

# 2023 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

Massachusetts Department of Energy Resources | September 30, 2024

# Table of Contents

Glossary	. 1
Introduction	2
Overview of MOR-EV Program 2014-2022	3
MOR-EV in 2023	4
2023 Program Overview: Light-duty Vehicles	5
MOR-EV Standard	6
MOR-EV Used	9
MOR-EV+	11
MOR-EV Trade-In	13
Culturally Competent Outreach	4
Demographic Program Participation Analyses	5
Voluntary, anonymous Demographic Survey Data	15
Results of Survey Data Analysis1	6
Environmental Justice Populations	2
State EJ Population Analysis: Municipality2	2
State EJ Population Analysis: Vehicle Registration Address	3
LIDAC Populations	3
Results of LIDAC Analysis2	4
Recommendations	4
Appendices2	6
Acknowledgements	71

# Glossary

AGHI	Annual gross household income
AGI	Adjusted gross income
BEV	Battery electric vehicle
СВО	Community-based organization
CSE	Center for Sustainable Energy

CUV	Crossover utility vehicle
DOER	Department of Energy Resources
EJ	Environmental justice
EV	Electric vehicle
FCEV	Fuel cell electric vehicle
GECA	Green Energy Consumers Alliance
GHG	Greenhouse gas
ICEV	Internal combustion engine vehicle
LIDAC	Low-income or disadvantaged community
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

### 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). Overseen by the Department of Energy Resources (DOER) and implemented by a third-party program administrator, MOR-EV provides incentives to residents, businesses, non-profits, and public entities to electrify light-, medium-, and heavy-duty vehicles.

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. In early 2023, DOER established a culturally competent outreach campaign, which is print accessible and accessible to English language learners, to inform dealers, vehicle salespeople, consumers and businesses in underserved communities, communities with high percentages of low-income households and communities with high proportions of high emissions vehicles about the MOR-EV programs and incentives. In addition, MOR-EV provides additional rebate funding to medium- and heavy-duty vehicles that operate in Environmental Justice Communities to further minimize air pollution impacts in those areas.

The underlying objectives of MOR-EV include:

- increasing consumer awareness and adoption of ZEVs
- increasing consideration of ZEVs in vehicle purchase/lease decisions
- reducing greenhouse gas (GHG) emissions of the transportation sector
- improving air quality and associated health benefits
- enhancing vehicle fuel diversity and security
- promoting economic growth

This report addresses the directive from the 2022 Act Driving Clean Energy and Offshore Wind<sup>1</sup> that requires DOER to provide annual reporting on the MOR-EV program as follows:

"The report shall include an analysis of the programs established in this section including, but not limited to, by examining historic and present participation of low-income and moderate-income households, examining participation among demographic groups, including data by race and ethnicity, and recommending strategies and investments to reduce or eliminate any disparities in program participation; provided, however, that, every 3 years, the report shall also examine the cost-effectiveness of the programs in reducing greenhouse gas emissions, using recent multi-year data." (source)

As 2023 is the first reporting year, it should be noted that many of the program changes enabled by the 2022 Act were not implemented until later in the calendar year; see section titled "MOR-EV in 2023" for further details.

# Overview of MOR-EV Program 2014-2022

Between 2014-2022, 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 on the various phases of the program are included below.

**Phase 1**, from June 2014 until January 2016, included rebates of \$2,500 for BEVs (including cars, CUVs, SUVs, and pick-up trucks), PHEVs with an onboard battery size of 15 kWh or more (referred to as PHEV Plus), and fuel cell electric vehicles (FCEV). 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,** from February 2016 through December 2018, continued the rebate levels from Phase 1 for vehicles with a manufacturer's suggested retail price (MSRP) of less than \$60,000. Vehicles with a MSRP greater than or equal to \$60,000 received a reduced rebate of \$1,000.

**Phase 3**, from January through September 2019, reduced the rebates from \$2,500 to \$1,500 for BEVs and FCEVs, and from \$750 to \$450 for ZEMs; it eliminated all rebates for PHEVs. The program did not provide rebates for any vehicles with a MSRP of \$50,000 or higher. MOR-EV was

<sup>&</sup>lt;sup>1</sup> M.G.L. c. 25A, § 19; St. 2022, c. 126, § 123.

then 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, although these participants are all considered free riders in the analysis because they made the purchase decision with the understanding no rebate was available.

**Phase 4**, from January through December 2020, 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 based on 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**, from January 2021 through June 2023, MOR-EV rebates were available for the purchase or lease of BEVs, FCEVs, and eligible PHEVs. In 2021, the MOR-EV Program 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. Starting November 10, 2022, the rebate amount for BEVs and FCEVs increased to \$3,500; there were no changes made to the PHEV rebate amount in 2022. Throughout 2021, the vehicle purchase price cap was set by statute as \$50,000 for any eligible vehicle type. In 2021, fleets were limited to a maximum of ten rebates per calendar year, but this cap was removed in 2022.

During this period, the Commonwealth also passed the 2022 Act Driving Clean Energy and Offshore Wind, which required several changes to MOR-EV to be phased in during the following year. The first change was that the vehicle price cap be increased to \$55,000 for BEVs and FCEVs that were purchased on or after November 10, 2022; in addition, the rebate amount increased to \$3,500 for BEV and FCEV rebate applications that were approved on or after this date.

#### MOR-EV in 2023

Due to the new climate legislation in 2022, the program underwent another overhaul, with most changes phased in during 2023. These changes included the removal of PHEVs from the program (since the legislation defined ZEVs as those that produce "no engine exhaust carbon emissions"), an additional rebate for income-qualifying residents, and rebates for used vehicles. To distinguish among the various rebate offerings, the rebate for new light-duty ZEV purchases or leases is now referred to MOR-EV Standard. Infographic 1 below illustrates the rebate offerings that were active in 2023, the relative incentive value, available method(s) of securing a rebate, and any associated restrictions to participation.

Infographic 1: MOR-EV Rebates Available in 2023

#### Standard

- \$3,500
- · Point of sale or post-purchase
- Open to all MA residents, businesses, and nonprofits

#### Used

- \$3,500 · Point of sale\* or
- post-purchase Open to MA residents who meet federal used EV tax credit income threshold or participate in a

state/federal

assistance

program

income-based

#### MOR-EV+

- \$1,500 adder to Standard, Used, or Trucks
- · Point of sale\* or post-purchase Open to MA
- residents who participate in a state/federal income-based assistance program

#### Trade-in

- \$1,000 adder to Standard, Used, MOR-EV+
- Post-purchase
- Open to MA residents who trade in a qualifying internal combustion engine vehicle when acquiring a ZEV

#### Trucks

- \$7,500 · Post-purchase
- · Open to all MA residents, businesses, nonprofits, and public entities

#### Class 3-8

- \$15,000-\$90,000
- · Post-purchase but rebate must be reserved in advance
- Open to all MA residents, businesses, nonprofits, and public entities

\*With an approved prequalification voucher

The first program modification in 2023 was to institute that PHEVs were no longer eligible under MOR-EV Standard. 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, and no further rebate applications for PHEVs were accepted after September 28, 2023.

