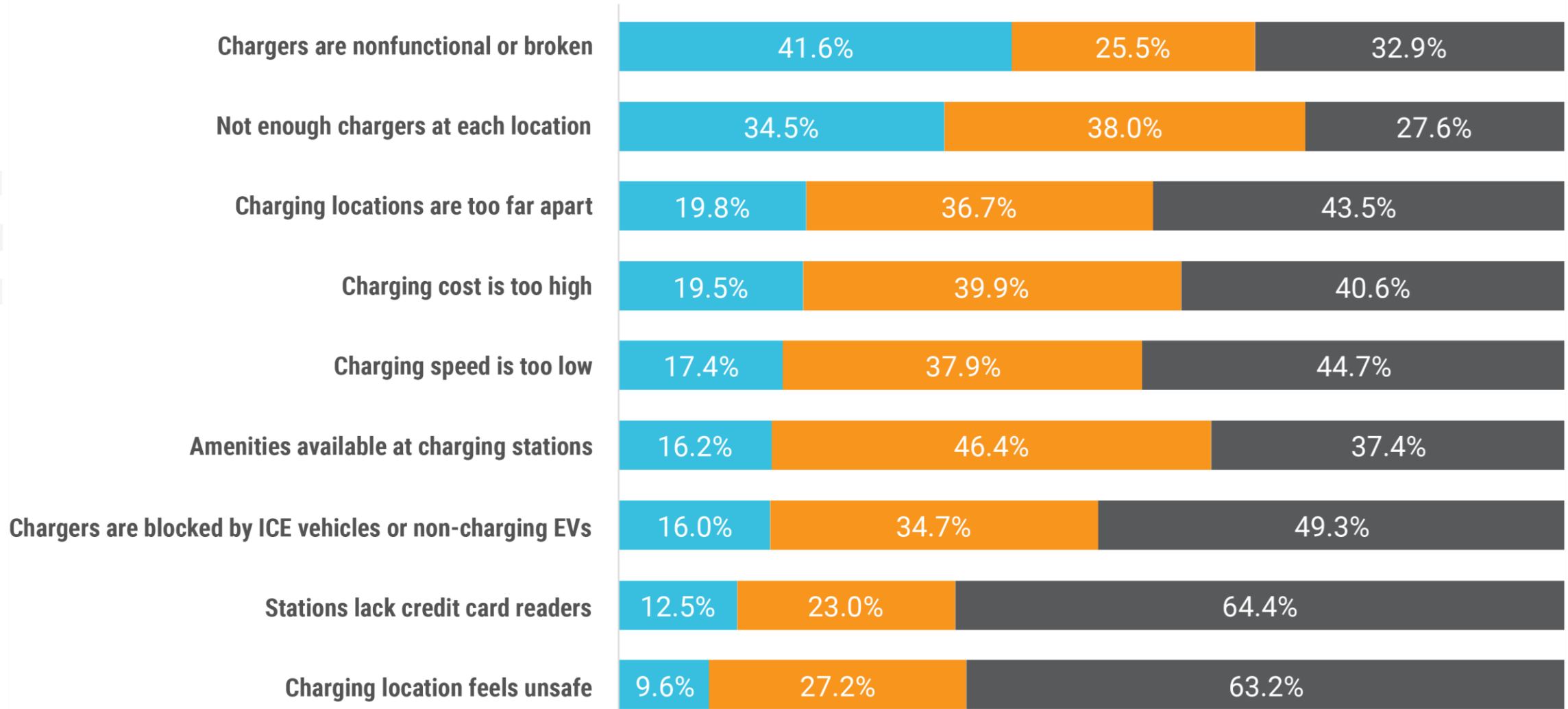
Over 40% of California EV drivers said that chargers being **nonfunctional or broken** was a **major concern** over the past year, with another **25%** saying that it is a **moderate concern**. **Not having enough chargers** at each location was most likely to be cited as a concern, with **over 70%** of respondents saying it was **at least a moderate concern**.

In comparison to nationwide numbers, California EV drivers were **more likely** to report concern over **charger availability**. This makes sense, as California is a state with more charger demand than any other state. Work needs to be done to match the public charger availability with the number of EVs in each state.

