

**EV
CO**

The EV Shift:

Colorado's Progress and Prospects in 2023

RIDING THE EV CURRENT

Get in and buckle up, because EVs are hitting Colorado with the force of a powerful stream.

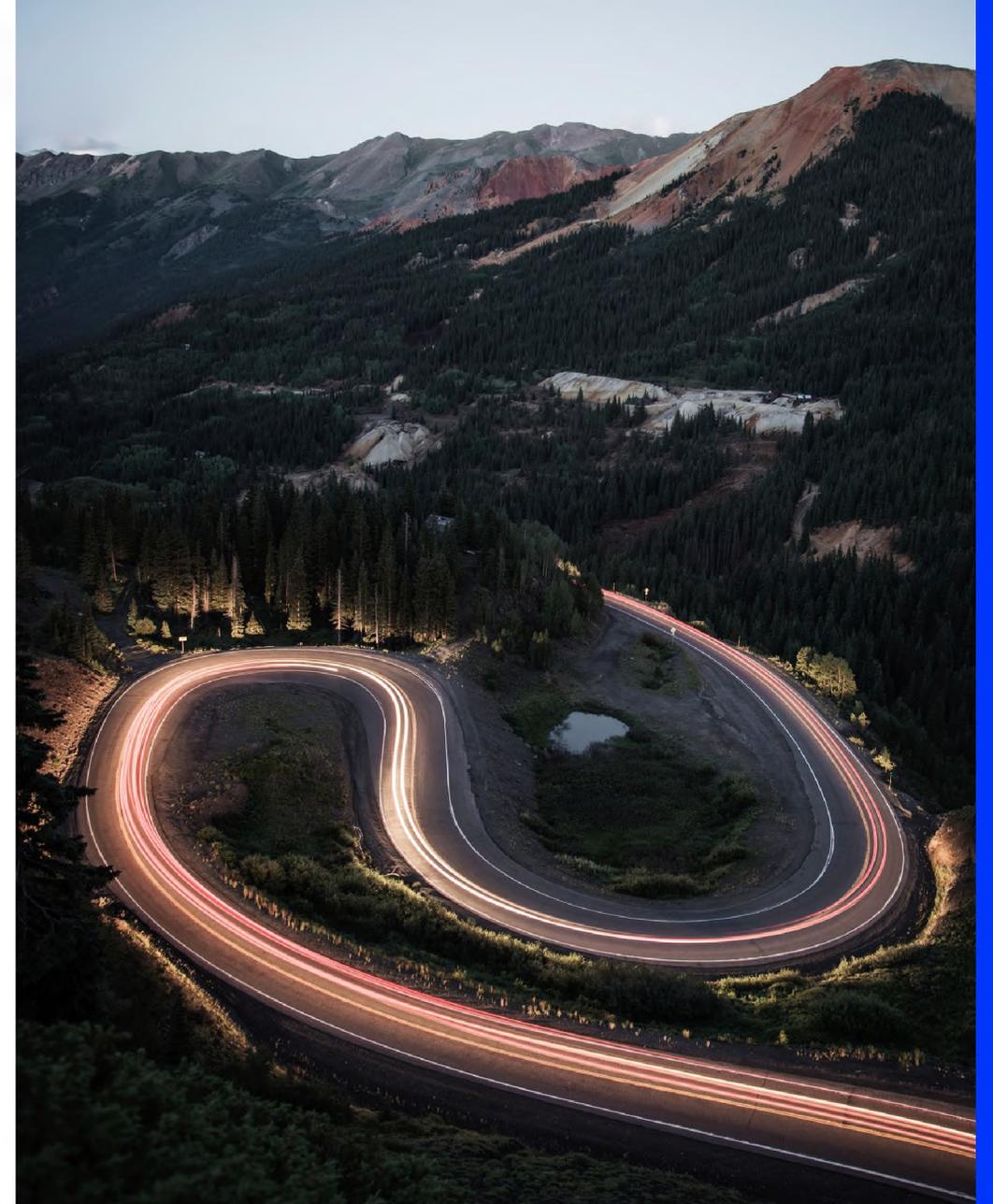
In our exploration of the EV landscape, the data speaks volumes—Colorado isn't just embracing electric vehicles (EVs); it's orchestrating a groundbreaking shift. As the largest contributor of all transportation emissions¹, light-duty vehicles face a formidable opponent in the form of the Colorado Electric Vehicle Plan, and the results are nothing short of electrifying.

Curbing the impact of light-duty vehicles on the environment is a far from simple task, but Colorado state government unveiled a plan in 2018 with just that ambition in mind: transition thousands of Coloradans seamlessly into the electric vehicle economy by 2030, while increasing market share of light duty EVs to nearly 100% by 2050².

Five years later, **the Centennial State is not just on the cusp of transformation; it's at the forefront of the EV current.** Spearheaded by the Polis administration, EV market share surged to an impressive 14.5%³ across the state and there are more than 101,000 EVs on Colorado roads⁴. Furthermore, 50% of non-EV owners are considering purchasing an EV in the next five years⁵.