Next, the MOR-EV Used program launched, offering a rebate of \$3,500 for the purchase or lease of eligible used vehicles and the MOR-EV+ low-income rebate adder become available, providing an additional rebate of \$1,500 is available to income-qualifying Massachusetts residents. Both rebate programs were launched on August 8, 2023. Also as of August 8, 2023, the MOR-EV Standard, Used, and MOR-EV+ rebates became available through participating dealerships in the Commonwealth at the point of sale or at the time of lease, with the latter two requiring pre-approval through the MOR-EV program administrator to be redeemed at a participating dealership. Alternatively, applicants are still able to apply to for any of these rebates online within 90 days of the purchase or lease of an eligible vehicle.

And finally in 2023, MOR-EV launched an additional \$1,000 rebate adder for the purchase or lease an eligible EV on or after August 8, 2023, if a qualified internal combustion engine vehicle (ICEV) traded in at that time. This program launched on December 6, 2023, and its annual budget is capped at one percent of the projected, upcoming fiscal year light-duty rebate spending. Applicants can apply for the MOR-EV Trade-In rebate alongside their online application for a MOR-EV Standard, MOR-EV Used or MOR-EV+ application or apply online after having received a MOR-EV rebate at the point-of-sale.

#### 2023 PROGRAM OVERVIEW: LIGHT-DUTY VEHICLES

The following figures and data are from the most recent MOR-EV Annual Report, which covers the period of March 2023 through February 2024. It was prepared by the Center for Sustainable Energy, the entity that administers the program on behalf of DOER. This section focuses on lightduty vehicles only given that they represent most dollars spent/rebates issued historically and during the reporting period.

#### **MOR-EV Standard**

The light-duty rebate program, in particular MOR-EV Standard rebates, continue to be the most active component of the overall program in terms of volume and spending as show in Figure 1.

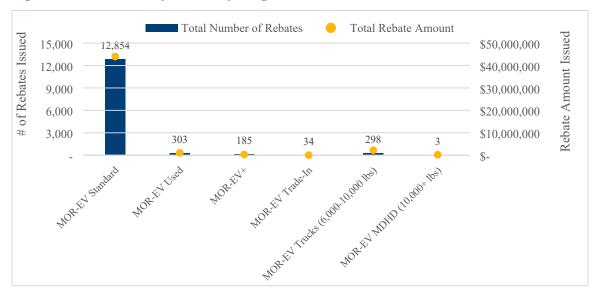


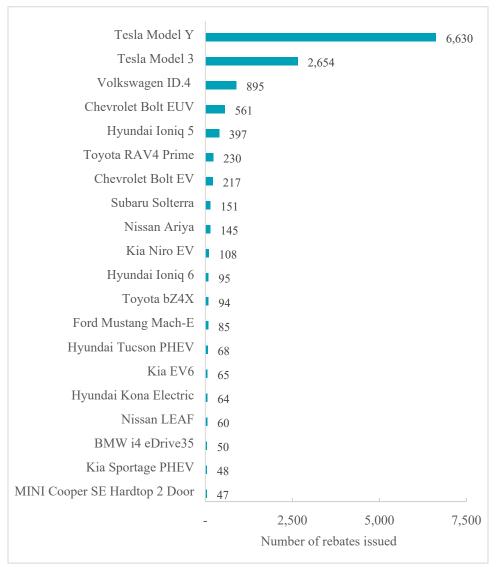
Figure 1: Total Number of Rebates by Program and Amount Issued

S&P Global registration data recorded 19,290 registrations of MOR-EV-eligible vehicles in this time frame.<sup>2</sup> In comparison, the MOR-EV rebate data shows 12,854 approved MOR-EV Standard applications, resulting in an overall program participation rate of 66% for the reporting period. Tesla Model Y had the highest number rebates and highest participation rate (83%). This was a significant increase from prior years due to the Model Y being eligible again. The Tesla Model 3 and Volkswagen ID.4 Pro also had the second and third highest participation rates at 77% and 71%, respectively.

\_.

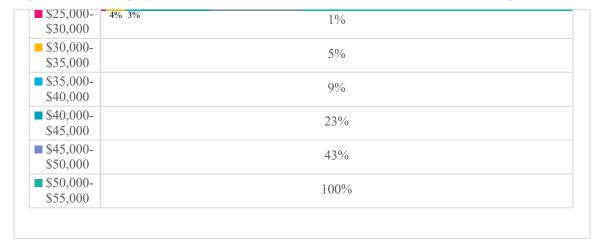
<sup>&</sup>lt;sup>2</sup> The <u>Massachusetts Vehicle Census</u> (MVC) cannot be filtered by specific dates in order to precisely align with the MOR-EV reporting timeframe herein, but for context, the MVC data shows there are 28,692 BEVs registered statewide that are either new or one year-old.





Following the increase in the price cap from \$50,000 to \$55,000 as allowed by the 2022 Act, a significant portion (57%) of MOR-EV Standard rebates were issued to vehicles in the highest eligible price segment, between \$50,000 and \$55,000.

Figure 3: Percentage of MOR-EV Standard Rebates Issued by Total MSRP Price Segment



Within one month of the MOR-EV point-of-sale rebate launch, the volume of applications submitted by participating dealers surpassed that of post-purchase applications and the monthly application volume increased by 6.2% after the point-of-sale launch was initiated. By the end of the reporting period, dealer point-of-sale applications accounted for well over 80% of the total application volume, a trend largely driven by Tesla's participation in the point-of-sale program which was 87%. Among non-Tesla original equipment manufacturers (OEMs), the distribution of point-of-sale versus post-purchase rebates averaged an equal 50/50 split. However, a tendency toward more point-of-sale rebates in the last few months of the reporting period was also evident among traditional brands. As of February 2024, there were 244 participating dealerships, representing 17 automotive brands.

Figure 4: Number of MOR-EV Standard Applications Submitted by Application Pathway



#### MOR-EV Used

The MOR-EV Used rebate became available to income-qualifying Massachusetts residents on August 8, 2023. To qualify for the rebate, individuals must either participate in an eligible income-qualifying program or have a modified adjusted gross income (AGI) that does not exceed \$150,000 for married couples filing jointly or surviving spouses, \$112,500 for heads of households, and \$75,000 for all other filers.

Initially, the rebate was available only through post-purchase applications. However, a prequalification voucher was introduced until August 29, 2023, allowing individuals to submit their qualifying documentation for the MOR-EV program before making a purchase. Upon approval, they received a confirmation voucher to present at a participating dealership to obtain the MOR-EV Used rebate at the point of sale. Over 70% of applicants qualified for the MOR-EV Used rebate based on their AGI, while a combined 22% of applicants qualified through their enrollment in the MassHealth and Massachusetts Health Connector programs.

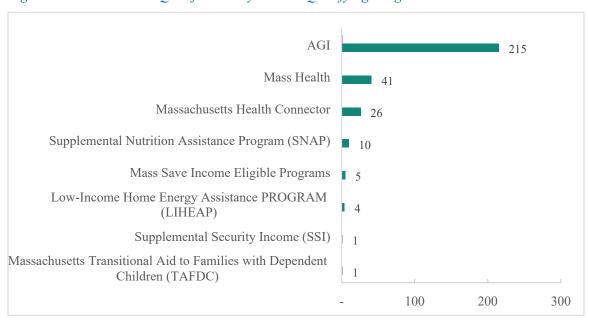


Figure 5: MOR-EV Used Qualification by Income-Qualifying Program or AGI

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. This broader distribution may be attributed to the diversity of the used vehicle market and the availability of inventory.

