# 2024 MOR-EV Report

ANNUAL REPORT TO THE SENATE AND HOUSE COMMITTEES ON WAYS AND MEANS, THE JOINT COMMITTEE ON TRANSPORTATION, AND THE JOINT COMMITTEE ON TELECOMMUNICATIONS, UTILITIES AND ENERGY

MOR-EV
Massachusetts Offers Rebates for Electric Vehicles

Massachusetts Department of Energy Resources

December 12, 2025

# Table of Contents



## Acronyms

| | |
|---|---|
| AGHI | Annual gross household income |
| AGI | Adjusted gross income |
| BEV | Battery electric vehicle |
| CBO | Community-based organization |
| CSE | Center for Sustainable Energy |
| CUV | Crossover utility vehicle |
| DOER | Department of Energy Resources |
| EEA | Executive Office of Energy and Environmental Affairs |
| EV | Electric vehicle |
| FCEV | Fuel cell electric vehicle |
| GECA | Green Energy Consumers Alliance |
| GHG | Greenhouse gas |
| HHI | Household income |
| ICEV | Internal combustion engine vehicle |
| LDV | Light-duty vehicle |
| LEP | Limited English Proficiency Speaker |
| MOR-EV | Massachusetts Offers Rebates for Electric Vehicles |
| MSRP | Manufacturer's suggested retail price |

| | |
|---|---|
| National HHI | National average household income |
| OEJE | Office of Environmental Justice & Equity |
| OEM | Original equipment manufacturer |
| PHEV | Plug-in hybrid electric vehicle |
| State Median HHI | State median household income |
| SUV | Sport utility vehicle |
| ZEM | Zero emission motorcycle |
| ZEV | Zero emission vehicle |

## List of Figures and Tables

# Introduction

The Massachusetts Offers Rebates for Electric Vehicles (MOR-EV) program aims to provide air pollution emission reductions for the Commonwealth by increasing the use of zero emission vehicles (ZEVs). The Massachusetts Department of Energy Resources (DOER) oversees and a third-party program administrator (the Center for Sustainable Energy, or CSE) implements MOR-EV.

MOR-EV provides incentives to residents, businesses, non-profits, and public entities to electrify light-, medium-, and heavy-duty vehicles. The MOR-EV program offerings currently include but are not limited to a standard rebate for new ZEVs, a point-of-sale rebate option to enable improved cost accessibility at the time of vehicle purchase or lease, rebates for used ZEVs, and a rebate adder intended for Commonwealth residents with limited income that can be combined with other MOR-EV rebates.

The underlying objectives of MOR-EV include:

- Increasing consumer awareness and adoption of ZEVs.
- Increasing consideration of ZEVs in vehicle purchase or lease decisions.
- Reducing greenhouse gas (GHG) emissions from the transportation sector.
- Improving air quality and associated health benefits.
- Enhancing vehicle fuel diversity and security.
- Promoting economic growth.

In 2023, DOER established a culturally competent outreach campaign designed to expand and improve education and information dissemination about MOR-EV programs and incentives to diverse populations. This campaign utilizes various strategies, including but not limited to, development of language accessible materials and webinars, presentations at community meetings, tabling at community events, and working closely with community-based organizations. In addition, MOR-EV provides additional rebate funding to medium- and heavy-duty vehicles to further minimize air pollution impacts.

Following program updates in 2023, including new regulations, MOR-EV participation reached record levels in 2024. With the addition of the point-of-sale rebates, an income qualifying adder, a used vehicle rebate, a trade-in adder, and an increase in rebate value from $2,500 to $3,500, all of which occurred in late 2023 to early 2024, program

expenditures reached more than $71 million[1] in calendar year 2024, providing over 18,600 rebates. Last year's spend was nine times the average annual expenditures between 2014 and 2022 and the number of rebates granted increased by six times over the same period.

Contributing to the program's growth was an increased focus on expanding engagement with communities and dealers. In calendar year 2024, the MOR-EV program participated in 23 community events, engaged with over 45 organizations to expand the outreach network in communities, and reached a total of 305 enrolled dealers in the point-of-sale program with broad geographic representation across the Commonwealth.

Table 1 below summarizes the growth of the program by the program phases outlined in Sections 1 and 2 (pp. 4-29).

**Table 1: Number of rebates issued and associated rebate spend by purchase or lease date during each phase of the MOR-EV program[2]**

| Phase | Dates | Rebates Issued | Rebate Spend | Average Monthly Rebate/Expenditure |
|---|---|---|---|---|
| **Phase 1** | June 2014 – January 2016 | 1,738 | $4,101,000 | 87 rebates/ $205,050 |
| **Phase 2** | February 2016 – December 2018 | 12,087 | $24,725,500 | 345 rebates/ $706,443 |
| **Phase 3** | January 2019 – December 2019 | 1,911 | $2,860,200 | 212 rebates/ $317,800 |
| **Phase 4** | January 2020 – December 2020 | 2,536 | $5,544,000 | 211 rebates/ $462,000 |
| **Phase 5** | January 2021 – July 2023 | 15,760 | $44,679,000 | 508 rebates/ $1,411,258 |
| **Phase 6** | August 2023 – December 2024 | 20,804 | $76,098,500 | 1,224 rebates/ $4,514,676 |

[1] This includes the MOR-EV Light Duty program and the MOR-EV Pick Up and Class 2b program. The Class 3-8 program is not included in these statistics due to the small number of applications submitted through the Class 3-8 program and the variable rebate values per vehicle class, ranging from $15,000 to $90,000.

[2] This is based off of the date of purchase or lease in the application rather than the date the rebate was paid as the rebate offerings available for the purchase or lease of an electric vehicle is dependent on which phase of the program the vehicle was purchased or leased under. This does not include the Class 3-8 program for the same reason noted in footnote 1.

This report provides detailed information for 2024 on the MOR-EV program consistent with Section 41 of Chapter 179 of the Acts of 2022. [3].

# Section I. Overview of the MOR-EV Program from 2014–2023

Between 2014 and 2023, MOR-EV provided rebates for the purchase or lease of battery electric vehicles (BEVs), fuel-cell electric vehicles (FCEVs), and plug-in hybrid electric vehicles (PHEVs) with a purchase price below a certain threshold. The design of MOR-EV evolved several times over the years. Details of the various phases of the program are included below.

## Phase 1: June 2014–January 2016

Phase 1 included rebates of $2,500 for BEVs (including cars, CUVs, SUVs, and pickup trucks), PHEVs with an onboard battery size of 15 kWh or more (referred to as PHEV Plus), and fuel-cell electric vehicles (FCEVs). Phase 1 also included rebates of $1,500 for PHEVs with an onboard battery of less than 15 kWh and $750 for fully electric zero emission motorcycles (ZEMs).

## Phase 2: February 2016–December 2018

Phase 2 continued the rebate levels from Phase 1 for vehicles with a manufacturer's suggested retail price (MSRP) of less than $60,000. Vehicles with an MSRP greater than or equal to $60,000 received a rebate of $1,000.

## Phase 3: January–December 2019

During Phase 3, rebates were reduced from $2,500 to $1,500 for BEVs and FCEVs, and from $750 to $450 for ZEMs, while all rebates for PHEVs were eliminated. The program did not provide rebates for any vehicles with a MSRP of $50,000 or higher. Additionally, due to budget constraints, MOR-EV was suspended from October through December 2019, during which time the program provided notice to potential participants that rebates would no longer be available. Rebates were ultimately provided to these EV purchasers.