Thanks to strategic investments at both the state and federal levels, Colorado's EV infrastructure has undergone a monumental expansion, creating an ecosystem that matches the fast pace of growing EV sales.

This report builds on our 2020 research⁶, but it's more than a collection of data points: it's a testament to Colorado's dynamic and rapidly evolving journey toward an electric future.



¹ Colorado Greenhouse Gas Pollution Reduction Roadmap

² Colorado 2023 Electric Vehicle Plan

³ Colorado Automobile Dealers Association, Q1-Q3 2023 Reports

⁴ EvaluateCO, November 7, 2023

⁵ 2023 Colorado Residential EV Survey, Slide 43

⁶ Colorado Energy Office: Electric Vehicle Awareness Market Research (June 2020)

THE STATE OF DRIVING ELECTRIC IN COLORADO

Colorado's goal is to:

Have **940,000** EVs on the road by 2030⁷

Increase market share of light duty EVs to **~100%** by **2050**⁸

Colorado's EV market share and readiness are at an all-time high:

14.5% of all new vehicle registrations (Through Q3, 2023)⁹



4,903 public chargers deployed across the state¹⁰

\$57 million awarded in public funding as a part of the federal NEVI program¹¹

The state continues to lead the U.S. in advancing an EV economy.

- EVs make up **8.5%** of all new U.S. vehicle purchases or leases.¹²
- Qualified Coloradans can access up to **18.5K** in EV savings by combining available tax credits and rebates.¹³
- Colorado is **#5** in the nation for EV sales.¹⁴
- And **#3** for EV-friendly policies like vehicle incentives and charging infrastructure.¹⁵

⁷ Colorado 2023 Electric Vehicle Plan

¹⁰ EvaluateCO, November 7, 2023

¹³ EV CO: Get the Facts on Driving Electric

⁸ Colorado 2023 Electric Vehicle Plan

¹¹ Colorado Department of Transportation

¹⁴ 2023 State of Transportation Electrification Scorecard

⁹ Colorado Automobile Dealers Association, Q1-Q3 2023 Reports

¹² Colorado Automobile Dealers Association, Q3 2023 Report

¹⁵ 2023 State of Transportation Electrification Scorecard

COLORADO'S EV SHIFT

When Coloradans first gave us their thoughts on going electric in 2020, EV awareness, consideration and adoption were just beginning to reach a critical mass. Three years later, the state has undergone a significant shift. Here's what we heard from respondents in 2023:

EV accessibility and awareness are on the rise:

66% have electric charging options near where they park ¹⁹

17% have EV charging at their workplace ²⁰

54% can easily point someone to a public EV charger (+10 pts)²¹

45% are aware of the federal EV tax credits available to them²²

28% are aware of Colorado's tax credits (+6 pts) ²³

EV adoption has surpassed expectations.



are now EV owners (+4 pts)¹⁶



say that they will buy or lease an EV by 2028¹⁷

Of the survey respondents who don't own EVs, but indicate that they could at some point ¹⁸:

	2023	2020
Ready to Roll Planning to purchase their first EV in the next 5 years and are considering a new vehicle	19%	15%
Kicking the Tires Planning to purchase an EV as prices fall in the next 5 years and are considering a used vehicle	21%	16%
Down the Road Planning to purchase an EV in 6-10 years	7%	7%
Wait, Wait Don't Sell Me Less inclined to adopt, but haven't ruled EVs out	16%	31%

¹⁶ 2023 Colorado Residential EV Survey, Page 19

¹⁷ 2023 Colorado Residential EV Survey, Slide 43

¹⁸ 2023 Colorado Residential EV Survey, Slide 19

¹⁹ 2023 Colorado Residential EV Survey, Slide 115

²⁰ 2023 Colorado Residential EV Survey, Slide 69

²¹ 2023 Colorado Residential EV Survey, Slide 67

²² 2023 Colorado Residential EV Survey, Slide 81

²³ 2023 Colorado Residential EV Survey, Slide 81

EV AWARENESS, CONSIDERATION AND ADOPTION ARE GROWING

Critical to consumer acceptance and purchase of EVs is engagement with the people of Colorado. Since launching the Colorado Electric Vehicle Plan (which includes the launch of EV CO, a consumer EV education initiative), state agencies have led extensive efforts to ensure all Coloradans understand how they can benefit, access and participate in this transportation transformation. In 2023, we saw significant increase in the consideration of EVs²⁴, especially when compared with 2020 data.