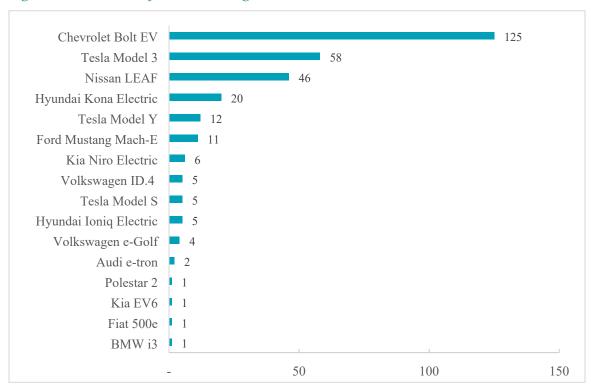


Figure 6: Distribution of Rebates Among Used Vehicle Models

As shown in Figure 7, the majority of used vehicles (66%) were sold within the purchase price range of \$15,000 to \$25,000. A small percentage of applicants (6%) purchased vehicles priced under \$15,000, while the remaining 29% of applicants acquired used vehicles with a final sales price exceeding \$25,000. Regarding vehicle age, 65% of rebated used vehicles were model years 2020 or newer. Vehicles from model years 2017 – 2019 accounted for 33% of the rebates, and only 1% of rebates were awarded to vehicles from model years 2016 and older.

32% 20% 40% 60% 80% 100% 0% Percentage of Rebates Issued per Price Segment ■ Below \$10,000 2% 5% **\$10,000-\$15,000** \$15,000-\$20,000 37% \$20,000-\$25,000 71% \$25,000-\$30,000 84% \$30,000-\$35,000 92% **\$35,000-\$40,000** 100%

Figure 7: Percentage of MOR-EV Used Rebates Issued by Purchase Price Segment

Through extensive dealer outreach and training, many dealers have become more comfortable with the Used rebate, and prequalified rebates quickly gained parity with post-purchase rebates.

#### MOR-EV+

The MOR-EV+ rebate adder for income-qualifying Massachusetts residents was introduced on August 8, 2023, alongside the MOR-EV Used rebate, initially as a post-purchase rebate. As of August 29, 2023, it was also available at the point of sale through a prequalification voucher. To qualify for the MOR-EV+ rebate adder, individuals must provide proof of participation in an eligible income-qualifying program

Of the applicants, 45% qualified through MassHealth, 29% through the Massachusetts Health Connector, and 16% through the Supplemental Nutrition Assistance Program (SNAP). The remaining 10% of applicants qualified through various other programs, as detailed in Figure 8.

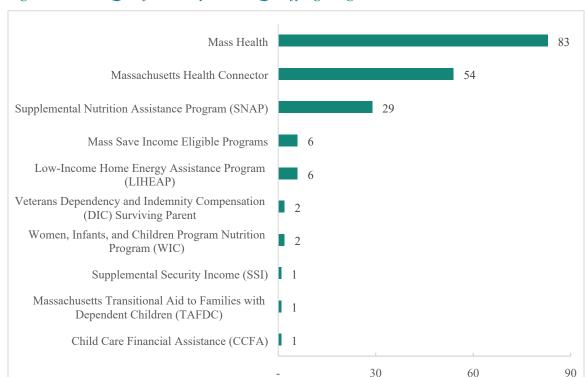


Figure 8: Rebate Qualification by Income-Qualifying Program

The MOR-EV+ rebate adder was distributed fairly evenly between new and used vehicles. Specifically, 53% of qualifying individuals received the adder on the purchase or lease of a new vehicle, while 47% received it in combination with the MOR-EV Used rebate. The average price of a vehicle associated with this rebate adder was \$34,856; see Figure 9 for new versus used pricing.

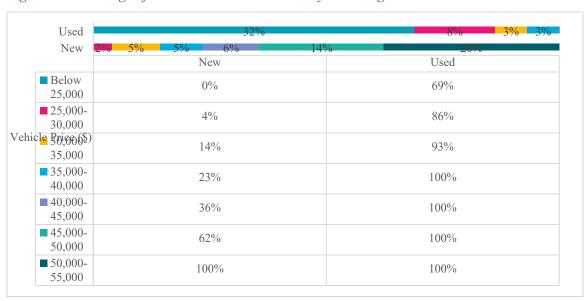


Figure 9: Percentage of MOR-EV+ Rebates Issued by Price Segment and New/Used Status

As of January 2024, a greater number of MOR-EV+ rebate adders are now issued directly by participating dealers compared to those applied for post-purchase.

#### MOR-EV Trade-In

The MOR-EV Trade-In rebate adder was introduced on December 6, 2023. Massachusetts residents who purchased or leased an eligible electric vehicle on or after August 8, 2023, and traded in a qualified internal combustion engine vehicle (ICEV) at that time were eligible for this additional rebate. To qualify for the Trade-In adder, the traded-in ICEV needed to be at least 12 years old based on the model year at the time of trade-in, have a market value demonstrated by its trade-in value, and be up to date on inspections, among other criteria.

Only 34 Trade-In rebates were issued during the MOR-EV Annual Report reporting period; it is assumed that this is primarily due to the stringent eligibility requirements for trade-in vehicles, though dealer awareness may be limited (i.e., dealers cannot offer the trade-in rebate at the point of sale and therefore may be less likely to mention it to customers if they are aware of it). The MOR-EV processing team recorded odometer readings when possible, showing that the average mileage of vehicles at the time of trade-in was 123,454 miles. Out of the 34 MOR-EV Trade-In rebates issued during the reporting period, 30 were provided in combination with a MOR-EV Standard rebate, one with a MOR-EV Used rebate, and one with both a MOR-EV Used and MOR-EV+ rebate adder (representing a total rebate for that customer of \$6,000).

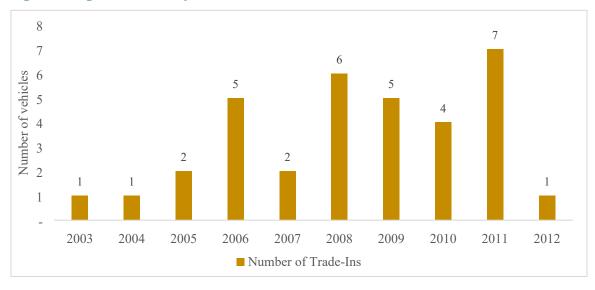


Figure 10: Age Distribution of ICEV Trade-in Vehicles

#### CULTURALLY COMPETENT OUTREACH

In addition to creating new rebate offerings, the 2022 Act prompted the development of a linguistically diverse and culturally competent outreach campaign. This campaign specifically targeted underserved communities, communities with high percentages of low-income households, and communities with high proportions of high-emission vehicles, collectively referred to as "environmental justice communities." Recognizing the need for more than passive education, the

MOR-EV program team sought local partnerships with community-based organizations (CBOs) to develop trusted, effective materials tailored to individual communities. Initially, the Massachusetts Climate Action Network (MCAN) was to serve as a local CBO aggregator and provided valuable guidance in support of the outreach campaign.

CSE then finalized a partnership agreement with Green Energy Consumers Alliance (GECA) to serve as the CBO aggregator and lead the on-the-ground efforts of the culturally competent outreach campaign.

Throughout the program year, GECA engaged with over 45 organizations to expand the outreach network in environmental justice communities. Building partnerships takes time, and while many CBOs expressed interest in supporting the MOR-EV program, timing issues and resource limitations often posed challenges.