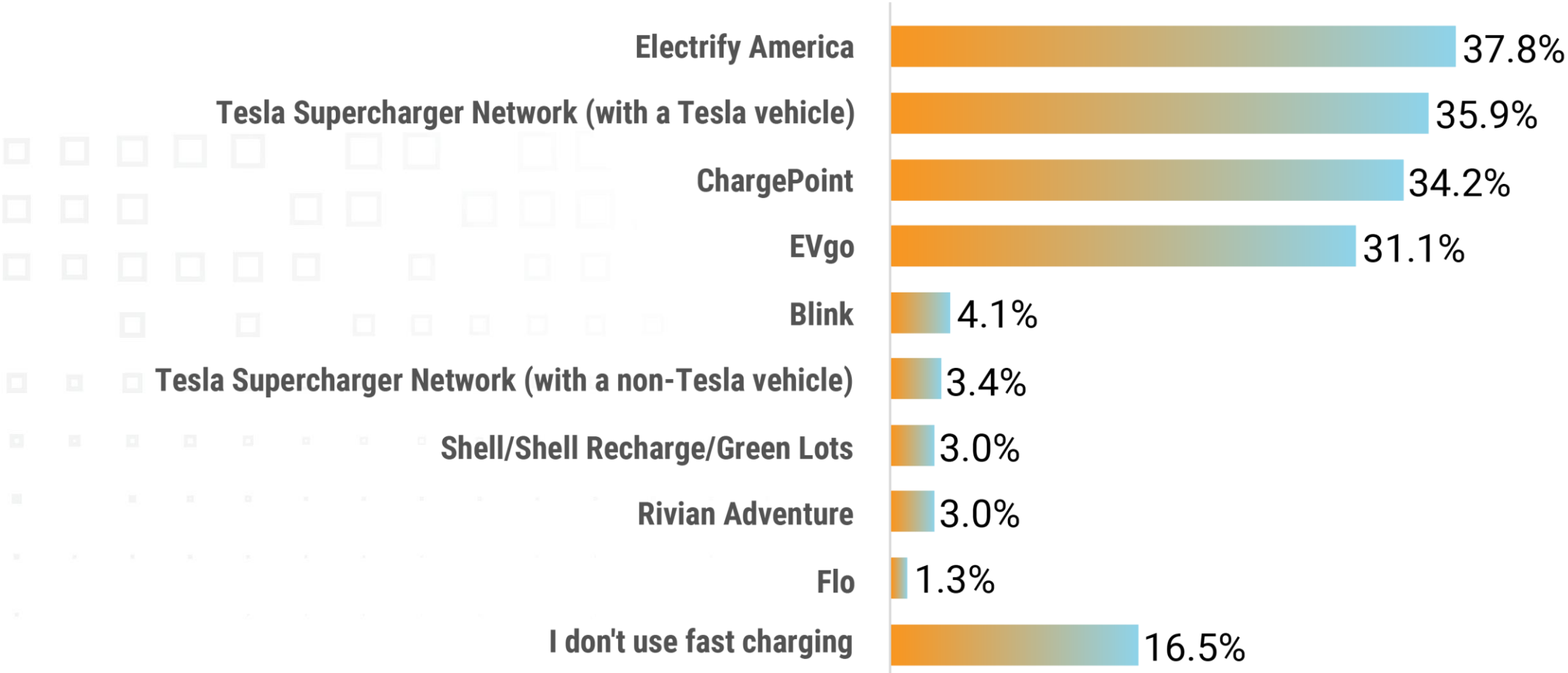
Even some of the lower-rated concerns bring up problems that can be improved with California public chargers. **Almost 40%** of California EV drivers said that **charging locations feeling unsafe** are at least a **moderate concern**, while **35%** said the same about **stations lacking credit card readers**.

How much of a concern have each of these issues been with your most used fast charging network within the past year?

■ A major concern ■ A moderate concern ■ Not at all a concern



For DC fast charging, what networks do you use most often? Select up to three.



Buying or Leasing an EV in California



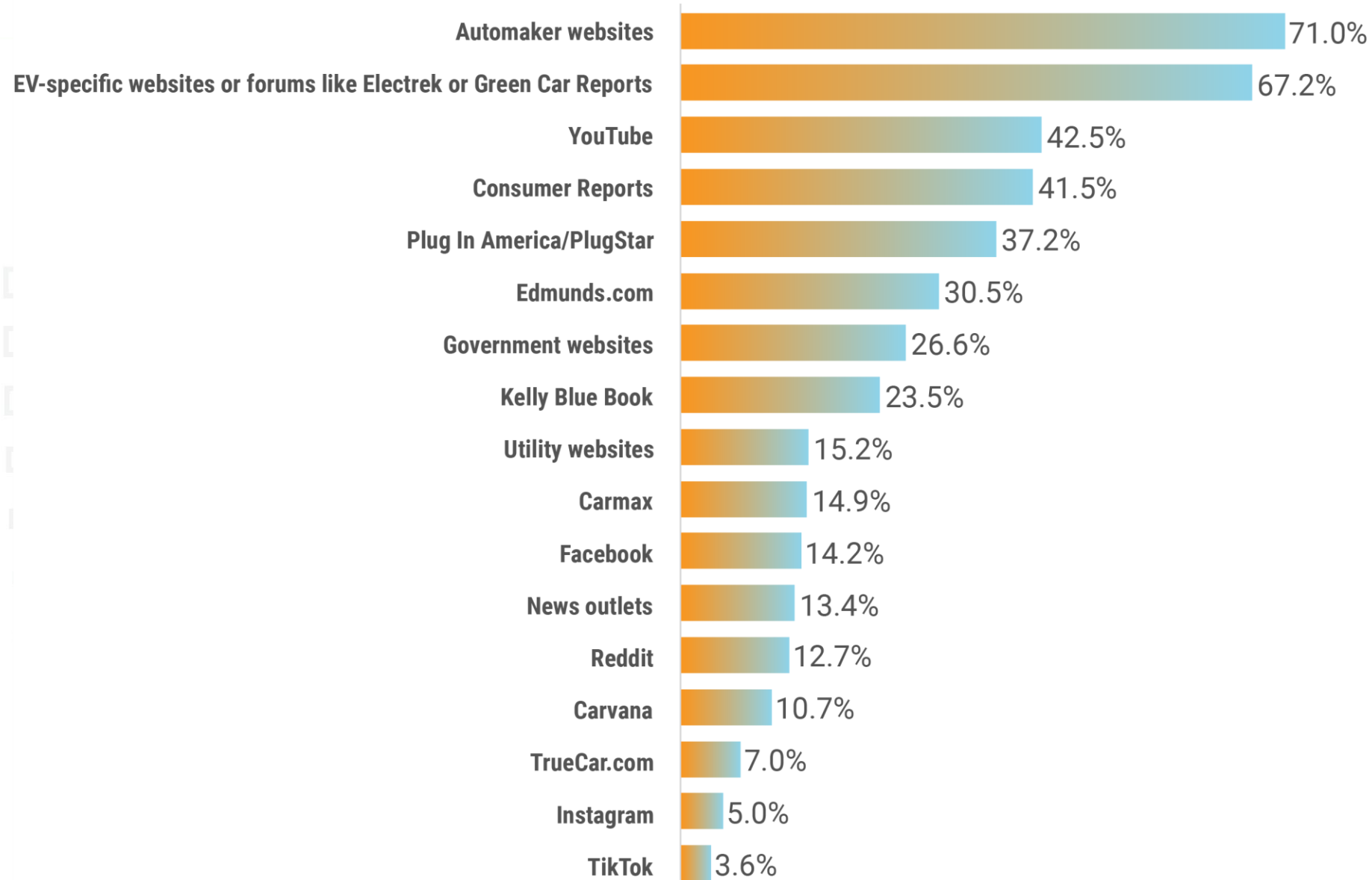
Automaker websites and EV-specific websites are the most popular online resources for those interested in researching EVs.