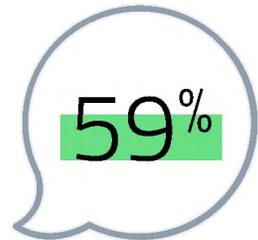


²⁴ 2023 Colorado Residential EV Survey, Slide 42

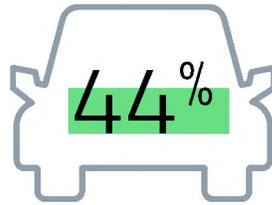


EV FAMILIARITY IS NOW A GIVEN

Across all aspects of electric driving, 73%²⁵ of survey respondents say they are somewhat or very familiar with EVs. Many have interacted with EVs, nearly half had seen an ad or video about EVs²⁶, and 46%²⁷ note having seen EV chargers in their area.



of respondents can name an EV brand²⁸



can identify specific EV models²⁹

Colorado's most recognized EV models include ³⁰:

Chevrolet Volt Chevrolet Bolt Nissan Leaf

VOLT

BOLT EV

LEAF

+10pts

- **Affordability:** costs associated with purchase, charging, maintenance, and EV tax credits and rebates.
- **Driving Experience:** weather performance, acceleration, and all-wheel drive capabilities.
- **Charging:** EV range, at-home charging equipment, charge times, and EV charging locations.
- **Compatibility with Life:** outdoor capabilities, storage, space and commuting benefits.

²⁵ 2023 Colorado Residential EV Survey, Slide 38

²⁶ 2023 Colorado Residential EV Survey, Slide 37

²⁷ 2023 Colorado Residential EV Survey, Slide 47

²⁸ 2023 Colorado Residential EV Survey, Slide 46

²⁹ 2023 Colorado Residential EV Survey, Slide 46

³⁰ 2023 Colorado Residential EV Survey, Slide 46

³¹ 2023 Colorado Residential EV Survey, Slides 123, 125, 127, 129

MORE SURVEY RESPONDENTS ARE CONSIDERING AN EV³²

Compared to 2020 data, the number of Coloradans considering purchasing an EV for the first time has increased significantly:

49%

expressed willingness to consider an EV (+10 pts)³³



³² 2023 Colorado Residential EV Survey, Slide 43

³³ 2023 Colorado Residential EV Survey, Slide 42

PROSPECTIVE EV OWNERS NO LONGER FIT A "TYPE"

Across the state, there is a generational shift that underscores the changing dynamics of car ownership. But while younger Coloradans are leading the charge towards an EV future, the demographics and interests of those prospective EV drivers varies greatly ³⁴. Today, interest in EV ownership cuts across a variety of consumer segments:



In the Driver's Seat:

When extrapolated across the state, In the Driver's Seat buyers make up 10% of the state population and are those most likely to purchase an EV in less than five years. Of our total survey respondents:

76% are 44 or younger

75% identify as male

72% hold moderate or conservative political views

78% live in a single-family home

84% own their own place

63% report a household income >\$100,000



Ready to Roll:

When extrapolated across the state, Ready to Roll buyers make up 19% of the state and are those most likely to purchase their first EV within the next five years as a **new** vehicle. Of our total survey respondents:

64% identify as male

53% are 44 or younger

87% drive <50 miles daily

75% live in a single-family home

69% own their own place

56% Have a penchant for mountain driving



Kicking the Tires:

When extrapolated across the state, Kicking the Tires buyers make up 21% of the population and are those most likely to purchase their first EV within the next five years as a **used** vehicle. Of our total survey respondents:

52% identify as female

47% rent or lease their place

35% report a household income <\$50,000

32% reside in multi-family housing

³⁴ 2023 Colorado Residential EV Survey, Slides 144-161

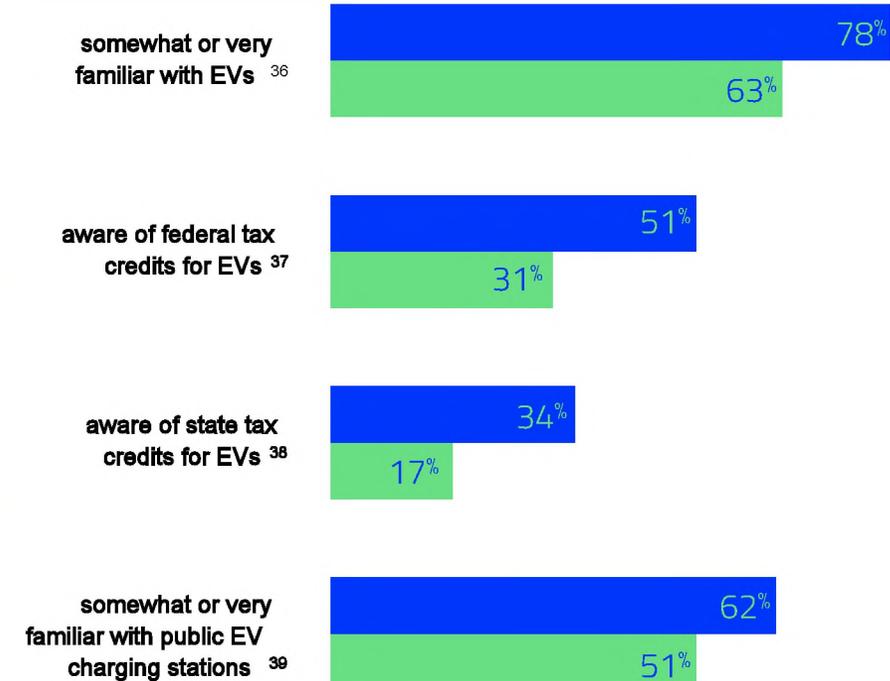
THERE IS AN EV AWARENESS GAP FOR THE STATE'S LOW-INCOME INDIVIDUALS

Accelerating the transition to electric mobility depends not only on consumer awareness, but also on ensuring EV adoption benefits are accessible to all, regardless of socioeconomic status. In our investigation of EV equity across Colorado, we focused on understanding perceptions among low-income individuals, revealing two significant obstacles to EV adoption.

First, we found that more than half³⁵ of lower income individuals intending to purchase or lease a vehicle opt for a used one. However, a robust EV market has yet to emerge, given both the long lifecycles of EVs and current market saturation rate. Consequently, it should come as no surprise that we uncovered a significant EV awareness between low- and high-income individuals.

With the used EV market still making up a small portion of the total EVs available for sale, there's still time to bridge the knowledge gap for low-income individuals. The growth trajectory of EV sales means shopping for a used EV will become more common, providing a more affordable entry point for a wider range of customers, including low-income individuals.

Higher Income Individuals (make >\$50K)  Low Income Individuals (make <\$50K)



³⁵ 2023 Colorado Residential EV Survey, Slide 34

³⁶ 2023 Colorado Residential EV Survey, Slide 207

³⁶ 2023 Colorado Residential EV Survey, Slide 40

³⁷ 2023 Colorado Residential EV Survey, Slide 209

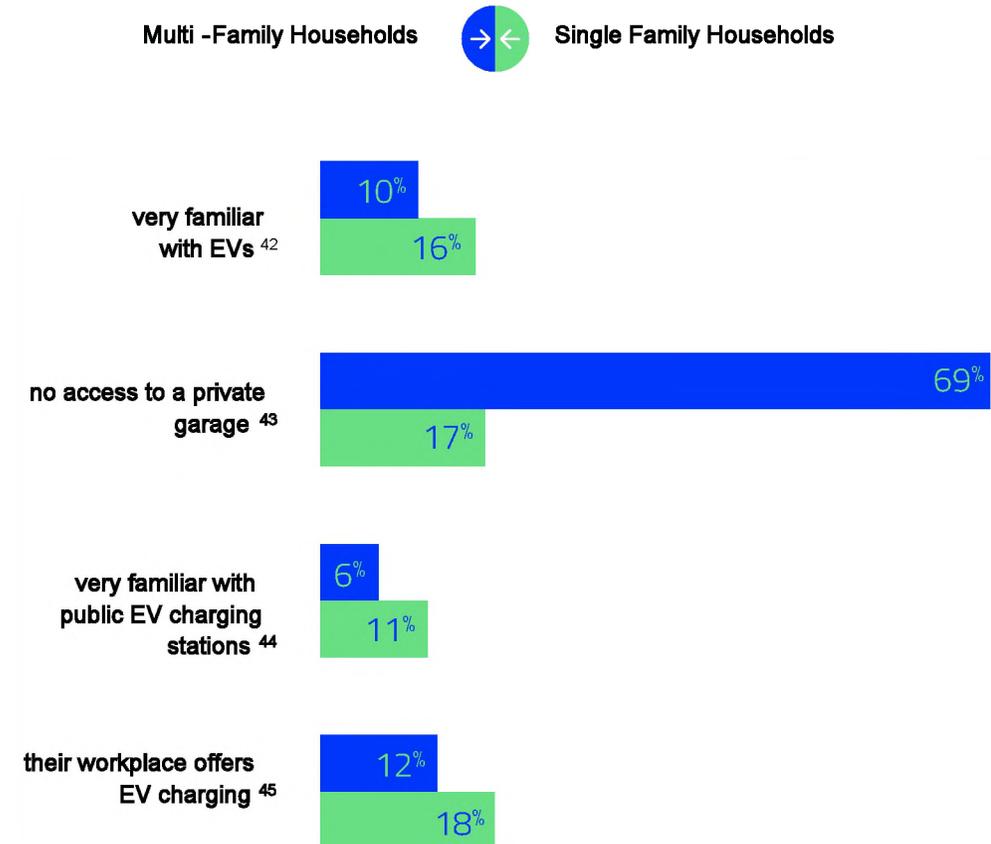
³⁷ 2023 Colorado Residential EV Survey, Slide 206

YOUNG RENTERS ARE EAGER TO ADOPT EVs BUT LACK CHARGING ACCESS

According to our data, multi-family households are interested in adopting EVs, but often lack the infrastructure needed to make the jump.