Despite these obstacles, several organizations partnered with the MOR-EV program in various capacities. These partners helped spread awareness about the different MOR-EV rebate types among their community members through virtual town halls and in-person events. During these events, GECA had the opportunity to present information about EV 101 and the MOR-EV rebate program, while local EV ambassadors shared their personal experiences with driving electric vehicles. The organizations that partnered with MOR-EV are listed in Figure 11.

Figure 11: Community Partners

CBO 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
Codman Square Neighborhood Development Corporation (CSNDC)	Boston
Quincy Asian Resources, Inc. (QARI)	Quincy
Westside Legends	Pittsfield

The CSE marketing and equity teams supported the culturally competent outreach campaign by gathering feedback from CBOs and tailoring social media posts and outreach materials to resonate with each target community. Additionally, GECA leveraged their strong online presence to host statewide webinars and release social media posts across a variety of platforms. GECA also promoted the MOR-EV program and rebate offerings through their email network and blog posts.

Feedback gathered by GECA from its attendance at various in-person events across the state suggests there are some common, cascading barriers that may be inhibiting EV adoption. First is the perception that EVs are luxury vehicles. Second is the upfront cost, though the magnitude of this barrier largely depends on the individual. Third is the availability of affordable vehicle options, whether new or used. Fourth is EV charging access issues, particularly with rental properties or situations where the resident would need to rely solely on public charging.

# **Demographic Program Participation Analyses**

These analyses cover historical data where available, as compared to calendar year 2023. In future reporting years there will be data that reflects a full year of having new MOR-EV programs in place (used vehicles, point-of-sale, income qualifying rebate adder, and trade-in rebates).

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 post-rebate survey data (that includes some of the requested demographic information) and analyzes a broader swathe of rebate recipients based on the vehicle registration address relative to Environmental Justice and Low-Income and Disadvantaged Communities. These analyses focus on light-duty vehicles only given that they represent most dollars spent/rebates issued historically and during the current reporting period, e.g., in 2023, 93% of issued rebate funds were for light-duty vehicles.

#### VOLUNTARY, ANONYMOUS DEMOGRAPHIC SURVEY DATA

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 most recent iteration of the survey consists of 39 questions and takes approximately 15 minutes to complete. Respondents have the option to save their progress and resume survey later if desired. Table 1 below illustrates the relative proportion of rebate recipients who have responded to the survey historically and in 2023.

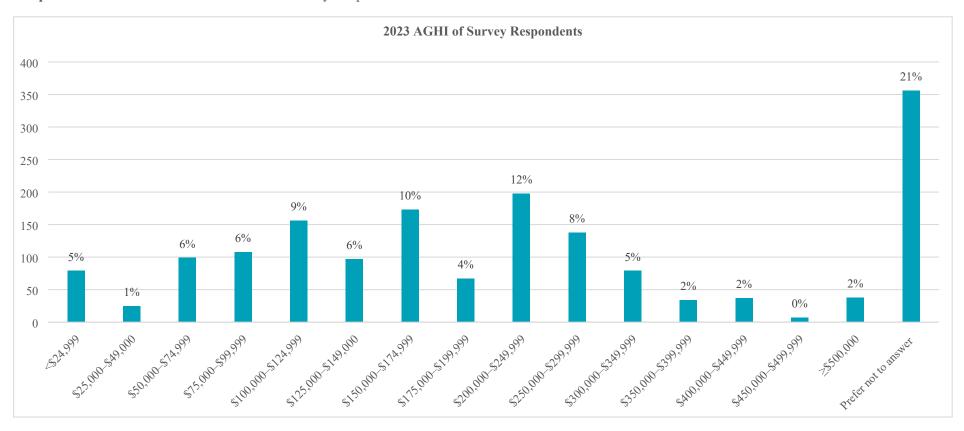
Table 1: MOR-EV Survey Participation Rates

Survey Year	Total number of survey respondents	Total number of rebate recipients*	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%

<sup>\*</sup>Includes MOR-EV rebates issued for zero emission motorcycles, PHEVs, extended range PHEVs, BEVs, and FCEVs.

#### Results of Survey Data Analysis

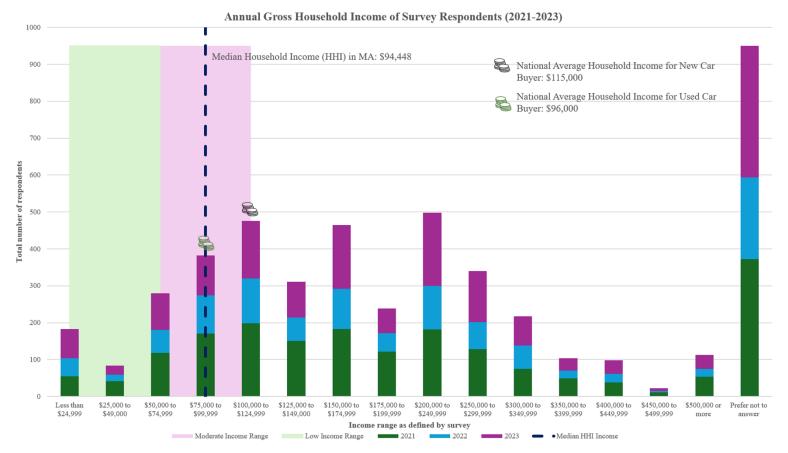
Graph 1. Annual Gross Household Income of Survey Respondents in 2023



**Graph 1** illustrates the Annual Gross Household Income (AGHI) distribution of 2023 survey respondents. For context, the National Average Household Income (National HHI) for a New Car Buyer is \$115,000¹ and 61% of survey respondents in 2023 reported having an AGHI of \$115,000 or higher. Conversely, the National HHI for a Used Car Buyer is \$96,000³ and 18% of survey respondents in 2023 reported having an AGHI of \$96,000 or lower. 21% of survey respondents did not report their AGHI.

<sup>&</sup>lt;sup>3</sup> Cox Automotive. 2023. Cox Automotive's Car Buyer Journey Study Shows Satisfaction with Car Buying Improved After Two Years of Declines. <a href="https://www.coxautoinc.com/market-insights/2023-car-buyer-journey-study/">https://www.coxautoinc.com/market-insights/2023-car-buyer-journey-study/</a>.

Graph 2. Annual Gross Household Income of Survey Respondents, 2021-2023



The Median Household Income (State Median HHI) in Massachusetts is \$94,488<sup>4</sup>. Between 2021-2023, most survey respondents reported an income higher than both the State Median HHI and the National HHI of New and Used Car Buyers.