Over **65%** of California drivers said they use **automaker websites or EV-specific websites and forums** to research EVs. These two stood apart from the rest as the most common resources, as no other resource is used by more than 45% of California drivers.

YouTube was the next biggest resource, with about **43%** of respondents saying they use this to research EVs. Consumer Reports (41.5%) and Plug In America/PlugStar (37.2%) were the next most popular resources for California driver respondents to find the information they need before buying or leasing an EV.

Social media sites make up a smaller portion of online resources utilized currently but stand with room to grow as the EV market evolves. Facebook is the most popular one, with 14.2% of California drivers saying they use it to research EVs. Reddit (12.7%), Instagram (5%), and TikTok (3.6%) are ones with little current presence but potential for growth.

Which online services have you utilized in researching EVs?



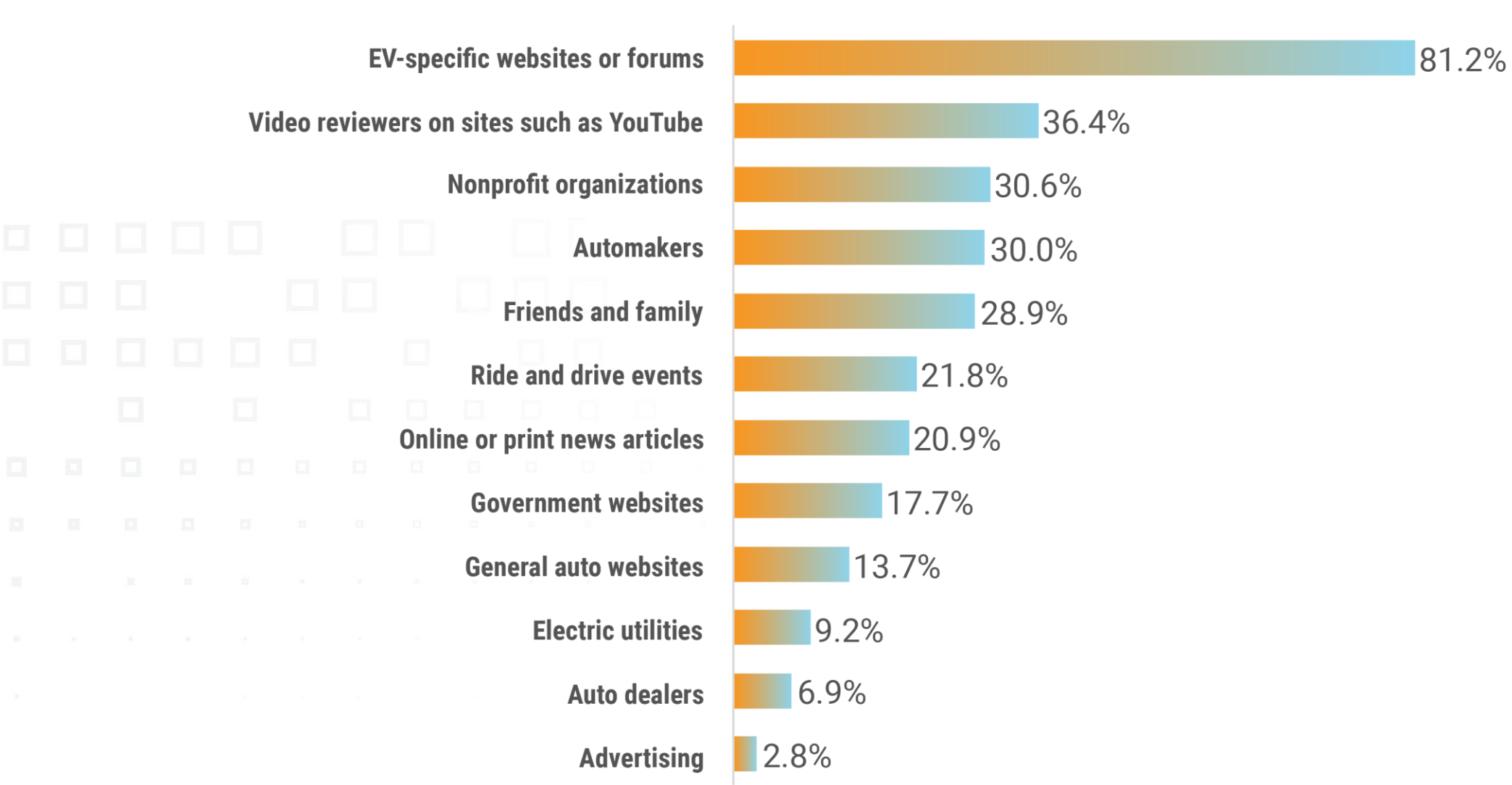
EV-specific websites and forums are far and away cited as the most trustworthy resource.