[3] M.G.L. c. 25A, § 19; St. 2022, c. 179, § 41 ("An Act Driving Clean Energy and Offshore Wind")

## Phase 4: January–December 2020

Phase 4 resumed the program at similar rebate levels as were offered in Phases 1 and 2 with two adjustments: (1) PHEV Pluses received a $1,500 rebate instead of a $2,500 rebate (and were designated as eligible by having a range of 25 or more electric miles rather than onboard battery size) and (2) ZEM rebates concluded. Beginning June 25, 2020, commercial and nonprofit fleets (including rental cars, company cars, and delivery vehicles) also became eligible to receive rebates.

## Phase 5: January 2021–July 2023

MOR-EV rebates were available for the purchase or lease of BEVs, FCEVs, and eligible PHEVs. In 2021, MOR-EV offered a $2,500 rebate for eligible BEVs and FCEVs as well as a $1,500 rebate for eligible PHEVs with an all-electric range of at least 25 miles. In 2021, fleets were limited to a maximum of ten rebates per calendar year, but this cap was removed in 2022.

Due to the passage of the 2022 Act Driving Clean Energy and Offshore Wind, the vehicle price cap increased from $50,000 to $55,000 for BEVs and FCEVs that were purchased on or after November 10, 2022, and the rebate amount increased to $3,500 for BEV and FCEV rebate applications that were approved on or after this date. As of July 1, 2023, the MOR-EV program only accepted applications for purchases or leases of PHEVs that took place on or before June 30, 2023.[4]

# Section II. MOR-EV Program Offerings in 2024

Figure 1 illustrates the rebate offerings that were active in 2024, the relative incentive value, available methods of securing a rebate, and eligible applicants.

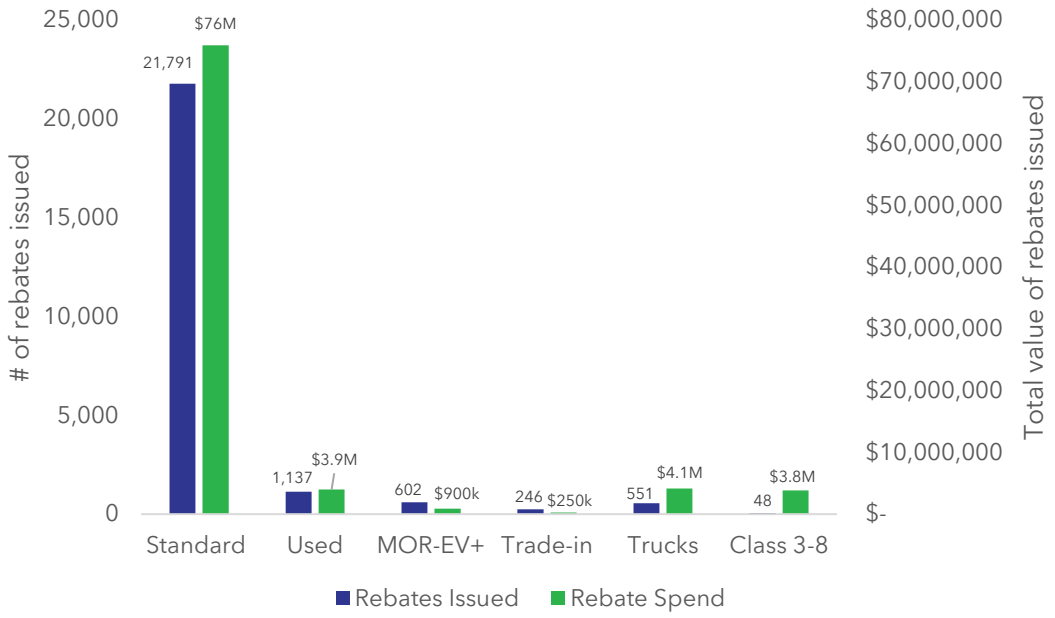
Rebate applications for light-duty vehicles (LDV), pickup trucks, and Class 2b vehicles were available for eligible applicants within 90 days of vehicle purchase or lease. Rebates listed as being available at the point-of-sale (or lease) could be claimed at a participating Massachusetts auto dealership. Any MOR-EV+ rebate adders and Used rebates, which are only available to eligible residents, required redemption of an approved pre-qualification voucher issued by the program administrator to be claimed at the dealership.

[4] The 2022 Act defined ZEVs as those that produce "no engine exhaust carbon emissions," therefore excluding PHEVs from the program.

Figure 1: 2024 MOR-EV Rebate Offerings


Figure 2 below demonstrates the total number of rebates issued between August 2023 and December 2024 for each of the MOR-EV rebate offerings, as well as the total expenditure for each during that time period. It should be noted that the MOR-EV+ and Trade-in offerings are adders and not their own rebates and can only be combined with a base rebate such as the MOR-EV Standard, MOR-EV Used, or MOR-EV Trucks rebate. The MOR-EV standard rebate offering continues to be the most prevalent, equaling 85% of total program spend during this period.

**Figure 2: MOR-EV rebates issued and total rebate spend by payment date between August 2023 and December 2024[5]**




This section focuses on LDVs and light-duty pickup trucks and other Class 2b vehicles like SUVs and vans, given that they currently and historically represent over 90% of rebate spending.[6] The figures and data in this section are derived from data provided by the MOR-EV Program Administrator to DOER.

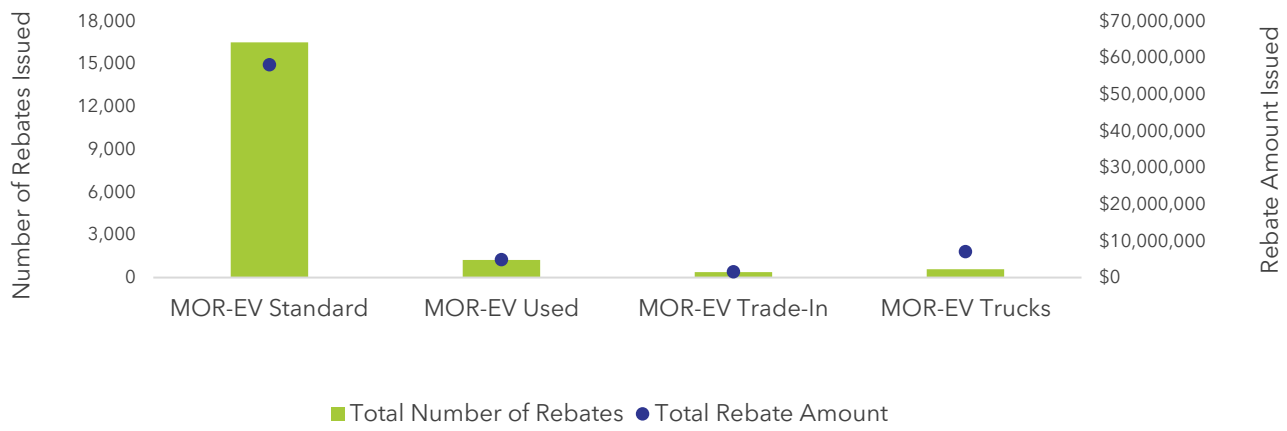
## 2024 Program Overview: Light-Duty Vehicles

### *MOR-EV Standard*

MOR-EV Standard rebates continue to be the most active component of the overall program in terms of volume and spending as shown in Figure 3.

[5] This is based off of the date that payment was sent for each of the rebate offerings.
[6] In calendar year 2024, 91% of issued rebate funds were for LDVs and 4% were for MOR-EV Trucks rebates.