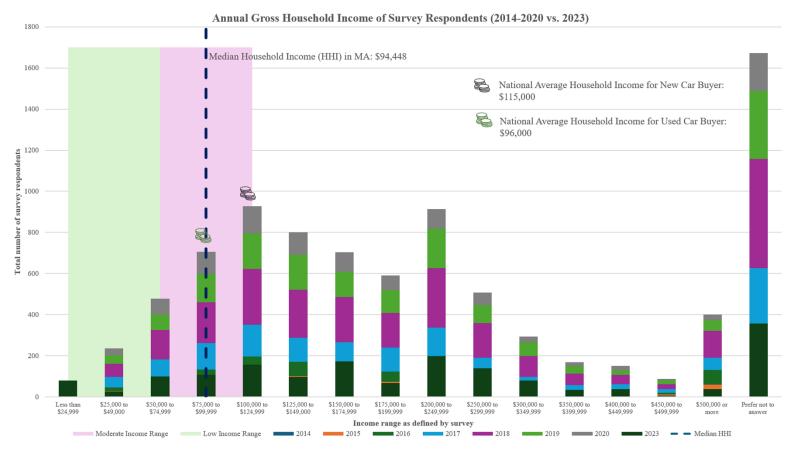
As shown in **Graph 2**, there was an increase in the number of respondents who earn less than \$24,999 from 2021 to 2023, and an increase in level of respondents that earn between \$50,000 and \$74,999 between 2022 and 2023. There was an average of ~25%

respondents across 2021-2023 that reported earning in the moderate-income range, defined as 61-120% of the State Median Income<sup>5</sup>. An average of ~6% of survey respondents could be considered low-income, based on the assumption that an income 60% or below the State Median Income qualifies as such.

<sup>&</sup>lt;sup>4</sup> U.S. Census. 2024. Massachusetts – Income and Poverty. <u>Massachusetts - Census Bureau Profile.</u>

<sup>&</sup>lt;sup>5</sup> EEA OEJE focuses on advancing environmental justice and equity for low-and moderate-income populations. Moderate-income is defined as 61%-80% of SMI, as well as the expanded Moderate-Income of 81%-120% of SMI.

Graph 3. Annual Gross Household Income of Survey Respondents Historically, 2014-2020 vs. 2023

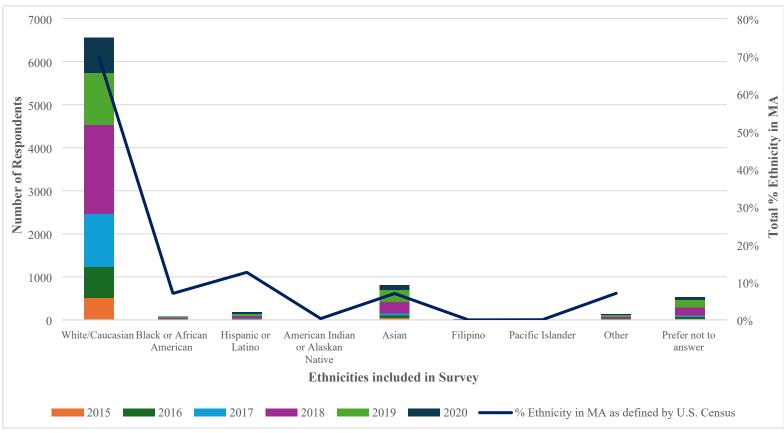


**Graph 3** illustrates that most survey respondents between the years of 2014-2020, and 2023, for comparison, reported an income higher than both the State Median HHI and the National HHI of New and Used Car Buyers. In 2023, there was a significant increase in survey respondents earning less than \$24,999 as compared to the total number of respondents in this category from the years 2014-2020. Like Graph 2, there was an average of ~25% respondents across 2014-2020 that reported earning in the moderateincome range.<sup>6</sup> Looking

at this data across an extended timeframe shows the proportion of low-income survey respondents at  $\sim$ 3%.

<sup>&</sup>lt;sup>6</sup> EEA OEJE focuses on advancing environmental justice and equity for low-and moderate-income populations. Moderate-income is defined as 61%-80% of SMI, as well as the expanded Moderate-Income of 81%-120% of SMI.

Graph 4. Ethnicity of Survey Respondents Historically, 2014-2020

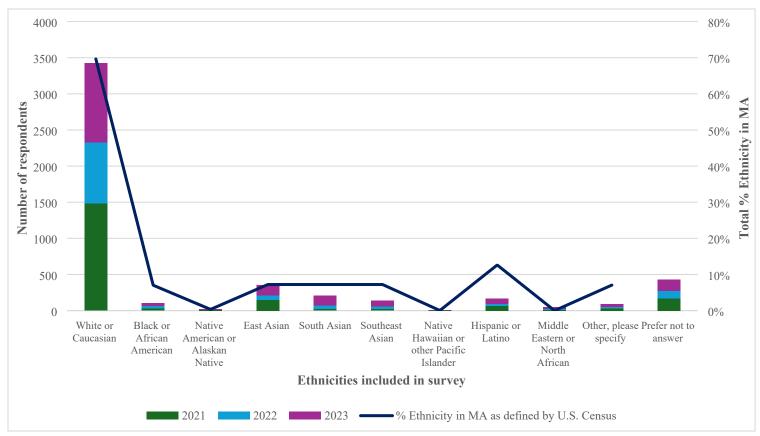


Between the years of 2014-2020 and mid-2021, the voluntary **MOR-EV** survey defined ethnicity in following the categories: White or Caucasian, Black or African American, Hispanic or Latino, American Indian or Alaskan Native, Asian. Filipino, Pacific Islander, or Other. These categories are defined similarly by the U.S. Census Bureau, apart from the 'Filipino' category. Graph 4 suggests that historically, when compared with

Massachusetts' current ethnic composition<sup>7</sup>, MOR-EV survey respondents of White/Caucasian and Asian ethnicities are well represented, whereas Black or African American and Hispanic or Latino residents are not.

<sup>&</sup>lt;sup>7</sup> U.S. Census. 2024. Massachusetts – Race and Ethnicity. <a href="https://data.census.gov/profile/Massachusetts?g=040XX00US25#race-and-ethnicity">https://data.census.gov/profile/Massachusetts?g=040XX00US25#race-and-ethnicity</a>

Graph 5. Ethnicity of Survey Respondents, 2021-2023



From mid-2021 through 2023, the voluntary MOR-EV survey defined ethnicity in the following categories: Black or African American. East Asian, Middle Eastern or North African, Native American or Alaska Native, Native Hawaiian or Pacific Islander, South Asian, Southeast Asian, White or Caucasian, Hispanic Latino, or Other. This categorization expands beyond the races and ethnicities defined by the U.S. Census Bureau by separating Asian identities and including a category specifically for Middle Eastern and North African identities. The U.S. Census does not provide a specific

count for individuals identifying as Middle Eastern or North African. Additionally, the Census reports that people identifying as Asian make up 7% of Massachusetts' total ethnic composition. Hence, the trend line representing the ethnic composition of Massachusetts appears flat for all three Asian subethnicities, due to the lack of comprehensive data detailing the percentage of the population within each specific category. Furthermore, **Graph 5** suggests that Black or African American and Hispanic or Latino residents are still underrepresented in the survey responses compared to the overall ethnic composition of the state.

#### ENVIRONMENTAL JUSTICE POPULATIONS

The Executive Office of Energy and Environmental Affairs (EEA) uses data from the 2019 American Community Survey to identify environmental justice (EJ) population areas in Massachusetts. An EJ population is a neighborhood where one or more of the following criteria are true:

- 1. the annual median household income is 65% or less of the statewide annual median household income
- 2. minorities make up 40% or more of the population
- 3. 25% or more of households identify as speaking English less than "very well"
- 4. minorities make up 25% or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150% of the statewide annual median household income.
- 5. If neighborhood or population is designated by EEA Secretary in accordance with law.

Across the Commonwealth, 188 Massachusetts municipalities have at least one EJ population as defined by EEA; these municipalities contain approximately 50% of the total state population as per 2022 census data. The percentage of each municipality that lives within an EJ census block varies between 0.7%–100% of residents.