Over 81% of California drivers said that **EV-specific websites and forums are one of their top three** most useful and trustworthy information resources. These websites and forums provide up-to-date news on EVs, and users can get opinions directly from other EV drivers, making them a dependable source of information and tips.

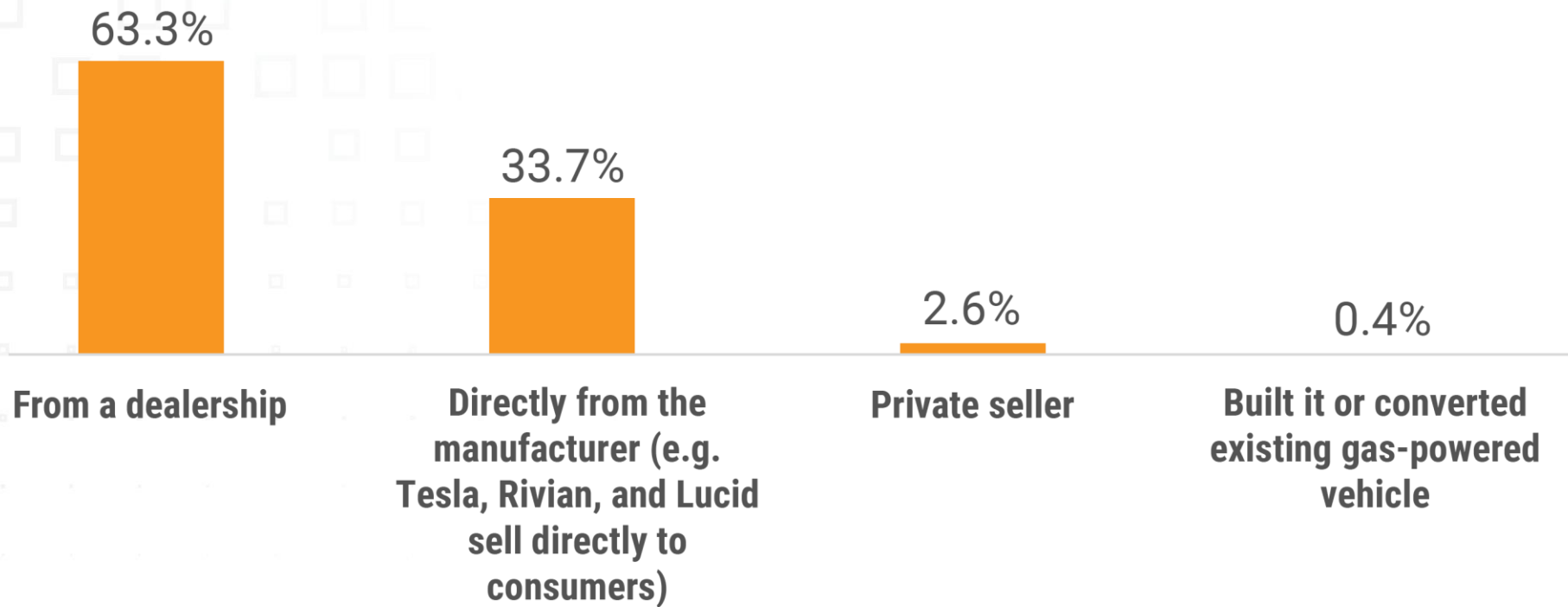
Video reviewers were cited as the second most useful and trustworthy resource, with 36.4% of California drivers selecting it in their top three. This is another resource where drivers can get opinions and viewpoints from fellow consumers without sales pressure.

One thing that stands out is the comparative lack of trust in automakers, auto dealers, and advertisers. While automaker websites were cited as one of the most popular resources, they were only ranked fourth when it comes to being useful and trustworthy. Auto dealers (6.9%) and advertising (2.8%) were ranked the lowest in this category.

Which information resources do you consider to be the most useful and trustworthy in researching EVs?
(respondents were allowed to select top three)



How did you acquire your primary EV?