**Figure 3: Total Number of Rebates and Amount of Funding Issued by payment date in 2024**




## Participation Rates (MOR-EV Standard)

S&P Global registration data recorded 20,992 Massachusetts registrations of MOR-EV-eligible vehicles in this time frame. In comparison, the MOR-EV rebate data shows 15,709 approved MOR-EV Standard applications, resulting in an overall program participation rate of 75% for the reporting period. In 2023, the overall program participation rate was 66%.

As shown in Table 2, Tesla Model Y had the highest number of rebates and highest participation rate (nearly 100%), compared to 83% in 2023. The Tesla Model 3 and Nissan LEAF models achieved the second highest participation rates at ~90% each, followed by Chevy Equinox (~89%), Subaru Solterra (~85%), and Hyundai Kona Electric (~84%).

**Table 2: Program Participation by Model (MOR-EV Standard Rebates)**

| Eligible Vehicle Model | Registered in MA | Rebated by MOR-EV | Participation Rate |
|---|---|---|---|
| **Tesla Model Y** | 7,824 | 7,806 | 99.8% |
| **Tesla Model 3** | 3,158 | 2,831 | 89.6% |
| **Hyundai IONIQ 5** | 1,586 | 933 | 58.8% |
| **Honda Prologue** | 1,305 | 245 | 18.8% |
| **Toyota bZ4X** | 852 | 546 | 64.1% |
| **Volkswagen ID.4** | 715 | 500 | 69.9% |
| **Ford Mustang Mach-E** | 688 | 402 | 58.4% |
| **Chevrolet Equinox** | 547 | 486 | 88.8% |

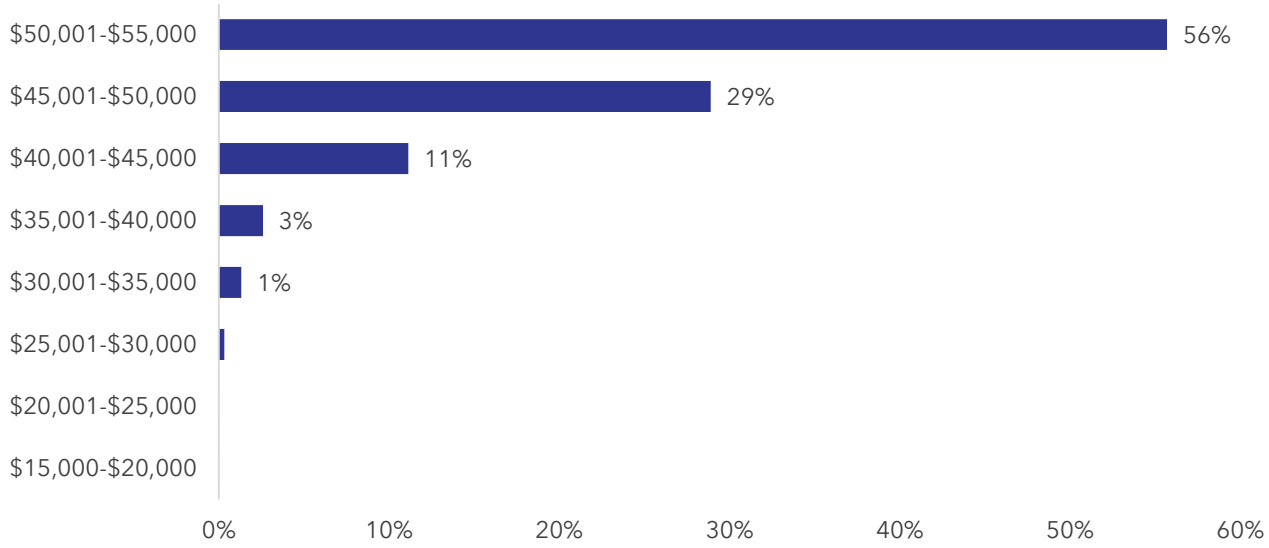
| Eligible Vehicle Model | Registered in MA | Rebated by MOR-EV | Participation Rate |
|---|---|---|---|
| Subaru Solterra | 468 | 396 | 84.6% |
| Kia Niro EV | 431 | 269 | 62.4% |
| Hyundai IONIQ 6 | 410 | 284 | 69.3% |
| Kia EV6 | 405 | 211 | 52.1% |
| BMW i4 | 392 | 18 | 4.6% |
| Nissan Ariya | 338 | 237 | 70.1% |
| Chevrolet Blazer EV | 304 | 226 | 74.3% |
| Tesla Model X | 281 | 0 | 0% |
| Tesla Model S | 180 | 0 | 0% |
| Hyundai Kona Electric | 161 | 135 | 83.9% |
| Audi Q4 e-tron | 155 | 0 | 0% |
| Nissan LEAF | 132 | 119 | 90.2% |

There are many reasons why an eligible vehicle may not have received a rebate including, but not limited to, lack of awareness, certain vehicle trims may have pushed the vehicle above the price cap, administrative burden, buyers who do not consider the incentive worth the time and effort to apply.

### Vehicle Price (MOR-EV Standard)

The average total MSRP for eligible new vehicles was $49,170. As detailed in Figure 4**Error! Reference source not found.**, over half of MOR-EV Standard rebates (56%) were issued to vehicles with a total MSRP between $50,000 and $55,000. This is similar to the 57% Standard rebates issued during the 2023 reporting timeframe with a total MSRP between $50,000 and $55,000. During the 2024 reporting period, 58% of Standard rebates issued were for new vehicle purchases and 42% were for leases.

**Figure 4: Vehicle Price Distribution (MOR-EV Standard Rebates)**




## Application Pathway (MOR-EV Standard)

Dealership point-of-sale applications[7] accounted for 88% of Standard rebates issued in 2024, compared to just over 80% in 2023. Approximately 12% of Standard rebates were issued directly to applicants through the post-purchase application pathway. Rebates redeemed through 305 participating dealers (as of August 2025) were predominantly from Tesla dealerships, which issued 72% of all Standard point-of-sale rebates.

### *MOR-EV Used*

The Used rebate was available through post-purchase applications or at a participating dealership with presentation of an approved prequalification voucher. To be eligible for a Used rebate, applicants must participate in a state or federal income-based assistance program or meet certain income thresholds.