Demographically, this group is younger (34 and under), resides as renters in townhouses, condos or apartment complexes, and has a household income of \$50,000 or less⁴⁰. Given these factors, public -and affordable- charging accessibility will play a vital role in removing barriers to EV adoption.

Colorado is making significant investments in public charging stations, including at multi-family housing and workplaces to ensure equitable EV access. Notably, these efforts are supported by the state's Charge Ahead Colorado program⁴¹, which offers substantial grant funding for community-based Level 2 (L2) and DC fast-charging (DCFC) electric vehicle charging stations. In addition, recently passed state legislation will require new multi-family housing to be wired for EV charging.



⁴⁰ 2023 Colorado Residential EV Survey, Slide 220

⁴¹ Charge Ahead Colorado

⁴² 2023 Colorado Residential EV Survey, Slide 231

⁴³ 2023 Colorado Residential EV Survey, Slide 225

⁴⁴ 2023 Colorado Residential EV Survey, Slide 236

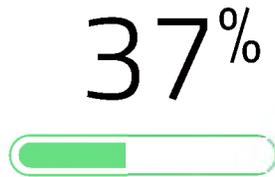
⁴⁵ 2023 Colorado Residential EV Survey, Slide 235

ONCE AN EV OWNER, FOREVER AN EV FAN

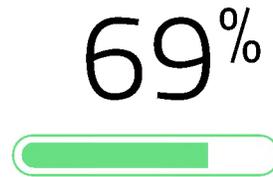
Findings showed that once Coloradans purchase an EV, they tend to become their biggest fans:



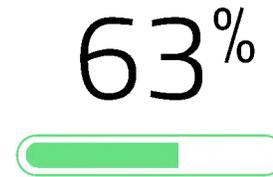
indicated they would purchase another EV in the next 5 years⁴⁶



will buy an EV to replace a current EV in their household⁴⁷



use their EV to drive to work or school almost daily⁴⁸



rely on their EV to drive long distances across Colorado or to neighboring states⁴⁹

Fast

Cool

Fun

Safe

Convenient

Reliable

Affordable

are the words they most commonly associate with Evs.⁵⁰

Colorado's Top 10 Most Popular EV Registrations⁵¹:

- 1 Tesla Model Y
- 2 Tesla Model 3
- 3 Nissan Leaf
- 4 Jeep Wrangler
- 5 Tesla Model S
- 6 Tesla Model X
- 7 Chevrolet Volt
- 8 Chevrolet Bolt (EV)
- 9 Toyota RAV4 Prime
- 10 Ford Mustang Mach-E

⁴⁶ 2023 Colorado Residential EV Survey, Slide 44

⁴⁸ 2023 Colorado Residential EV Survey, Slide 159

⁵⁰ 2023 Colorado Residential EV Survey, Slide 190

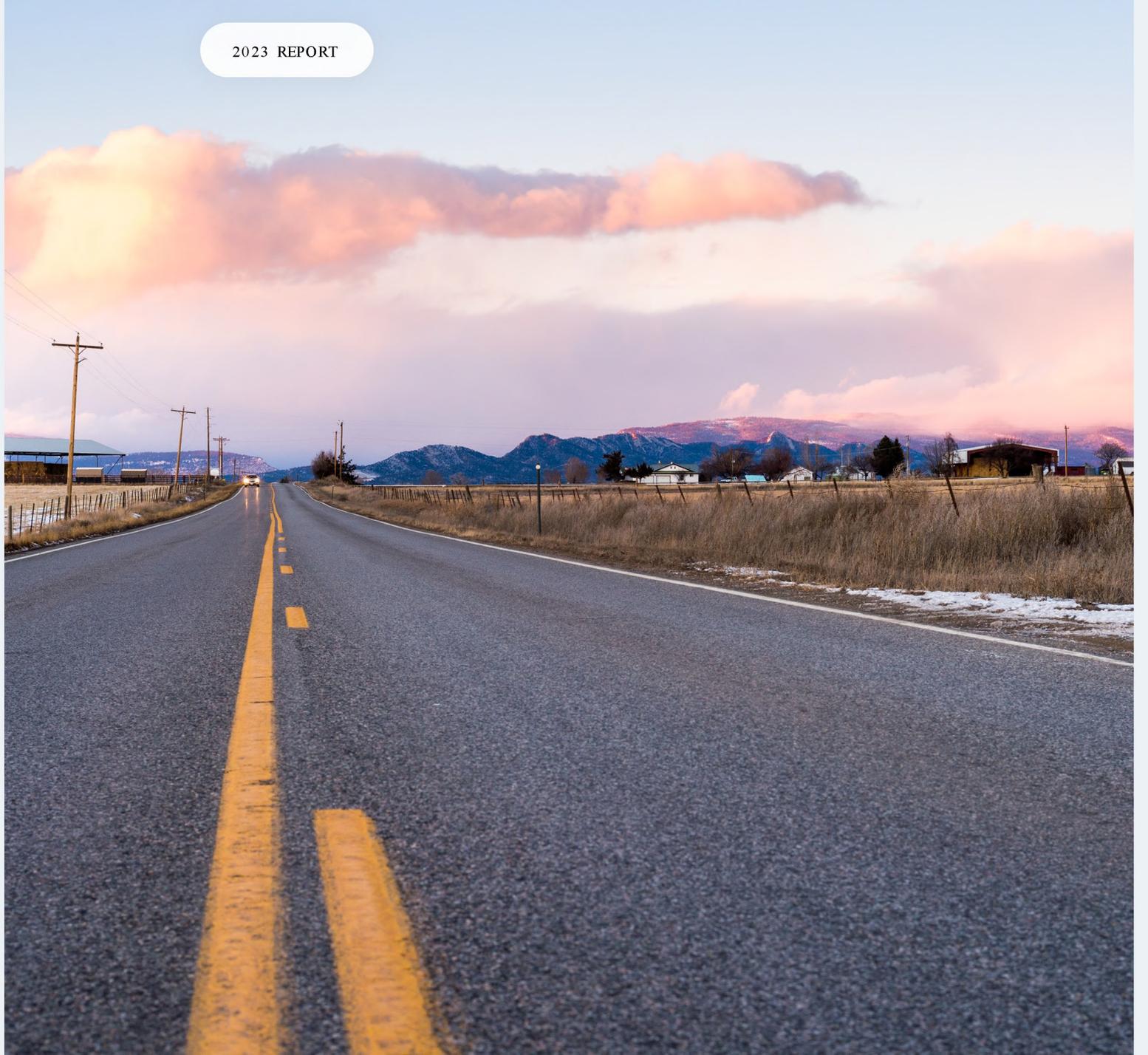
⁴⁷ 2023 Colorado Residential EV Survey, Slide 44