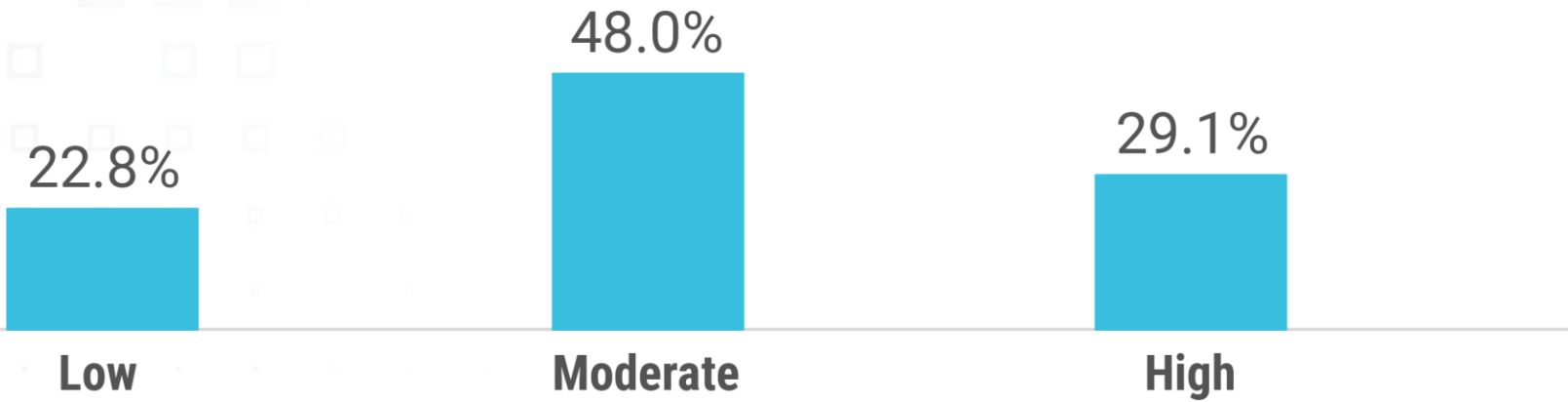
About 29% of California drivers rate dealership knowledge of EVs as high, but dealers often have little influence on purchases.

Just under 30% of California EV drivers rated dealership knowledge of EVs as high, compared to 22.8% who said that dealership knowledge is low. The remaining **48% rated dealership knowledge as moderate**. This does not necessarily signal a problem for dealerships in California, but shows that there is still room for improvement.

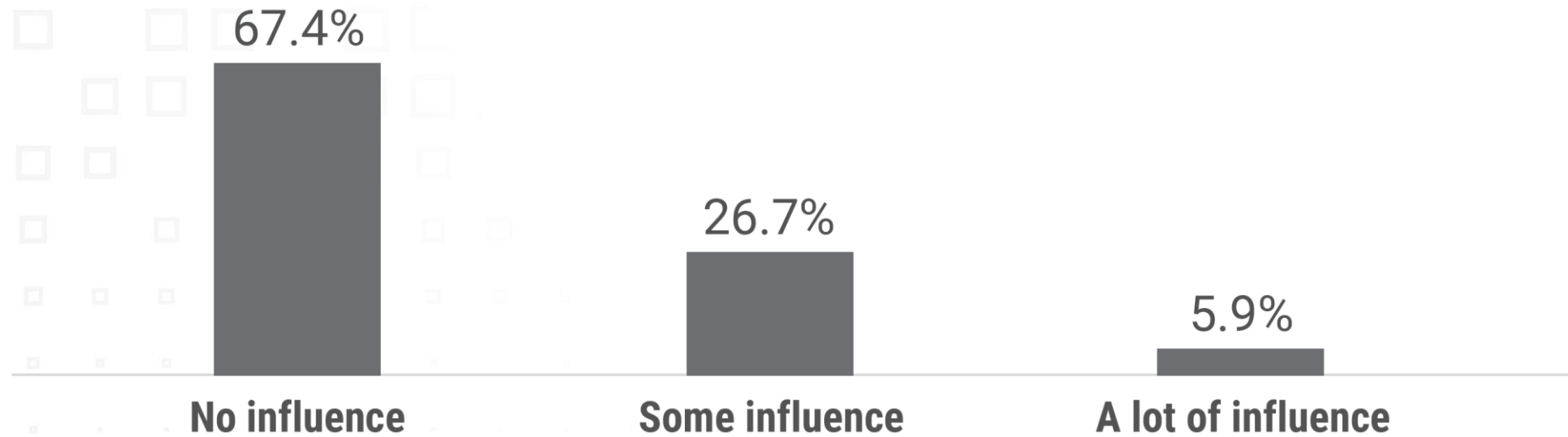
However, drivers reported that dealers often have little influence on their decision-making. About **67% of California drivers said that their dealer had no influence on what they bought or leased** and 79% of drivers said that they know exactly what they want to buy or lease when they go to a dealership for a car.

This ties into the findings from slides 32 and 33. Auto dealers were cited as one of the least trusted information resources when doing research on EVs, so it seems that drivers are more likely to do their research beforehand and go in knowing what they want.

If you have visited a dealership or showroom, how would you rate the salesperson's knowledge about EVs?



Thinking back to your last car purchasing decision, how much influence did the dealer have on your decision to buy or lease what you did?



When you go to a dealership for a car, how much of your decision has been made on what kind of car you want to buy or lease?

I know exactly what I want to buy or lease.