## Program Qualification (MOR-EV Used)

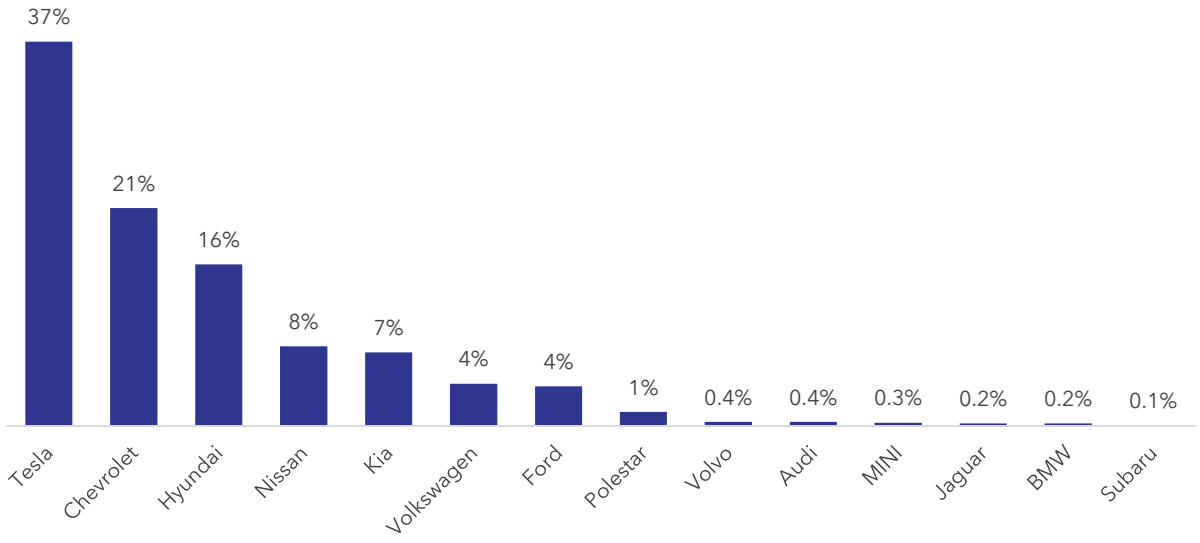
Approximately 32% of Used rebate recipients in 2024 were eligible based on participation in another income-based assistance program and around 68% were eligible based on household income (HHI). In comparison, in 2023, 70% of MOR-EV Used applicants qualified for the rebate based on HHI.

[7] As of August 2025, there are 305 participating dealerships that offer MOR-EV rebates, representing 22 automotive brands.

## Vehicle Characteristics (MOR-EV Used)

Unlike the new vehicle program, where rebate distribution is more concentrated among a few models, the Used program shows a broader distribution of rebates across various models (see Figure 5). This broader distribution may be attributed to the diversity of the used vehicle market and the availability of inventory.

**Figure 5: Vehicle Manufacturer Distribution (MOR-EV Used Rebates)**




Used vehicle ages ranged from 2–11 years old (see Table 3), with an average age of 4 years old, based on model year, at the time of application.

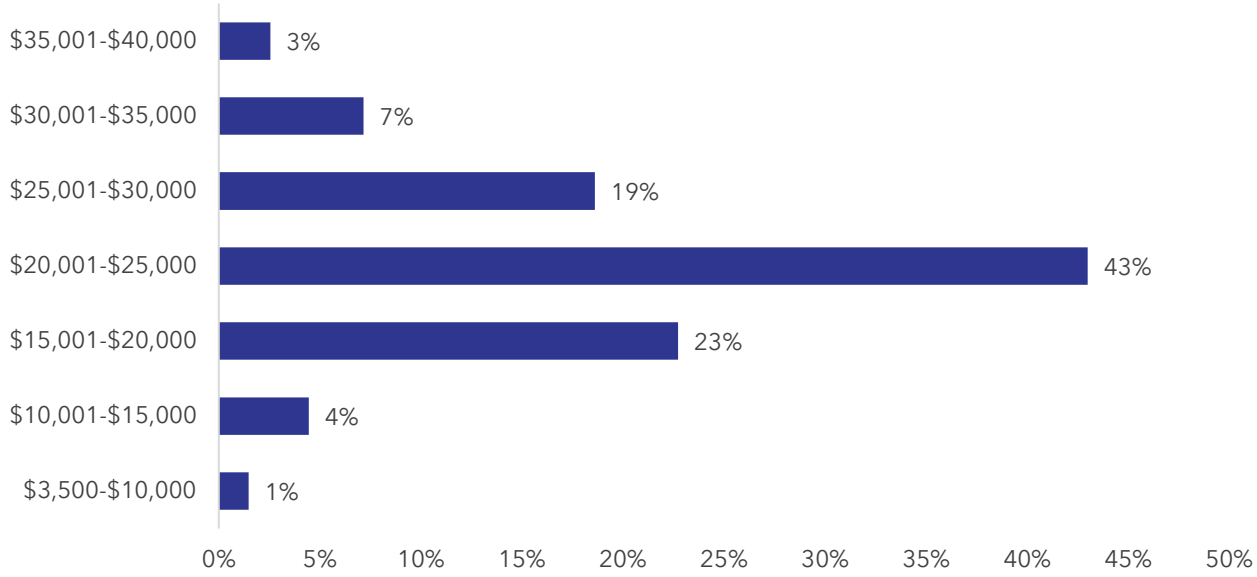
**Table 3: Vehicle Age Distribution (MOR-EV Used Rebates)**

| Model Years | 2023 | 2024 |
|---|---|---|
| 2020-2023 | 65% | 81% |
| 2017-2019 | 33% | 16% |
| 2016 or older | 1% | 3% |

## Vehicle Price (MOR-EV Used)

The average used vehicle purchase price was $23,300; individual vehicle prices ranged between $3,900 and the maximum of $40,000, as shown in Figure 6. Most used vehicles (66%) were sold within the purchase price range of $15,000 to $25,000, which was the same in 2023.

**Figure 6: Vehicle Price Distribution (MOR-EV Used Rebates)**




### Application Pathway (MOR-EV Used)

Dealership point-of-sale applications accounted for 46% of Used rebates issued and the remaining 54% were issued to approved applicants after the vehicle purchase or lease date.

### *MOR-EV+*

The MOR-EV+ rebate adder is limited to income-qualifying Massachusetts residents and can be combined with a Standard, Used, or Trucks[8] rebate. MOR-EV+ was available through post-purchase applications or at a participating dealership with the presentation of an approved prequalification voucher.

### Program Qualification (MOR-EV+)

Of the 1,466 MOR-EV+ recipients, 38% qualified through MassHealth, 28% through the Massachusetts Health Connector, and 21% through the Supplemental Nutrition Assistance Program (SNAP); these relative proportions have not changed significantly since 2023. The remaining 12% of applicants qualified through various other programs, as detailed in Table 4.

[8] Only 12 MOR-EV+ adders were issued in combination with Trucks rebates in 2024 and have been excluded from this analysis.

**Table 4: Applicant Income Qualification by Program (MOR-EV+)**

| | |
|---|---|
| MassHealth | 38% |
| Massachusetts Health Connector | 28% |
| Supplemental Nutrition Assistance Program (SNAP) | 21% |
| Low-Income Home Energy Assistance Program (LIHEAP) | 4% |
| Mass Save® Income Eligible Programs | 4% |
| Massachusetts Health Safety Net | 3% |
| Supplemental Security Income (SSI) | 1% |

### Vehicle Characteristics (MOR-EV+)

In the first five months of offering the MOR-EV+ rebate adder (August to December 2023), the issuance of the adder was distributed relatively evenly between new and used vehicles with a slightly higher proportion of new vehicles. In 2024, the program trends skewed toward more used vehicles: specifically, 64% MOR-EV+ adders were issued in combination with a Used rebate, while 36% were issued in combination with a Standard rebate.

#### *MOR-EV Trade-In*

To qualify for the Trade-In adder, the associated ICEV[9] needed to be at least 12 years old based on the model year at the time of trade-in, have a market value greater than $0 as demonstrated by its trade-in value, and be up to date on inspections, among other criteria.

There were 387 Trade-In rebate adders issued during the reporting period. Of these, 292 (75%) were provided in combination with a Standard rebate; 72 (19%) with a Used rebate; and 23 (6%) Trade-In adders were combined with the MOR-EV+ adder *and* a Standard or Used rebate (representing a total rebate for that applicant of $6,000).