⁴⁹ 2023 Colorado Residential EV Survey, Slide 159

⁵¹ EValuateCO, November 7, 2023

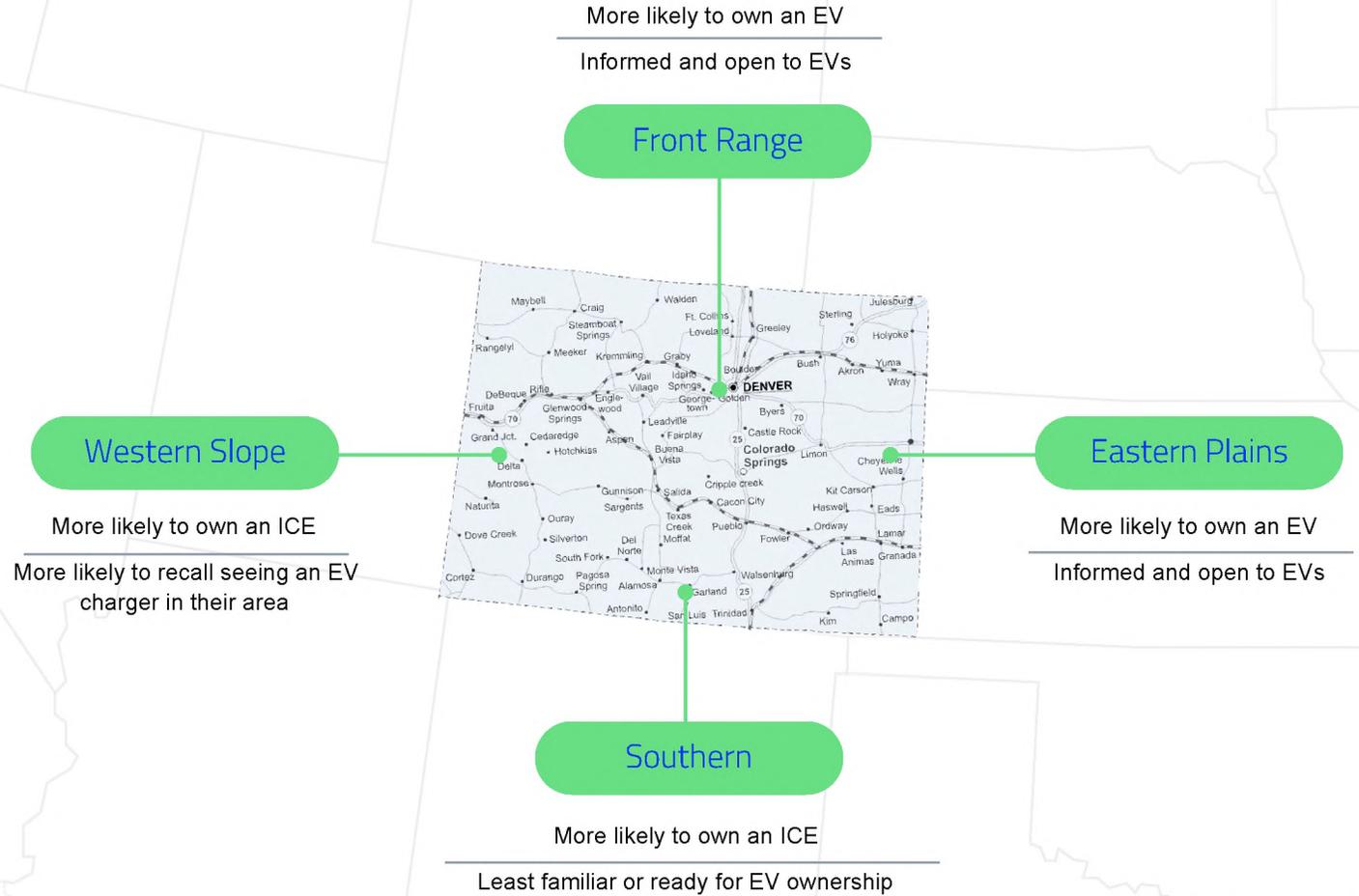
THE ROAD AHEAD: EV SATURATION HINGES ON CONTINUED CONSUMER EDUCATION

While our state continues to see significant change overall in consumer awareness, interest and adoption of EVs, filling the perception and education gaps related to EV costs, charging and overall Coloradan lifestyle fit will be critical in removing barriers and accelerating this transportation transformation.



EV INTEREST AND OWNERSHIP FACE A SHARP GEOGRAPHIC DIVIDE

While positive ownership experiences continue to drive EV awareness, consideration and adoption forward, it should be noted that Colorado continues to face a sharp geographic divide in EV ownership and interest ⁵².



THE BIGGEST BARRIERS FOR EV ADOPTION ARE COST PERCEPTIONS

According to our survey, 71% of respondents cite cost⁵³ as the most important factor when considering an EV purchase. Interestingly, however, we uncovered several significant misperceptions consumers believe related to EV costs:

Perception 72% of respondents believe EVs are more expensive than ICEs⁵⁴

Reality

30+

vehicles available for <\$45,000

The average price to purchase a new car in the U.S. is well over \$48,000⁵⁵. Today, however, there are 30+ EV and plug-in hybrid models available for <\$45,000⁵⁶. Additionally, EV owners can save 50% more than ICE owners on maintenance over their cars' lifespan⁵⁷.

Perception 51% of respondents do not believe EVs are affordable for the average person⁵⁸

Reality

\$18.5K

potential savings in tax credits and rebates

