



MDEEV

MARYLAND ELECTRIC VEHICLE

Market Research Report

Understanding Marylanders' perceptions
towards electric vehicles

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SYNDICATED RESEARCH

Introduction to MRI-Simmons

MRI- SIMMONS

We used the MRI-Simmons database to identify the target audience's behaviors and attitudes to build a more accurate profile of the audience we are studying. For the segments we study, the likelihood of a certain behavior or attitude is calculated in comparison to other populations.



MRI- SIMMONS

MRI-Simmons is the largest source of market research information in the United States. It is nationally-representative, multi-modal, and used by a wide range of industries to inform business decisions, build consumer profiles, and plan media.



MRI- SIMMONS

Fall survey collected from 9/1/2022 to 10/16/2023

- **51,480** total respondents across the contiguous United States
- **797** respondents in Maryland who bought a car within past 3 years

MRI- SIMMONS

Segment	Number of respondents
Compact	148
Standard	151
Luxury	70
SUVs/Vans	334
Pickups	75
EVs	19*

***Estimates should be interpreted with caution!**

MRI- SIMMONS

Index score: What percentages mean

The likelihood of the target to meet a specified criterion, expressed in relation to the base, where 100 = average.

$$\frac{(\text{Weighted \% of target} / \text{Weighted \% of base}) * 100}{\text{Percentage} - 100} =$$

For example...

$$\frac{(94.37\% \text{ of Marylanders have a household income of at least } \$199,000 / 30.99\% \text{ of all Americans have a household income of at least } \$199,000) * 100}{304 - 100} =$$

Marylanders are 204% more likely to have a household income over \$199,000

Rule of thumb: index scores **>|10%|** are meaningful



SYNDICATED RESEARCH

**How incentives and rebates
influence vehicle purchases**

MD EV owners were slightly influenced by rebates and incentives

MARYLANDERS

	Percent of all U.S.	Percent of Marylanders	Percent of Maryland EV owners
Agree that “Rebates and incentives strongly influence my new vehicle purchase decisions”	48%	64%	54%
<i>Index score to U.S.</i>	-	8%	+12%
<i>Index score to Marylanders</i>		-	5%

According to MRI-Simmons, Maryland residents who own EV's were **12% MORE** influenced by rebates and incentives than the U.S. overall, and 5% MORE influenced by these than other Maryland residents.

Discussion follows, but results should STILL be interpreted with caution.

Rebates by segments

MARYLANDERS

	Percent of all U.S.	Percent of Marylanders	Percent of Maryland Compacts	Percent of Maryland Standards	Percent of Maryland Luxuries	Percent of Maryland SUV/Vans	Percent of Maryland Pickups
Agree that "Rebates and incentives strongly influence my new vehicle purchase decisions"	48%	64%	54%	53%	37%	49%	45%
<i>Index score to U.S.</i>	-	8%	+11%	+10%	-23%	+1%	-7%
<i>Index score to Marylanders</i>		-	+5%	+4%	-28%	-5%	-12%

SYNDICATED RESEARCH

Marylanders

(compared to the U.S. overall)

Demographics: well-off and actively progressive

MARYLANDERS TO THE U.S. OVERALL

- 101% more likely to have a total household income over \$100,000
- 19% less likely to believe their household will be worse off financially in the next 12 months

- 46% more likely to be Democrats
- 81% more likely to work for a political party

	United States	Maryland
Bachelor's degree or higher, percent of persons aged 25 and older, 2017-2021	33.7%	41.6%
Median household income (in 2021 dollars), 2017-2021	\$69,021	\$91,431
Percent in poverty	11.5%	9.6%

Source:

<https://www.census.gov/quickfacts/fact/table/US,MD#>

Inclined to newer models

MARYLANDERS TO THE U.S. OVERALL

Marylanders are ...	% More/ less likely
I normally buy cars brand new	21%
I generally purchase the most expensive model with all the luxury appointments and options	25%
The technologies offered in a car's dashboard influence my decision to buy it	15%
Buying a self-driving car is something I would like to do as soon as possible	-11%
I like to get a new car every two or three years	-14%

...Otherwise, Marylanders have very average attitudes towards automobiles

Purchased with financing, through a provider

MARYLANDERS TO THE U.S. OVERALL

Marylanders' most recent car was more likely to be acquired...