## MOR-EV Trucks

MOR-EV Trucks incentivizes purchases and leases of light-duty pickup trucks and other Class 2b vehicles like SUVs and vans. Rebates are available for both individual and fleet purchases and leases but can only be claimed through the post-purchase application pathway.

[9] An internal DOER analysis of rebated ICEVs between the launch of the Trade-in Adder in December 2023 and May 2025 suggested that approximately 40% are still registered in Massachusetts.

As shown in Figure 7, vehicles for individual use comprised most of the rebates issued during the reporting period. The most popular models rebated through the program are shown in Figure 8.

**Figure 7: Vehicle & Applicant Type Distribution (MOR-EV Trucks)**

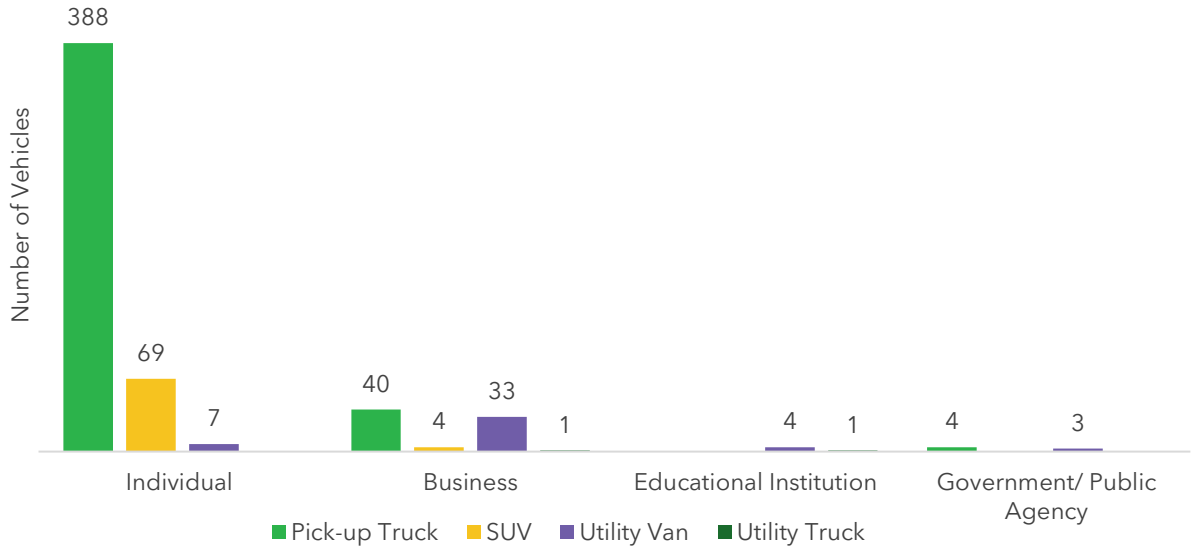
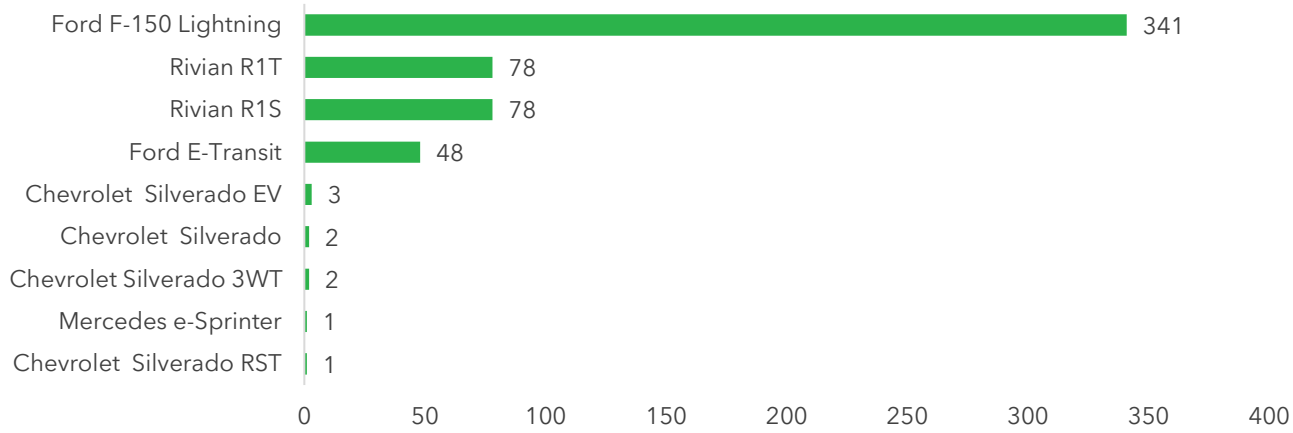



**Figure 8: Vehicle Model Distribution (MOR-EV Trucks)**

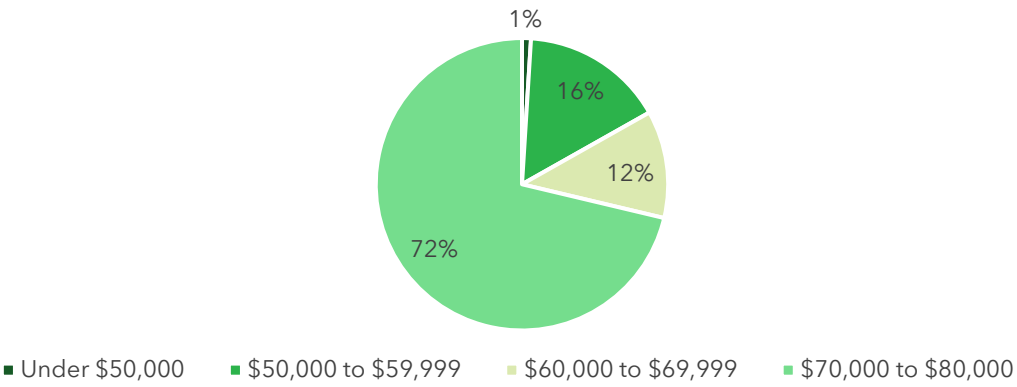



## Vehicle Price

Figure 9 illustrates that during the reporting period, most of the rebated pickup trucks and Class 2b ZEVs fell into the $70,000-$80,000 total MSRP range. However, this

distribution was expected given that the pricing for pickup trucks in 2024 was still relatively high[10] compared to ICEV counterparts.

**Figure 9: Vehicle Price Distribution (MOR-EV Trucks)**




## Dealership Engagement

CSE partnered with the Massachusetts-based organization Energy New England (ENE) again this reporting period to support dealer engagement and continued education. ENE utilized its expansive auto dealer network and local outreach channels to enroll Massachusetts dealers in the point-of-sale program and provide on-demand dealer support during the reporting period. Throughout the program year, MOR-EV hosted 33 large dealership webinars covering program details, applicant eligibility, and vehicle requirements, and assisted over 250 dealer staff with the dealership application process.

In addition to online support, ENE advanced the MOR-EV program through in-person outreach. ENE representatives visited dealerships upon request to discuss the benefits of the MOR-EV program and ensure program education by providing dealer training, answering dealer inquiries, and delivering marketing materials for display. To support broader program education and outreach, ENE staffed tables at several events[11] to share information about the MOR-EV rebate programs with the public.