Coloradans can access up to \$7,500 available in federal EV tax credits, while the state offers an additional \$5,000 tax credit that can stack on top⁵⁹. Paired with Colorado's "Vehicle Exchange Colorado" program—which offers an up to \$6,000 rebate on qualifying new or leased EVs⁶⁰—qualified Colorado EV purchasers could reduce the cost of their EV purchase by up to \$18,500⁶¹.

⁵³ 2023 Colorado Residential EV Survey, Slide 80

⁵⁴ 2023 Colorado Residential EV Survey, Slide 85

⁵⁵ Consumer Reports

⁵⁶ Xcel Energy

⁵⁷ Energy.gov

⁵⁸ 2023 Colorado Residential EV Survey, Slide 54

⁵⁹ EV CO: Save Money

⁶⁰ Vehicle Exchange Colorado

⁶¹ EV CO: Get the Facts on Driving Electric

EV CHARGING REMAINS THE LARGEST KNOWLEDGE GAP FOR CONSUMERS

Colorado has approximately 4,903⁶² EV chargers across the state, including the 578⁶³ that were built in 2023 alone. According to our survey, 46%⁶⁴ of respondents were aware that there are EV chargers in their area. While this familiarity is a positive step, charging -related topics continue to be the largest knowledge gap for consumers, underscoring the ongoing need for educational initiatives to ensure EVs are more accessible and appealing to a broader range of Coloradans.

Perception 62% of respondents don't believe EVs can be charged using a standard three-pronged outlet⁶⁵

Reality



100%

Of all EVs can be charged using a standard, three -pronged electrical outlet

Most EVs come with a charging adapter that plugs right into your standard three-pronged electrical outlet. This type of charging adds 3-5 miles of charge per hour⁶⁶.

Perception 67% of respondents expressing having "range anxiety" when contemplating an EV purchase⁶⁷

Reality



300

miles of average range

An EV's range typically falls within 300 miles⁶⁸. To put that in context, since 70%⁶⁹ of Coloradans typically cover 30 miles or less in daily driving, their prospective EV could drive up to 11 days on a single charge.