DOER has access to partial MOR-EV vehicle registration address data from 2021-2022, although data from earlier program years are not available. After the MOR-EV program moved to a fully online application portal in 2022, address data has been collected consistently. Data herein is associated with light-duty rebates issued (i.e., paid) for which valid address information was available.

#### State EJ Population Analysis: Municipality

Vehicles that received a MOR-EV rebate and were registered in a municipality that encompasses at least one EJ population are outlined below. It is possible that rebated vehicles may be operating frequently within the municipality in which they are registered, contributing to local air quality improvements. Table 2 illustrates the relative proportion of rebates issued to vehicles registered in municipalities with and without EJ populations.

Table 2: MOR-EV Rebates to Vehicles Registered in Municipalities with EJ Populations

Registration Municipality and State EJ Populations	2021-2022	2023
Municipality does not have any EJ populations	1,535 rebates \$3.29M <b>31%</b>	2,864 rebates \$8.2M <b>28%</b>
Municipality has at least 1 EJ population	3,376 rebates \$7.36M <b>69%</b>	5,943 rebates \$20.8M <b>72%</b>

#### State EJ Population Analysis: Vehicle Registration Address

Vehicle registration street addresses, which are necessary to determine specific census blocks, were analyzed to determine how many MOR-EV rebates were issued to addresses that meet the state EJ criteria as follows. Trends have remained relatively similar over the past three years, with most rebated vehicle registration addresses <u>not</u> being in designated EJ neighborhoods.

As shown in Table 3, in 2021-2022, approximately 17.5% of rebate spending went to residents at addresses meeting at least 1 EJ criterion; in 2023, the corresponding percentage was 22%.

Table 3: MOR-EV Rebates to Vehicles Registered at Addresses within EJ Census Blocks

Registration Address (Census Block) and State EJ Criteria	2021-20228	2023
Not meeting any criteria	4,031 rebates \$8.57M <b>83%</b>	6,457 rebates \$27.25M <b>78%</b>
Meeting 1-3 EJ criteria	880 rebates \$1.86M <b>17.5%</b>	1,833 rebates \$6.44M <b>22%</b>

#### LIDAC POPULATIONS

Under the federal administration's Justice40 initiative, the federal government defines low-income or disadvantaged communities (LIDACs) by considering environmental burdens, health disparities, socioeconomic factors, and demographic information. This framework is meant to ensure that 40% of federal investment benefits in areas like clean energy reach these communities. Tools such as the Climate and Economic Justice Screening Tool and the U.S. EPA's Environmental Justice Screening and Mapping Tool are used to identify and map these communities at the census tract level.

Through the 2022 Climate Bill, the MOR-EV program was granted \$50M in federally sourced funding (from the American Rescue Plan Act, or ARPA) that was transferred to DOER in 2023. Because of these federal funds, MOR-EV reports on progress toward meeting the Justice40 initiative and 2023 will become the comparative LIDAC baseline going forward.

#### Results of LIDAC Analysis

Based on the available data<sup>9</sup>, there were 45 MOR-EV rebates issued to vehicles registered at an address that falls within a LIDAC census block in 2023. The combined value of those rebates was approximately 0.54% of light-duty rebate spending in 2023.

<sup>&</sup>lt;sup>8</sup> Full vehicle registration street address was not available for all MOR-EV rebates issued between 2021-2022.

<sup>&</sup>lt;sup>9</sup> 374 out of 8,289 addresses pulled from the MOR-EV application portal (4.5%) did not yield correlating census tract identification numbers and therefore could not be analyzed.

Table 3: MOR-EV Rebates to Vehicles Registered at Addresses within LIDAC Census Blocks

Registration Address and Federal LIDAC Designation	2023
Not in a LIDAC census block	8,244 rebates \$18.4M <b>99.5%</b>
In a LIDAC census block	45 rebates \$157.5K <b>0.54%</b>

### Recommendations

At the time of report release, ongoing funding for MOR-EV has not been identified and continuation of the program is uncertain; based on recent trends, the MOR-EV program administrator estimates there is less than one year of committed funding remaining (projected funding depletion around June 2025). This funding includes the November 2022 Legislature commitment of \$50 million from ARPA funds and DOER's \$50 million match from Regional Greenhouse Gas Initiative (RGGI) auction proceeds in 2024. Additionally, there are questions around projected program impacts, particularly the extent to which MOR-EV rebates are influencing ZEV adoption and if or how they will impact purchasing behaviors in future years.

DOER is exploring potential strategies for longer-term financial solvency. The Department is currently running scenario analysis of the MOR-EV program (e.g., examining the equity of the used vehicle market for eligible residents and potential impacts of changing the MOR-EV Used rebate) to formulate the most cost-effective way to run the program while also meeting the Commonwealth's clean transportation and equity goals. DOER will also consider outside funding sources like federal tax credits, consumer behavior, and the cost-effectiveness from a GHG perspective. Much of the program is established by statute and may require legislative action for either program structure changes (e.g., adjusting rebate levels) and/or additional funding if the program is to continue.

In the interim, DOER recommends implementing the following actions:

- Work with the Office of Environmental Justice & Equity (OEJE) and other stakeholders identified by OEJE to identify potential improvements to the voluntary survey data process, which may include adding new survey questions, revising existing questions, and/or considering how the survey is being conducted (e.g., whether there can be improvements to survey engagement). Engage with participating auto dealership stakeholders about the potential to engage in upfront voluntary survey data collection that would not be tied to customers' personal information.
- Work with the MOR-EV program administrator and its local subcontractors to identify and reduce barriers to entry for used car dealers to be able to acquire used EVs in inventory and

effectively sell them to residents of their local communities. Used vehicles account for most vehicle sales in the Commonwealth and half the sales by dollar total (source: MSADA). However, only a small number of used auto dealers in the Commonwealth are currently in the business of regularly selling used EVs. Dealer education and support can help to expand this number of participants in the used EV marketplace. Used auto dealers need greater support and resources to prepare to sell EVs in terms of developing supply chains for used EV inventory. This in turn will make it easier for used car buyers to find EVs at their local dealers rather than having to travel to distant dealers to find EVs on the lot, a significant geographic equity of access concern.

- Broaden the MOR-EV culturally competent outreach campaign to include paid focus groups aimed at identifying specific barriers to EV adoption and collecting recommendations from community members and community-based organizations about how to make the program more accessible to different demographic groups.
- Regularly track the impact of the income-qualifying programs to help target MOR-EV outreach and education programs. Identify opportunities for cross-promotion with other state income-based programs such as Mass Save®, the health assistance programs that many rebate recipients have used to prequalify for the income-limited MOR-EV programs, and the utility residential EV charging programs.
- If concerted outreach and program data still indicate disparity in participation among groups cannot be further improved (e.g., outreach has limitations, used EV market factors are outside MOR-EV program control, etc.), the Commonwealth could consider revised legislation to address current program inequities, particularly among low- to moderate-income populations.

## Appendices

Historic and calendar year 2023 data have been provided in these appendices in accordance with the requirements of the 2022 Climate Act.

In addition, the MOR-EV website (<a href="https://mor-ev.org/">https://mor-ev.org/</a>) has two online dashboards: one for the light-duty program (<a href="https://mor-ev.org/statistics">https://mor-ev.org/statistics</a>) and one for the Pickup Truck and Class 3-8 programs (<a href="https://mor-ev.org/statistics-trucks">https://mor-ev.org/statistics-trucks</a>). These two dashboards both offer the opportunity to download high level program data.