---

[10] For example, the Model Year 2024 starting MSRPs for the all-electric Ford F-150 Lighting and Rivian R1T were $55,000 and $71,700 respectively, compared to the starting MSRP of $36,570 for a Ford F-150.
[11] In-person events (and approximate number of attendees): Mass. Independent Auto Dealer Association MIADA event (150), Westborough Sustainability Event (70), Salem Kicks Gas (240), Recharge America

## Culturally Competent Outreach

In 2024, MOR-EV continued to support a linguistically diverse and culturally competent outreach campaign. The culturally competent outreach campaign is designed to ensure that all communities across Massachusetts have equitable access to information about EVs and rebates. Recognizing that trust and familiarity are essential to effective outreach, the program relies on close collaboration with local community-based organizations (CBOs) to reach residents where they live, work, and gather.

The Green Energy Consumers Alliance (GECA) continued its role as the core MOR-EV partner for 2024, serving as the CBO aggregator and leading on-the-ground efforts of the culturally competent outreach campaign.

Over the course of the reporting year, GECA and the CSE Equity Team led the efforts to connect MOR-EV with more than 45 organizations, expanding the MOR-EV outreach network to communities across Boston, Lowell, Worcester, Springfield, Pittsfield, and New Bedford. While many organizations expressed enthusiasm for supporting the program, real-world challenges such as scheduling constraints and limited staff capacity often made formal participation difficult. Even so, several CBOs became active partners; Table 5 lists the 2024 CBO partners.

The community partners helped share information through community events, town halls, and online sessions. At these events, GECA and the CBOs presented EV basics (EV 101) and MOR-EV program details while local EV ambassadors brought the material to life by sharing their own experiences driving electric vehicles. These personal stories helped dispel the perception that EVs are out of reach and created space for attendees to ask candid questions.

**Table 5: 2024 MOR-EV Community Partners**

| Community-Based Organization Name | Location |
|---|---|
| Allston Brighton Health Collaborative (ABHC) | Boston |
| Alternatives for Community & Environment (ACE) | Boston |
| Berkshire Regional Planning Commission (BRPC) | Pittsfield |
| Coalition for a Better Acre (CBA) | Lowell |

Berkshires (100), Sustainable Plymouth Car Show & EV Workshop (100), Longwood Boston (100), Get Charged Up Regional EV Expo (100), Holyoke Gas & Electric Event (150), Westfield Big Rig and Pumpkin Fest (300), Recharging Careers and a Clean Energy Future for Western Mass (100), Hingham EV Ride & Drive (50), Mass. State Auto Dealers Association (MSADA) 2024 Annual Meeting (200), Ride Clean Mass kickoff (50), and Mass Fleet Advisor Vehicle Showcase (40).

| Community-Based Organization Name | Location |
|---|---|
| Codman Square Neighborhood Development Corporation (CSNDC) | Boston |
| Quincy Asian Resources, Inc. (QARI) | Quincy |
| Westside Legends | Pittsfield |

GECA also expanded the campaign's reach through statewide engagement. During the reporting period, nine EV 101 webinars were hosted online, offering interactive Q&A sessions that made information more accessible and approachable to a wide audience. Local CBO partners such as QARI provided MOR-EV outreach information for attendees at their annual Lunar New Year's Festival and the August Moon Festival and provided EV 101 presentations in-language to their Vietnamese and Chinese community members. Additionally, Westside Legends in Pittsfield provided community outreach through interactive events such as their Annual Soap Box Derby. In total, GECA and the other CBOs attended 23 community events where program staff distributed flyers, answered questions, and held more than 460 one-on-one conversations with residents about MOR-EV and electric vehicles. These direct interactions provided valuable insight into the concerns and motivations of community members and informed future outreach approaches.

GECA and CSE tailored outreach materials and social media posts to reflect the needs of each community. GECA and the CBOs amplified these efforts through their digital platforms, newsletters, and blog posts, ensuring that information about MOR-EV rebates reached both local networks and statewide audiences.

The conversations, engagement, and partnerships fostered through this outreach campaign have laid a strong foundation for a more inclusive approach to EV adoption. By meeting communities where they are and centering their voices, MOR-EV continues to grow into a program that not only expands rebate access but also strengthens trust and long-term engagement across Massachusetts.

Finally, DOER hosted a series of community-based listening sessions, in partnership with CSE and GECA. These sessions created space for CBOs working to share feedback on barriers to EV adoption, charging infrastructure gaps, and fleet electrification needs:

- In February 2024, DOER held two feedback sessions to specifically explore fleet electrification needs.[12]

[12] Representatives from the following organizations participated in the February 2024 fleet electrification outreach sessions: Making Opportunity Count (MOC), Green Energy Consumers Alliance, Quincy Asian Resources, Worcester Roots, and Westside Legends.

- Another session in November 2024 focused on general program feedback and equity concerns.[13]

These conversations highlighted the importance of adequate infrastructure that supports not just individual drivers but also ride-share and community fleets, and accessible rebate information, particularly for multilingual communities. Feedback from these types of sessions informs ongoing improvements to the MOR-EV program and broader equity strategies.

# Section III. Demographic Analysis

DOER does not collect race, ethnicity, and income level data for all MOR-EV rebate recipients. The following section provides a summary of limited voluntary and anonymous post-rebate survey data that includes demographic information about some program participants.

Through the MOR-EV program administrator, rebate recipients are invited to voluntarily participate in an anonymous online survey upon approval of their application and again when they receive notification that their rebate check has been sent. For rebates issued at the point of sale or lease, the participating dealership must enter a customer email address, which is later used to send the survey to the rebate recipient. The surveys take approximately 10-15 minutes to complete. Respondents have the option to save their progress and resume the survey later if desired.

## Survey Participation Rate

Table 6and Table 7 below illustrate the relative proportion of rebate recipients who have responded to the surveys over time. It appears likely that the growing segment of point-of-sale rebates since 2023 has impacted the LDV rebate survey response rate. Since many recipients do not have direct engagement with MOR-EV, they may be less likely to complete the survey. In 2024, the survey was conducted with MOR-EV Trucks rebate recipients for the first time; the Trucks survey participation rate was much higher, further suggesting that post-purchase applicants are more likely to engage with the program than point-of-sale applicants.

[13] Representatives from the following organizations participated in the November 2024 feedback session: Green Energy Consumers Alliance, All In Energy, and Solsis Energy.

**Table 6: MOR-EV Light-Duty Vehicle Survey Participation Rates, 2014-2024**

| Survey Year | Total number of survey respondents | Total number of rebate recipients[14] | Percentage of rebate recipients that responded to survey |
|---|---|---|---|
| 2014 | 342 | 528 | 65% |
| 2015 | 603 | 985 | 61% |
| 2016 | 846 | 1,643 | 51% |
| 2017 | 1,515 | 3,037 | 50% |
| 2018 | 2,654 | 5,944 | 45% |
| 2019 | 1,645 | 3,277 | 50% |
| 2020 | 1,071 | 2,534 | 42% |
| 2021 | 1,946 | 5,374 | 36% |
| 2022 | 1,125 | 3,742 | 30% |
| 2023 | 1,691 | 10,480 | 16% |
| 2024 | 4,463 | 18,291 | 24% |

**Table 7: MOR-EV Trucks Survey Participation Rate, 2024[15]**

| Survey Year | Total number of survey respondents | Total number of rebate recipients | Percentage of rebate recipients that responded to survey |
|---|---|---|---|
| 2024 | 284 | 423 | 67% |