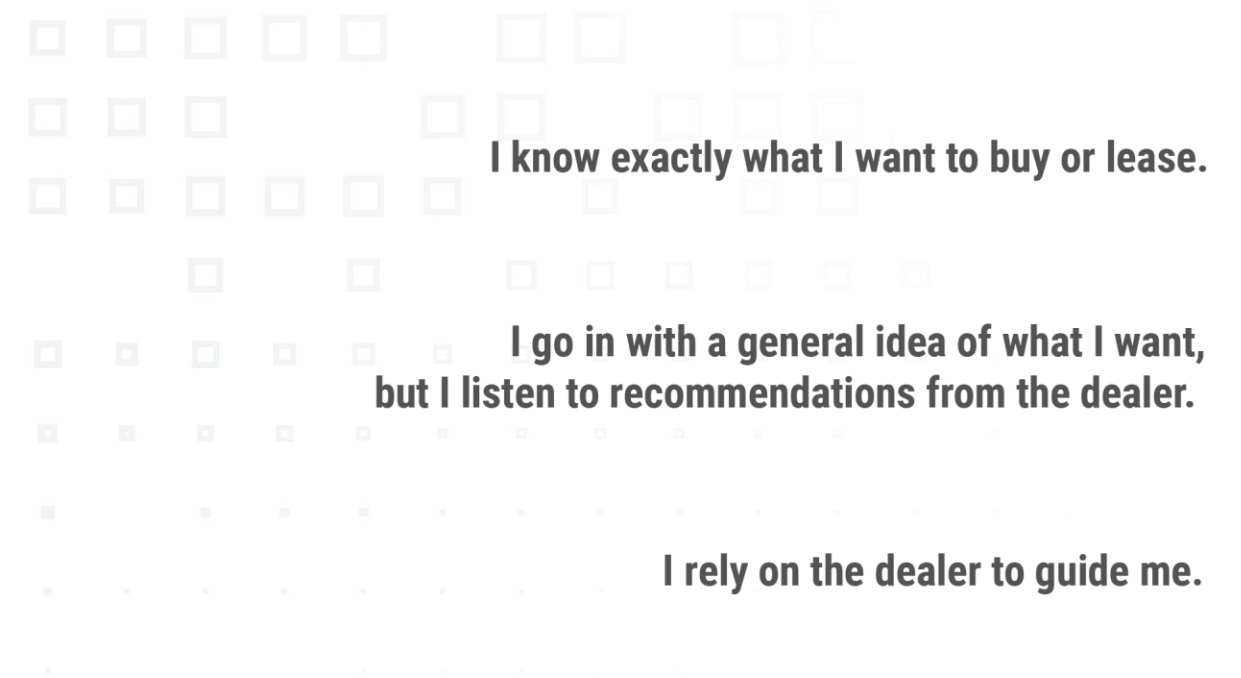
79.0%

I go in with a general idea of what I want, but I listen to recommendations from the dealer.

20.8%

I rely on the dealer to guide me.

0.2%



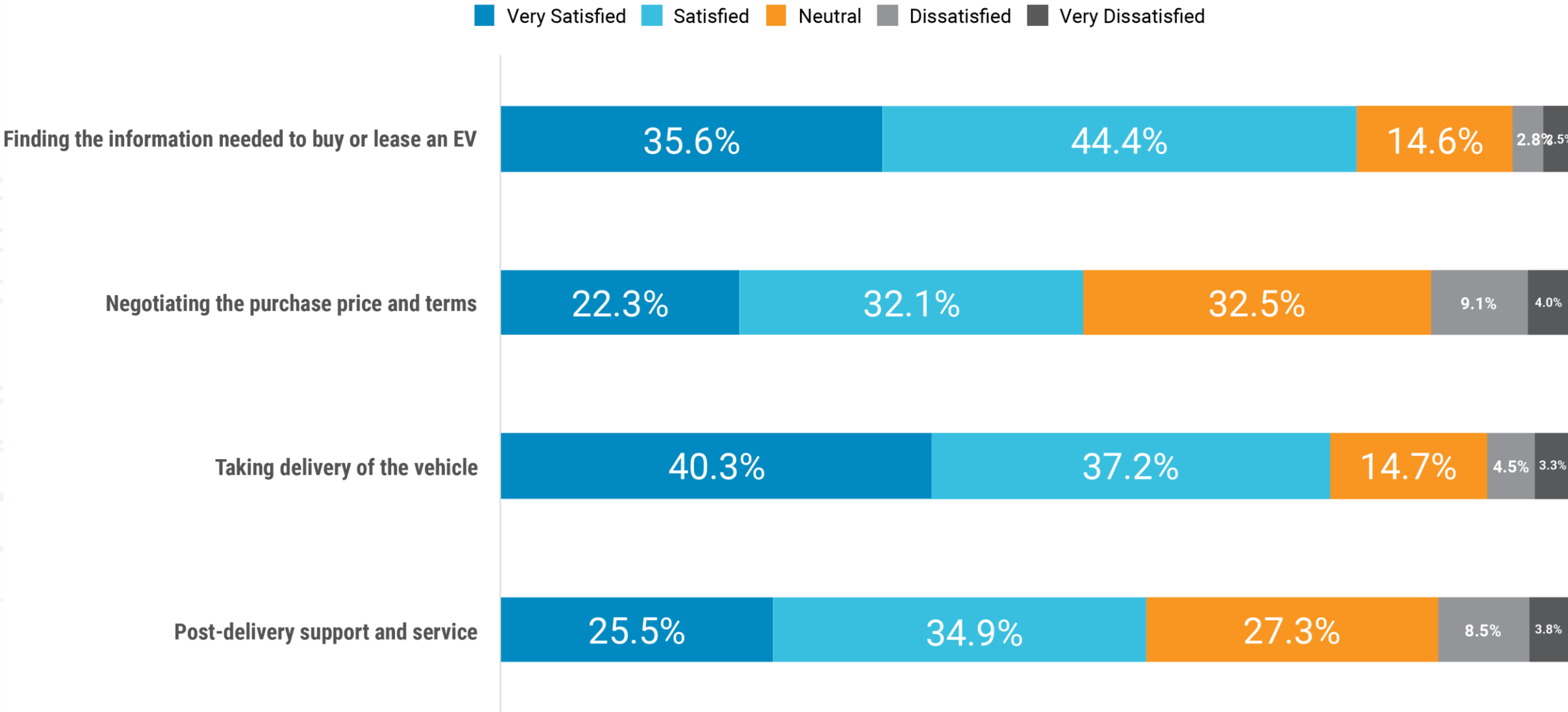
There is room for improvement in the EV purchasing journey, especially when it comes to negotiating and post-delivery support.