⁶² EValuateCO, November 7, 2023

⁶³ EValuateCO, Jan. 1, 2023 – Oct. 7, 2023

⁶⁴ 2023 Colorado Residential EV Survey, Slide 47

⁶⁵ 2023 Colorado Residential EV Survey, Slide 64

⁶⁶ EV CO: Convenient Charging

⁶⁷ 2023 Colorado Residential EV Survey, Slide 53

⁶⁸ 2023 Colorado Residential EV Survey, Slide 52

⁶⁹ 2023 Colorado Residential EV Survey, Slide 155

CHARTING COLORADO'S EV FUTURE IN 2024

There remains a growing interest and appetite across Colorado for EVs, including an eagerness to learn more about the technology and how it can seamlessly integrate into the daily lives of residents.

As we peer into the near future, Colorado's journey into the EV era promises several significant developments, each contributing to a more widespread and equitable adoption of clean transportation:





Widespread Deployment of Fast -Charging EV Plazas:

The Colorado Energy Office's Direct Current Fast-Charging (DCFC) Plazas program⁷⁰ is a collaboration with the Colorado Department of Transportation to enhance access to high-speed charging across Colorado. Thanks to a combination of state and federal funds, including a \$57M⁷¹ federal National Electric Vehicle Infrastructure (NEVI) grant through the Infrastructure Investment Jobs Act and the state's Charge Ahead Colorado program⁷², Colorado plans to accelerate development of its fast-charging infrastructure network, prioritizing gaps along designated corridors and within disadvantaged communities, while expanding existing sites.

⁷⁰ [Colorado Energy Office: Plazas Program](#)

⁷¹ [Colorado Department of Transportation](#)

⁷² [Colorado Energy Office: EV Fast-Charging Corridors](#)

Revolutionizing Purchase with Point -of-Sale Tax Credit:

The recent decision by the U.S. Treasury and the State of Colorado⁷³ represents a concerted effort to streamline the process for consumers to access EV incentives. Dealerships are now empowered to provide buyers with immediate access to both federal and state tax credits at the time of purchase, eliminating the previous delay until tax time. This significant change, effective in 2024, allows eligible Colorado buyers to benefit from a \$7,500 federal tax credit and a \$5,000 state tax credit when acquiring a new EV from participating dealers. In addition, a new \$2,500 state tax credit for EVs with an MSRP below \$35,000⁷⁴ will be introduced in 2024. For used EV buyers, an instant \$4,000 federal credit⁷⁵ is available at the time of purchase, further fostering a more accessible and affordable EV market.

⁷³ [The Colorado Sun: Federal electric vehicle tax credit change will turbocharge Colorado sales, local officials say \(October 2023\)](#)

⁷⁴ [EV CO: Save Money](#)

⁷⁵ [EV CO: Save Money](#)



As the Centennial State continues to navigate the electrified path, it beckons a future where the roar of combustion engines gives way to the quiet hum of electric motors, echoing the state's commitment to

**A CLEANER,
GREENER
TOMORROW.**

Beyond The Colorado Energy Office's 2023 Colorado Residential EV Survey, the data for this document was pulled from multiple sources. These include EV CO, The Colorado Energy Office, EValuateCO, the Colorado Automobile Dealers Association, and local and national media coverage. All sources have been cited throughout and can be found below.

For additional information about the state's EV efforts, visit energyoffice.colorado.gov and evco.colorado.gov.

REFERENCES

ABOUT THE 2023 COLORADO RESIDENTIAL SURVEY

Methodology

- Sample size: n = 2,006
- Margin of error of $\pm 2\%$ at 95% confidence level
- Fielded August–September 2023
- English and Spanish surveys
- Regional breakout by county: Eastern Plains, Front Range, Southern and Western Slope
- Sample representative of Colorado population norms: Age, sex, income, geography. Minimum quota set for low income

2023 survey sampling and weighting scheme

- Quotas were set for key demographics (gender, age, income), and geographic location to be sure a representative mix of responses were received and to allow for segmentation by consumer type.
- We applied a post fieldwork weighting scheme using geographic and demographic data (gender and income) to ensure responses were representative of the adult population in Colorado.

2023 regional breakout by county

- We have a proportionally larger sample in less populous areas to gain statistically significant numbers when doing regional analysis.
- We chose the four geographic regions because we saw differences in those populations in our existing demographic information.
- There is no 'right' answer to choosing geographic segments, but this reflects what we believe allows a fair representation of all parts of Colorado and this approach enables us to ensure we're getting representative responses from urban and rural individuals.

ADDITIONAL SOURCES

[ACEEE.org](https://www.aceee.org)

[Charge Ahead Colorado](#)

[Colorado 2023 Electric Vehicle Plan](#)

[Colorado Automobile Dealers Association](#)

[Colorado Department of Transportation](#)

[Colorado Energy Office: Plazas Program](#)

[Colorado Energy Office's 2023 Colorado Residential EV Survey](#)

[Colorado Greenhouse Gas Pollution Reduction Roadmap](#)

[Consumer Reports](#)

[Energy.gov](https://www.energy.gov)

[EValuateCO](#)

[EV CO](#)

[Vehicle Exchange Colorado](#)

[Xcel Energy](#)

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Thank You