By September 30, 2024, DOER will post raw MOR-EV data for download on the MOR-EV website and will continue to do so annually.

NOTE: There were no ICE vehicle trade-in rebates issued in calendar year 2023.

- A. Total number and value of light-duty BEV rebates issued
- B. Light-duty BEV rebates issued by zip code
- C. Light-duty BEV rebates issued by municipality
- D. Rebates issued by vehicle type and weight
- E. Light-duty BEV rebates issued by vehicle make
- F. Light-duty BEV rebates issued by vehicle model
- G. Light-duty BEV rebates issued by applicant type
- H. Light-duty BEV rebates issued by new program
- A. Total number and value of light-duty BEV rebates issued

Year	Number of Rebates issued	Value of rebates issued
2021-2022	2,004	\$5,029,00
2023	8979	\$31,330,000

B. Light-duty BEV rebates issued by zip code

Light-duty BEV rebates issued by zip code: 2021 – 2022

**Commented [CS1]:** The datasets in the appendices are in response to the requirements in the 2022 Act; for next year's report, DOER requests to submit this information as a separate spreadsheet given the volume of data.

Registration	Number of	Value of	Percentage of total rebate
Postal Code	Rebates issued	rebates issued	spend in 2021-2022
01001	2	\$5,000	0%
01002	17	\$42,500	1%
01007	2	\$5,000	0%
01008	1	\$2,500	0%
01011	1	\$2,500	0%
01013	2	\$5,000	0%
01020	5	\$12,500	0%
01026	1	\$2,500	0%
01027	11	\$27,500	1%
01028	4	\$10,000	0%
01030	2	\$5,000	0%
01035	5	\$12,500	0%
01036	1	\$2,500	0%
01037	2	\$5,000	0%
01038	2	\$5,000	0%
01039	1	\$2,500	0%
01040	9	\$22,500	0%
01053	1	\$2,500	0%
01054	3	\$7,500	0%
01056	2	\$5,000	0%
01057	4	\$10,000	0%
01060	10	\$25,000	0%
01062	12	\$30,000	1%
01069	1	\$2,500	0%
01072	4	\$10,000	0%
01075	4	\$10,000	0%
01077	2	\$5,000	0%
01082	2	\$5,000	0%
01085	5	\$12,500	0%
01088	1	\$2,500	0%
01089	3	\$7,500	0%
01095	4	\$10,000	0%
01096	2	\$5,000	0%
01104	1	\$2,500	0%
01104	5	\$12,500	0%
01108	2	\$5,000	0%
01108	1	\$2,500	0%
01118	1	\$2,500	0%
01128	2	\$5,000	0%
	1	· · · · · · · · · · · · · · · · · · ·	
01201	1	\$2,500	0%

01226	2	\$5,000	0%
01230	5	\$12,500	0%
01237	1	\$2,500	0%
01238	2	\$5,000	0%
01247	4	\$10,000	0%
01257	1	\$2,500	0%
01266	2	\$5,000	0%
01267	2	\$5,000	0%
01301	10	\$25,000	0%
01330	1	\$2,500	0%
01331	2	\$5,000	0%
01337	2	\$5,000	0%
01338	1	\$2,500	0%
01341	1	\$2,500	0%
01342	1	\$2,500	0%
01360	1	\$2,500	0%
01364	1	\$2,500	0%
01368	1	\$2,500	0%
01370	4	\$10,000	0%
01373	3	\$7,500	0%
01375	1	\$2,500	0%
01376	1	\$2,500	0%
01420	2	\$5,000	0%
01430	1	\$2,500	0%
01432	2	\$5,000	0%
01440	1	\$2,500	0%
01450	3	\$7,500	0%
01451	4	\$10,000	0%
01453	9	\$22,500	0%
01460	8	\$20,000	0%
01462	3	\$7,500	0%
01463	2	\$5,000	0%
01464	1	\$2,500	0%
01473	2	\$5,000	0%
01475	1	\$2,500	0%
01501	2	\$5,000	0%
01503	1	\$2,500	0%
01504	2	\$5,000	0%
01505	1	\$2,500	0%
01507	4	\$10,000	0%
01510	3	\$7,500	0%
01516	1	\$2,500	0%

01518	2	\$5,000	0%
01519	4	\$10,000	0%
01520	4	\$10,000	0%
01523	3	\$7,500	0%
01527	3	\$7,500	0%
01529	2	\$5,000	0%
01532	12	\$30,000	1%
01534	2	\$5,000	0%
01535	1	\$2,500	0%
01536	3	\$7,500	0%
01540	1	\$2,500	0%
01541	1	\$2,500	0%
01543	5	\$12,500	0%
01545	21	\$52,500	1%
01550	1	\$2,500	0%
01560	3	\$7,500	0%
01562	2	\$5,000	0%
01564	1	\$2,500	0%
01566	2	\$5,000	0%
01568	4	\$10,000	0%
01569	2	\$5,000	0%
01570	1	\$2,500	0%
01571	1	\$2,500	0%
01581	15	\$37,500	1%
01583	1	\$2,500	0%
01585	3	\$7,500	0%
01588	1	\$2,500	0%
01590	1	\$2,500	0%
01602	5	\$12,500	0%
01603	2	\$5,000	0%
01604	7	\$17,500	0%
01606	2	\$5,000	0%
01607	1	\$2,500	0%
01609	3	\$7,500	0%
01610	2	\$5,000	0%
01701	21	\$52,500	1%
01702	5	\$12,500	0%
01718	2	\$5,000	0%
01719	4	\$10,000	0%
01720	14	\$35,000	1%
01721	17	\$42,500	1%
01730	9	\$22,500	0%

01731	1	\$2,500	0%
01740	3	\$7,500	0%
01741	5	\$12,500	0%
01742	25	\$62,500	1%
01745	1	\$2,500	0%
01746	14	\$35,000	1%
01747	1	\$2,500	0%
01748	17	\$42,500	1%
01749	5	\$12,500	0%
01752	8	\$20,000	0%
01754	5	\$12,500	0%
01756	1	\$2,500	0%
01757	4	\$10,000	0%
01760	27	\$67,500	1%
01770	5	\$12,500	0%
01772	8	\$20,000	0%
01773	14	\$35,000	1%
01775	8	\$20,000	0%
01776	18	\$45,000	1%
01778	16	\$40,000	1%
01801	12	\$30,000	1%
01803	10	\$25,000	0%
01810	18	\$45,000	1%
01821	2	\$5,000	0%
01824	13	\$32,500	1%
01826	3	\$7,500	0%
01827	1	\$2,500	0%
01830	2	\$5,000	0%
01832	6	\$15,000	0%
01833	4	\$10,000	0%
01834	1	\$2,500	0%
01841	4	\$10,000	0%
01843	1	\$2,500	0%
01844	6	\$15,000	0%
01845	5	\$12,500	0%
01850	2	\$5,000	0%
01851	3	\$7,500	0%
01852	7	\$17,500	0%
01854	4	\$10,000	0%
01860	1	\$2,500	0%
01862	3	\$7,500	0%
01863	2	\$5,000	0%