From a manufacturer or dealer	17%
From a retailer (e.g. CarMax, AutoNation, etc.)	24%
With financing from a dealer	17%
With a bank loan	16%
With financing from the auto manufacturer	33%

Marylanders' most recent car was **less** likely to be acquired...

In a private sale/Individual	-46%
On a lease	-11%
From an independent used car dealer	-24%
With cash	-11%

SYNDICATED RESEARCH

Marylanders by car segment

EV estimates should be interpreted with caution!

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Automobile attitudes

COMPARED TO ALL MARYLANDERS

Cars are a...

Compact: Necessary evil	<ul style="list-style-type: none">• 22% more likely to agree that owning a car is less important nowadays given the other options for getting around• 12% less likely to have a vehicle that is fun to drive
Standard: Hobby	<ul style="list-style-type: none">• 25% more likely to consider themselves to be automotive enthusiasts• 18% more likely that people ask their advice when it comes to automobiles• 15% more likely to perform the routine maintenance on their cars
Luxury: Status symbol	<ul style="list-style-type: none">• 40% more likely to seek out vehicles with bold, innovative designs that stand apart• 14% less likely to look at several vehicle brands when shopping for a new vehicle
SUVs/Vans: Fact of life	<ul style="list-style-type: none">• 16% more likely to drive mostly for errands• 13% less likely to agree that owning a car is less important nowadays given the other options I have for getting around
Pickups: Lifestyle	<ul style="list-style-type: none">• 22% more likely to like driving• 19% more likely to agree that buying American products is important• 16% more likely to agree that the quality of workmanship/construction of a vehicle is more important than anything else
EVs: Fun, new thing	<ul style="list-style-type: none">• 53% more likely to keep up on the latest advances in automobile technology• 24% more likely to be interested in what goes on under the hood of a car

Demographics and key characteristics

COMPARED TO ALL MARYLANDERS

Segment

- | | |
|-----------|--|
| Compact | <ul style="list-style-type: none">• Single: 35% more likely to have never married, 27% more likely to have no children• Younger: 23% more likely to be 18-49• More male: 12% more likely to be men |
| Standard | <ul style="list-style-type: none">• Very typical to Marylanders demographically• Drive the least |
| Luxury | <ul style="list-style-type: none">• Married: 40% more likely to be married• Wealthy: 256% more likely to earn \$250,000+• Educated: 39% more likely to have college degrees• Diverse: 26% more likely to be Black/African American |
| SUVs/Vans | <ul style="list-style-type: none">• Highest and lowest incomes• 33% more likely to have some college, but no degree |
| Pickups | <ul style="list-style-type: none">• Conservative: 34% more likely to be White, 98% more likely to be Republican• 21% more likely to be parents |
| EVs | <ul style="list-style-type: none">• 60% more likely to be male• 28% more likely to be White and 120% more likely to be Asian• 80% more likely to have graduate degrees• 77% more likely to be Republican (120% more likely in last round) |

How each segment typically purchased their car

COMPARED TO ALL MARYLANDERS

Segment	
Compact	<ul style="list-style-type: none">• 13% more likely to buy-in-person and pickup in-person• 16% more likely to buy used
Standard	<ul style="list-style-type: none">• 57% more likely to buy with trade-in• 45% more likely to use dealer financing• 36% more likely to agree that leasing is a great way to try new cars• 27% more likely to buy new• 17% less likely to buy with cash
Luxury	<ul style="list-style-type: none">• 319% more likely to buy online and pickup in-person• 107% more likely to buy online and have delivered• 19% more likely to use cash
SUVs/Vans	<ul style="list-style-type: none">• 25% more likely to buy with trade-in• 41% more likely with credit union loan
Pickups	<ul style="list-style-type: none">• 17% more likely to buy-in-person and pickup in-person (98% of segment!)
EVs	<ul style="list-style-type: none">• 10% more likely to buy in-person and pickup in-person (73% of segment!)• 88% more likely to buy new (84% of segment)

Some segments are concerned about cars' environmental impact...