## Survey Data: Household Income Analysis

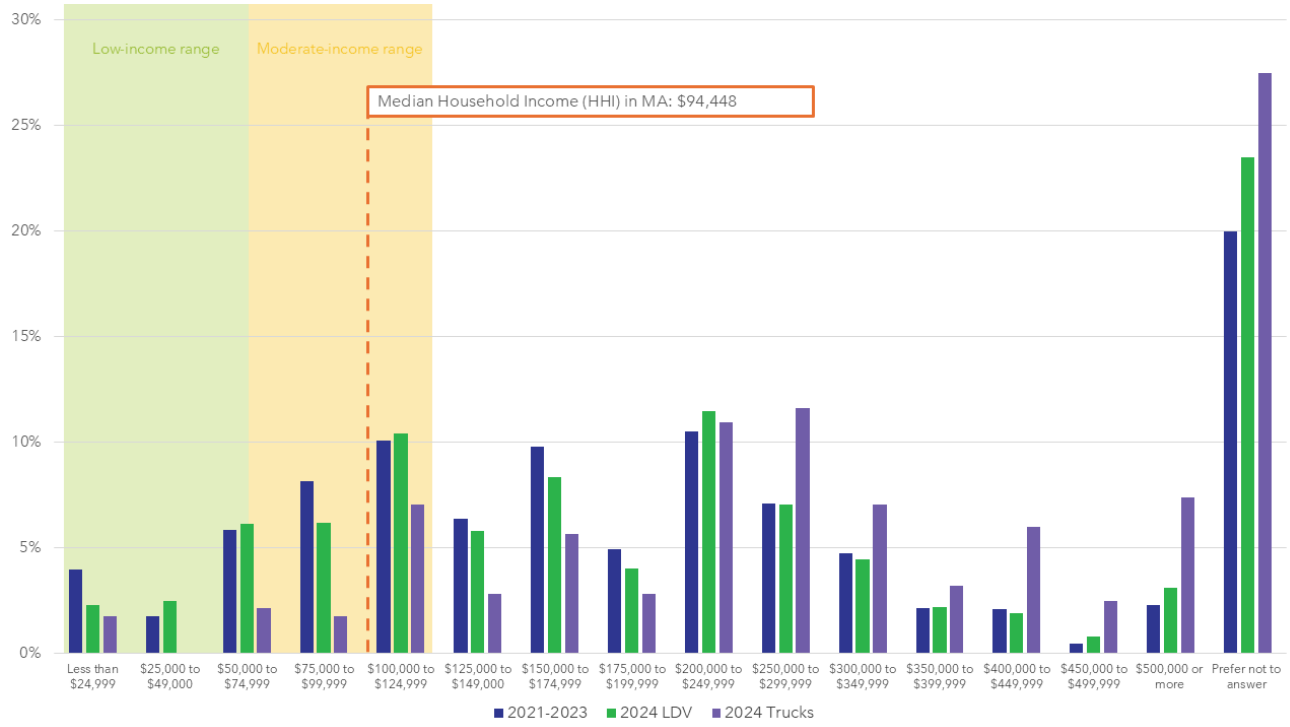
The State Median Household Income (State Median HHI) in Massachusetts is $94,488[16]. Figure 10 illustrates the self-reported income distribution of 2024 survey respondents compared to the previous survey years.

There was some deviation between the reported HHI in 2021–2023 versus 2024 among LDV survey respondents. Between 2021 and 2023, 61% of survey respondents reported HHI above the State Median HHI; in 2024, it was 75% of respondents.

[14] Includes MOR-EV rebates issued for zero emission motorcycles, PHEVs, extended range PHEVs, BEVs, and FCEVs.
[15] Individual recipients only; fleets are not included in the analysis.
[16] U.S. Census. 2024. Massachusetts – Income and Poverty. Massachusetts - Census Bureau Profile.

The 2024 MOR-EV Trucks survey results indicated that the pickup truck rebate recipient group is potentially comprised of higher income earners than the LDV group, with an average annual HHI of $281,600, versus an average HHI of $194,500 for light-duty rebate recipients in 2024.

**Figure 10: Annual Household Income of Survey Respondents**




Approximately 26% of 2024 survey respondents could be considered low- or moderate-income[17] based on reported annual HHI. This result is nearly identical to other recent survey years as shown in Table 8: Percentage of Light-Duty Vehicle Survey Respondents Considered Low- to Moderate-IncomeTable 8.

**Table 8: Percentage of Light-Duty Vehicle Survey Respondents Considered Low- to Moderate-Income**

| Percent of Total LDV Survey Respondents | 2021-2023 | 2024 |
|---|---|---|
| Low-income (≤$56,700) | 8% | 9% |
| Moderate-income (≥$56,701 and ≤$113,500) | 18% | 17% |

[17] EEA OEJE focuses on advancing environmental justice and equity for low-and moderate-income populations and has defined low-income as less than or equal to 60% of State Median HHI and moderate income as 61%-120% of State Median HHI.

*Survey Respondent Income Compared to National Average Income of EV Buyers*

The *2023 Car Buyer Journey Study* by Cox Automotive provides insight into how income corresponds to ICEV and EV purchases at the national level.

**Figure 11: National Household Income of Car Buyers**

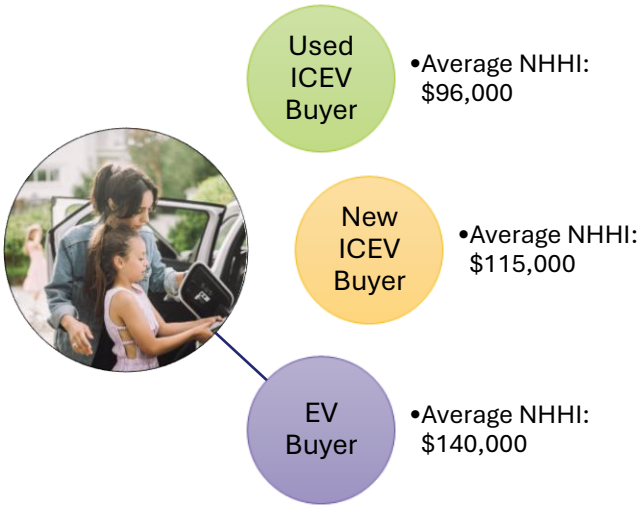



Figure 11 illustrates the average National Household Income (NHHI) of vehicle buyers based on the vehicle type per the 2023 Cox Automotive study results.

According to 2024 MOR-EV survey data, 46% of respondents reported having a HHI of $140,000 or greater, which is the average NHHI for an EV buyer.

*Survey Respondent Income Compared to Federal EV Tax Credit Thresholds*

The income-based thresholds to qualify for the federal New Clean Vehicle Tax Credit[18] in 2024 were as follows:

- $300,000 for married couples filing jointly or a surviving spouse.
- $225,000 for heads of households.
- $150,000 for all other filers.

When requesting HHI values, the MOR-EV survey does not capture whether respondents have filed taxes or applied for federal tax credits, whether taxes were filed jointly or as head of household, etc. However, using 2024 survey data, 33% of respondents reported an annual HHI of $150,000 or less and 64% of respondents reported an HHI of $300,000 or less.