California EV drivers found themselves **mostly satisfied with taking delivery of the vehicle** - 77.5% of respondents said they were at least satisfied with this part of the process when it comes to acquiring the EV that they currently drive most often. About 40% said they were very satisfied with this step.

While drivers were very unlikely to report dissatisfaction with any step of the process, improvements can be made to increase satisfaction with certain steps. Just **under 55%** of California respondents said **they are satisfied with negotiating the purchase price and terms**. About **60%** said the same about **post-delivery support and service**.

About **80% of respondents** said **they were satisfied with finding the information they needed** to buy or lease an EV, with about 36% saying they were very satisfied with this. Only 5.3% of respondents said they were dissatisfied, a step that the data indicate was often done prior to talking with a dealer or seller.

Overall, how satisfied were you with each of the following steps in your EV purchase for the vehicle that you drive most often?



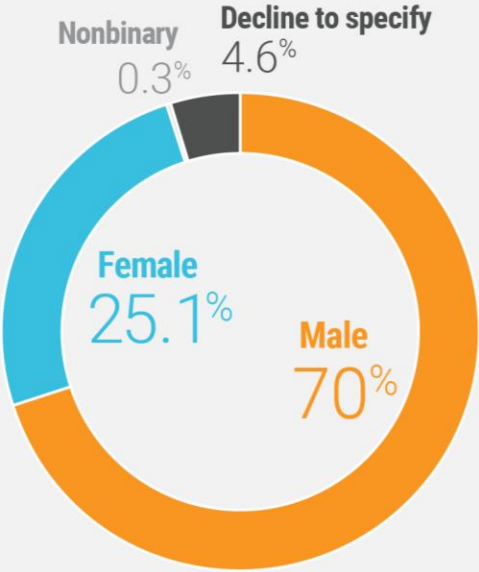
Demographics



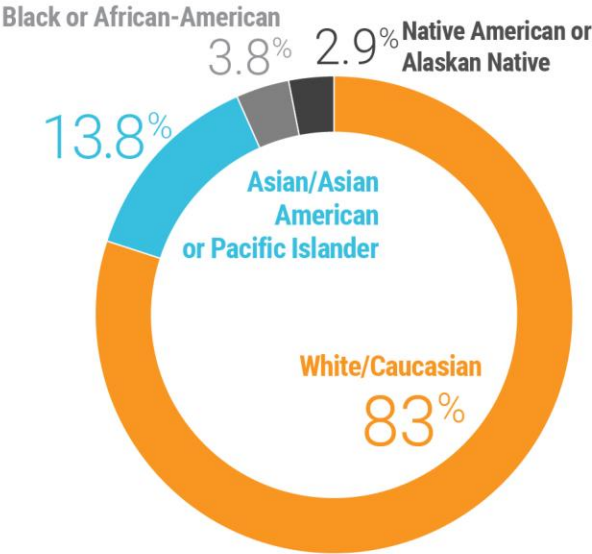
Age Range

18-24	25-34	35-44	45-54	55-64	65-74	75+
1.1%	8.3%	10.1%	12.4%	25.3%	29.0%	13.7%

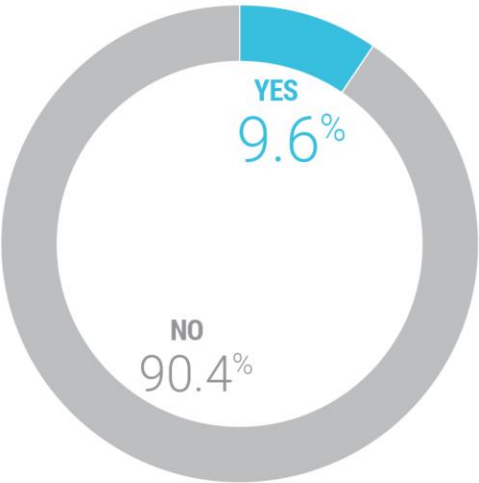
To which gender identity do you most closely identify?



Which race/ethnicity describes you?
Check all that apply.