COMPARED TO ALL MARYLANDERS

Segment	
Compact	<ul style="list-style-type: none">• 12% more likely to agree that buying an electric/hybrid car is the right thing to do to protect the environment• 13% more likely to agree that their next car will be more eco-friendly• 21% more likely to buy vehicles that reflect their commitment to support the environment• 21% more likely to buy a brand that is committed to reducing its impact on the environment
EVs	<ul style="list-style-type: none">• 23% more likely to agree that buying an electric/hybrid car is the right thing to do to protect the environment

...but others are not concerned

COMPARED TO ALL MARYLANDERS

Segment

Pickups

- 23% **less** likely to agree that buying an electric/hybrid car is the right thing to do to protect the environment
- 13% **less** likely to buy vehicles that reflect their commitment to support the environment

EVs

- 41% **less** likely to buy vehicles that reflect their commitment to support the environment
- 57% **less** likely to buy a brand that is committed to reducing its impact on the environment
- 39% **less** likely to expect brands they buy to support social causes.

Luxury

- No variation (to MD or U.S., no variation from MD to U.S.)

SUVs/Vans

- No variation (to MD or U.S., no variation from MD to U.S.)

SUMMARY

**KEY FINDINGS AND
TAKEAWAYS**

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Concluding thoughts

MARYLAND AND EVS

- While MRI-Simmons may not be the best source of information on Maryland EV owners (hence our literature review), **we do learn a lot about Marylanders and the other car segments.**
- **A Marylander's car says a lot about their background, behaviors, and attitudes, towards EVs.**
 - The following car segments in Maryland are **easier** sells for EV ownership...
 - Compacts – prioritize environment, purchase in person (opportunity to try an EV), skew male, not particularly attached to their existing car, open to rebates/incentives
 - Standard – open to rebates/incentives and other alternative financing, car enthusiasts who might just need to see how EVs could be the next big thing, most typical to Marylanders overall (see below)
 - SUV/Vans – drive for practical reasons only, no serious aversions to EVs
 - Whereas the following car segments in Maryland are **harder** sells for EV ownership...
 - Luxury – though demographically aligned, they consider a very narrow range of brands/models and purchase online
 - Pickups – politically averse, 18% less likely to trust advertising, 900% more likely to need a vehicle for hauling power
- **Marylanders overall seem (more) amenable to EV's, meaning there should be room to grow this segment.**
 - 51% of Americans agree that buying an electric/hybrid car is the right thing to do to protect the environment (55% in MD)
 - 32% of Americans buy vehicles that reflect their commitment to support the environment (34% in MD)
 - 54% of Americans agree that their next car will be more eco-friendly (60% in MD)
 - 48% of Americans agree that rebates and incentives strongly influence their new vehicle purchase decisions (51% in MD)
 - *All figures are virtually the same as in 2021 (within |2%|)*

SECONDARY RESEARCH

Literature review

Pre-existing research on EV adoption in Maryland

Summary & Recommendations

- Purchasing an EV is a complex decision for Marylanders. Most research focused on logical/practical factors that impact consumer behavior. However, research also showed that the decision to buy a car tends to be more irrational and emotional, but those details were lacking for EV purchases.
 - Future research should explore emotional factors that impact purchasing an EV.
- Rebate and incentive perceptions of Marylanders have not been well researched.
 - Future research should explore these and how they may have evolved.
- Maryland EV owners tend to skew more **male** (85%), **older** (ages 40-69), higher **income** (81% over 100K), and more educated (86% of EV owners have at least a college degree). **Research revealed the gender gap as the most salient.**
 - Future research should explore the values and experiences of women in Maryland as this would be the most promising target audience.

Based on a review of 11 publications from 2018-2023

NEXT: PRIMARY RESEARCH

In-depth interviews

Overview

Our own qualitative research

NEXT STEPS FROM US

- **What:** In-depth interviews
- **Why:** To inform MarylandEV's outreach by understanding how Maryland EV and non-EV owners relate to their cars, how they perceive EVs (and how those perceptions have changed), and the shared values of Marylanders
- **How:** 20-30 minute online (or phone) interviews
- **Example questions:**
 - What made you buy your most recent car?
 - Is there anything that might motivate you to want to buy an electric vehicle as your next car?
 - How would you generalize your area of Maryland? Can you describe the typical person that lives there?
 - What do you feel like buying an electric car says about a person?
- **Who:** 25 Marylanders who acquired a car (either used or new) since 2020
 - 10 EV owners, 15 non-EV owners, at least 50% female
- **How You Can Help: Please let us know if you or anyone you know are interested. We are offering a small electronic gift card as a token of our appreciation, for both referrals and interviews!**

THANK YOU!

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