## Survey Data: Racial Identity Analysis

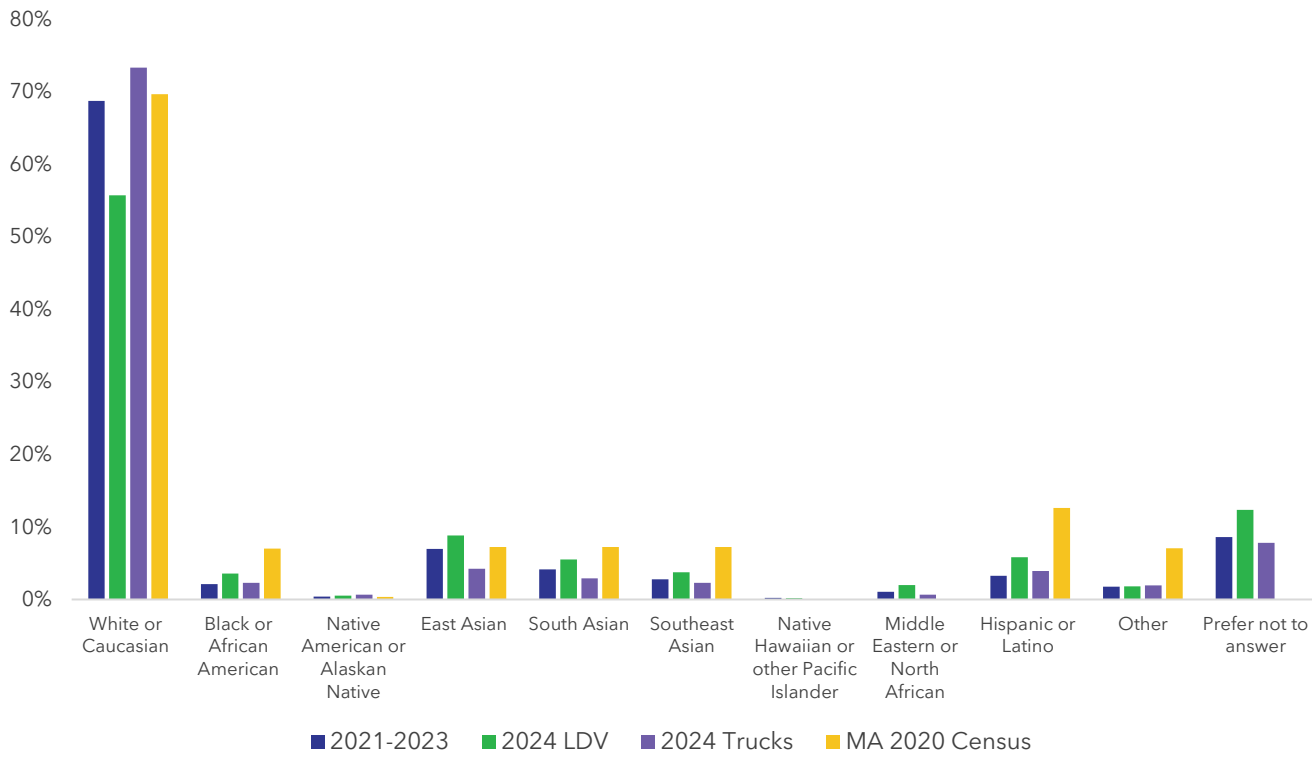
The options available for individuals to identify their race in the MOR-EV surveys expand beyond the races and ethnicities defined by the U.S. Census Bureau;

[18] https://www.irs.gov/credits-deductions/credits-for-new-clean-vehicles-purchased-in-2023-or-after.

specifically, the survey separates Asian identities and includes a category specifically for Middle Eastern and North African identities, which the 2020 U.S. Census data does not. Additionally, the Census reports that people identifying as Asian make up 7% of Massachusetts' total ethnic composition; therefore, 7% is used as the 2020 Massachusetts Census value across all three Asian sub-ethnicities from the survey due to a lack of detailed state-level data.

The survey results illustrated in Figure 12 suggest that Black or African American and Hispanic or Latino residents are still underrepresented among the responses compared to the overall racial composition of the state. Groups where the survey indicates potentially greater program participation versus the respective statewide representation include pickup truck rebate recipients identifying as White or Caucasian and LDV rebate recipients who identify as East Asian.

**Figure 12: Racial Identity of Survey Respondents versus 2020 Massachusetts Census Data**



# Section IV. Recommendations to Reduce Disparities in Program Participation

## 2023 Follow-up

Following the 2023 MOR-EV Report release, DOER implemented the following recommendations contained therein:

- DOER identified improvements to the voluntary survey data process, including adding new survey questions and revising existing questions.

- DOER is engaging with the state's investor-owned utilities to identify opportunities for cross-promotion of income-based Mass Save® programs and the MOR-EV+ and Used offerings. In addition, DOER and MassCEC actively cross-promote key transportation programs and pilots that overlap with MOR-EV objectives, including but not limited to the new Ride Clean Mass program for ride share and taxi drivers and the Mass Fleet Advisor program that provides businesses and non-profits with free technical consultations for developing fleet electrification plans.
- As of the 2024 report release, DOER is exploring potential near-term strategies to cost-effectively manage the availability of program funding while also meeting the Commonwealth's clean transportation and equity goals that could be facilitated through an amendment to the current MOR-EV program regulation, 225 CMR 26.00.

## 2024 Recommendations

Statute establishes much of the MOR-EV program and may require legislative action for sweeping structural changes and/or additional funding. The Massachusetts state legislature authorized funding into fiscal year 2027, however it is unclear how long this funding will be available to maintain program operations, which will be dependent on rebate volume, program changes, other incentives, etc.

There are still questions about projected program impacts, particularly the implications of the retirement of the federal EV tax credit in September 2025 and the extent to which MOR-EV rebates influence or will continue to influence ZEV adoption. In the interim, DOER will consider implementation of recommendations that aim to strategically target rebate spending in certain market segments and reduce program free ridership. These potential actions include:

- Introduce program changes through regulations to help extend the program's financial solvency to further support the Commonwealth's equitable clean transportation goals. This may include reducing the vehicle price cap for certain rebates, simplifying the program to reduce confusion and burden on applicants, diverting more funding to fleets versus individuals in the medium- and heavy-duty categories, and broadening eligibility for MOR-EV+ to include moderate-income as well as low-income residents.
- Improve access to information for MOR-EV applicants and potential applicants, such as incorporating more educational resources on the MOR-EV landing page (e.g., benefits of EVs, types of charging and best practices) and having the program administrator conduct more proactive outreach to applicants about home EV charging incentives based on their utility provider.
- Incorporate community feedback provided to DOER and/or the MOR-EV program administrator with regards to barriers to entry for EV adoption when such recommendations can be addressed within the scope of the MOR-EV program and DOER's authority.
- Continue to work and collaborate with community partners to provide information, tools, and resources for the public, including Limited English Proficiency Speakers (LEPs).

# Appendix: MOR-EV Data

## Report Data

Historic and calendar year 2024 data for the following categories are available in accordance with the requirements of the 2022 Climate Act.

https://www.mass.gov/doc/calendar-year-2024-legislative-mor-ev-report-appendix/download

1. Total number and value of light-duty BEV rebates issued
2. Light-duty BEV rebates issued by zip code
3. Light-duty BEV rebates issued by municipality
4. Rebates issued by vehicle type and weight
5. Light-duty BEV rebates issued by vehicle make
6. Light-duty BEV rebates issued by vehicle model
7. Light-duty BEV rebates issued by applicant type
8. Light-duty BEV rebates issued by program

## Raw Data

Annual MOR-EV data is posted online by DOER and is available to download:

https://www.mass.gov/info-details/mor-ev-rebate-program#additional-information

## Data Dashboards

The MOR-EV website has two online dashboards that can be filtered and provide data visualizations. The data populating these dashboards can also be downloaded.

- Light-duty rebates: https://mor-ev.org/statistics
- Trucks and Class 3-8 rebates: https://mor-ev.org/statistics-trucks