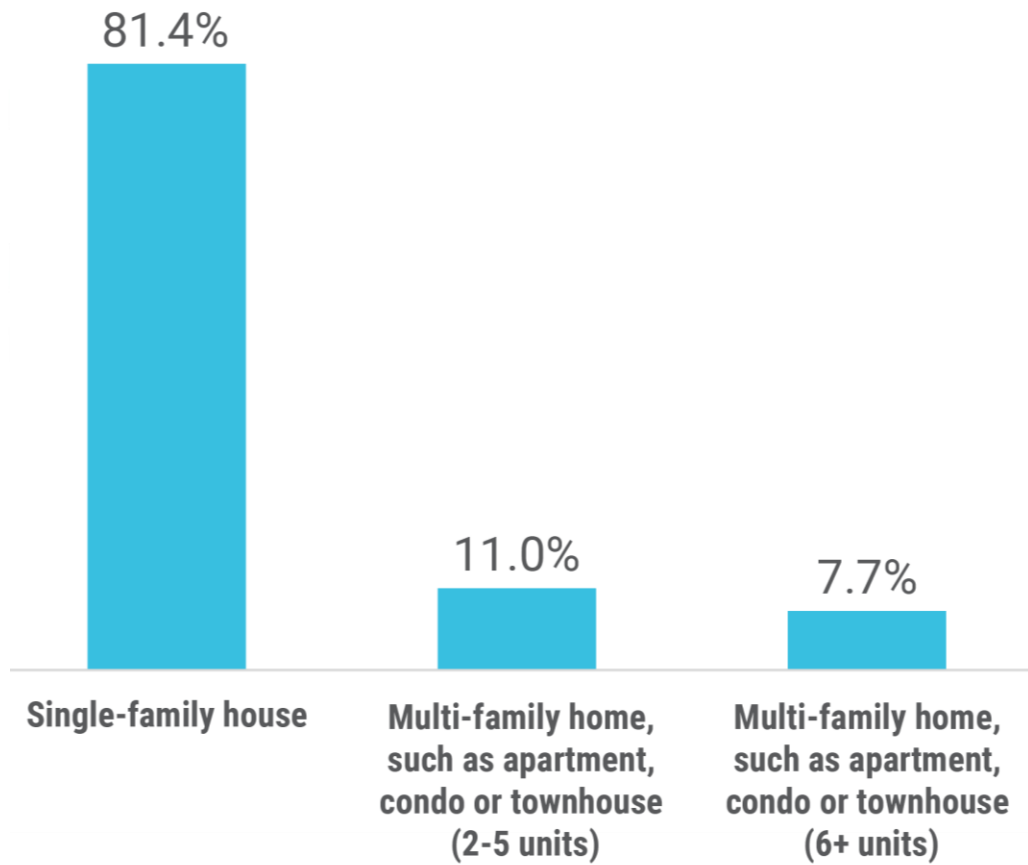
Are you of Hispanic or Latino origin?



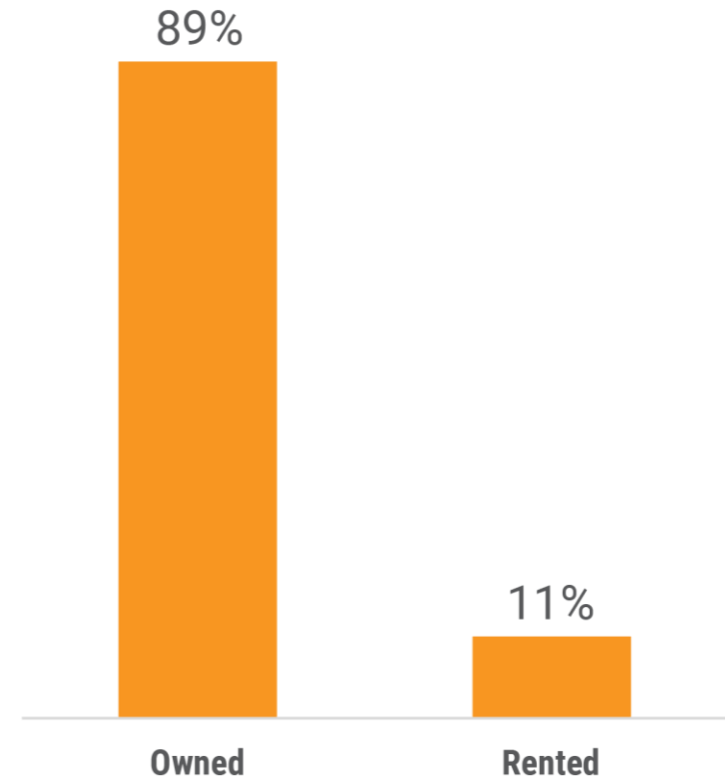
Annual Household Income

Up to \$36,000	3.9%
\$36,001 to \$50,000	5.5%
\$50,001 to \$75,000	8.7%
\$75,001 to \$100,000	16.9%
\$100,001 to \$250,000	46.1%
\$250,001 or more	18.8%

What type of residence do you live in?



Is your home residence owned or rented?



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Plug In America sincerely thanks Pete O'Connor, whose dedication to conducting and analyzing previous surveys laid the foundation for this report and future ones.

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About Plug In America

Plug In America is the nation's leading nonprofit organization dedicated to the transition to affordable and accessible plug-in vehicles and charging through education, advocacy, and research. Formed in 2008, the organization provides practical, objective information to consumers and dealerships about EVs through various programs, including National Drive Electric Week, Drive Electric Earth Month, PlugStar.com, and other public outreach events. Learn more at PlugInAmerica.org.