01864	5	\$12,500	0%
01867	17	\$42,500	1%
01876	5	\$12,500	0%
01879	2	\$5,000	0%
01880	7	\$17,500	0%
01886	20	\$50,000	1%
01887	7	\$17,500	0%
01890	21	\$52,500	1%
01902	1	\$2,500	0%
01904	2	\$5,000	0%
01905	3	\$7,500	0%
01906	4	\$10,000	0%
01907	2	\$5,000	0%
01908	1	\$2,500	0%
01913	8	\$20,000	0%
01915	10	\$25,000	0%
01921	3	\$7,500	0%
01922	1	\$2,500	0%
01923	4	\$10,000	0%
01929	2	\$5,000	0%
01930	7	\$17,500	0%
01938	10	\$25,000	0%
01940	4	\$10,000	0%
01944	3	\$7,500	0%
01945	10	\$25,000	0%
01949	1	\$2,500	0%
01950	10	\$25,000	0%
01951	1	\$2,500	0%
01952	1	\$2,500	0%
01960	4	\$10,000	0%
01966	4	\$10,000	0%
01969	2	\$5,000	0%
01970	9	\$22,500	0%
01982	2	\$5,000	0%
01983	2	\$5,000	0%
01984	1	\$2,500	0%
01985	5	\$12,500	0%
02019	5	\$12,500	0%
02020	1	\$2,500	0%
02021	8	\$20,000	0%
02025	6	\$15,000	0%
02026	8	\$20,000	0%

02030	5	\$12,500	0%
02032	3	\$7,500	0%
02035	4	\$10,000	0%
02038	13	\$32,500	1%
02043	8	\$20,000	0%
02045	8	\$20,000	0%
02048	7	\$17,500	0%
02050	2	\$5,000	0%
02052	7	\$17,500	0%
02053	5	\$12,500	0%
02054	2	\$5,000	0%
02056	7	\$17,500	0%
02061	2	\$5,000	0%
02062	12	\$30,000	1%
02066	3	\$7,500	0%
02067	16	\$40,000	1%
02071	1	\$2,500	0%
02072	6	\$15,000	0%
02081	11	\$27,500	1%
02090	14	\$35,000	1%
02093	2	\$5,000	0%
02109	1	\$2,500	0%
02114	3	\$7,500	0%
02115	1	\$2,500	0%
02116	11	\$27,500	1%
02118	9	\$22,500	0%
02119	3	\$7,500	0%
02122	2	\$5,000	0%
02124	5	\$12,500	0%
02125	8	\$20,000	0%
02126	3	\$7,500	0%
02127	5	\$12,500	0%
02128	6	\$15,000	0%
02129	3	\$7,500	0%
02130	20	\$50,000	1%
02131	21	\$52,500	1%
02132	10	\$25,000	0%
02134	7	\$17,500	0%
02135	13	\$32,500	1%
02136	5	\$12,500	0%
02138	8	\$20,000	0%
02139	6	\$15,000	0%

02140	13	\$32,500	1%
02141	9	\$22,500	0%
02142	1	\$2,500	0%
02143	7	\$17,500	0%
02144	18	\$45,000	1%
02145	10	\$25,000	0%
02148	17	\$42,500	1%
02149	7	\$17,500	0%
02150	2	\$5,000	0%
02151	6	\$15,000	0%
02152	4	\$10,000	0%
02155	32	\$80,000	2%
02169	22	\$55,000	1%
02170	6	\$15,000	0%
02171	7	\$17,500	0%
02176	17	\$42,500	1%
02180	9	\$22,500	0%
02184	12	\$30,000	1%
02186	14	\$35,000	1%
02188	5	\$12,500	0%
02189	1	\$2,500	0%
02190	7	\$17,500	0%
02191	2	\$5,000	0%
02210	1	\$2,500	0%
02215	4	\$10,000	0%
02301	1	\$2,500	0%
02302	1	\$2,500	0%
02324	4	\$10,000	0%
02330	1	\$2,500	0%
02332	2	\$5,000	0%
02338	2	\$5,000	0%
02339	4	\$10,000	0%
02341	1	\$2,500	0%
02343	1	\$2,500	0%
02346	2	\$5,000	0%
02347	1	\$2,500	0%
02351	1	\$2,500	0%
02356	7	\$17,500	0%
02359	5	\$12,500	0%
02360	25	\$62,500	1%
02364	6	\$15,000	0%
02368	1	\$2,500	0%

02370	2	\$5,000	0%
02375	5	\$11,500	0%
02379	4	\$10,000	0%
02420	17	\$42,500	1%
02421	27	\$67,500	1%
02445	9	\$22,500	0%
02446	10	\$25,000	0%
02451	9	\$22,500	0%
02452	5	\$12,500	0%
02453	10	\$25,000	0%
02458	9	\$22,500	0%
02459	15	\$37,500	1%
02460	4	\$10,000	0%
02461	7	\$17,500	0%
02462	2	\$5,000	0%
02465	6	\$15,000	0%
02466	9	\$22,500	0%
02467	9	\$22,500	0%
02468	11	\$27,500	1%
02472	25	\$62,500	1%
02474	23	\$57,500	1%
02476	14	\$35,000	1%
02478	30	\$75,000	1%
02481	12	\$30,000	1%
02482	8	\$20,000	0%
02492	24	\$60,000	1%
02493	5	\$12,500	0%
02494	12	\$30,000	1%
02535	3	\$7,500	0%
02536	3	\$7,500	0%
02537	1	\$2,500	0%
02539	1	\$2,500	0%
02543	2	\$5,000	0%
02554	3	\$27,500	1%
02556	1	\$2,500	0%
02557	6	\$15,000	0%
02563	6	\$15,000	0%
02568	6	\$15,000	0%
02575	2	\$5,000	0%
02601	1	\$2,500	0%
02630	2	\$5,000	0%
02631	2	\$5,000	0%

02632	2	\$5,000	0%
02633	2	\$5,000	0%
02635	1	\$2,500	0%
02643	1	\$2,500	0%
02644	1	\$2,500	0%
02645	2		0%
	3	\$5,000	
02649		\$7,500	0%
02653	4	\$10,000	0%
02655	2	\$5,000	0%
02657	1	\$2,500	0%
02664	2	\$5,000	0%
02667	2	\$5,000	0%
02668	2	\$5,000	0%
02670	1	\$2,500	0%
02673	1	\$2,500	0%
02703	6	\$15,000	0%
02717	2	\$5,000	0%
02718	1	\$2,500	0%
02719	1	\$2,500	0%
02720	2	\$5,000	0%
02721	2	\$5,000	0%
02723	1	\$2,500	0%
02726	5	\$12,500	0%
02738	4	\$10,000	0%
02739	2	\$5,000	0%
02740	2	\$5,000	0%
02746	1	\$2,500	0%
02747	2	\$5,000	0%
02748	2	\$5,000	0%
02760	6	\$15,000	0%
02764	1	\$2,500	0%
02766	3	\$7,500	0%
02767	1	\$2,500	0%
02769	1	\$2,500	0%
02770	1	\$2,500	0%
02771	6	\$15,000	0%
02777	2	\$5,000	0%
02779	1	\$2,500	0%
02780	8	\$20,000	0%
02790	2	\$5,000	0%
Total	2,004	\$5,029,000	100%

Light-duty BEV rebates issued by zip code: 2023

Registration	Number of	Value of rebates	Percentage of total rebate
Postal Code	Rebates issued	issued	spend in 2023
01001	8	\$28,000	0%
01002	55	\$190,500	1%
01007	12	\$42,000	0%
01008	1	\$3,500	0%
01012	2	\$7,000	0%
01013	2	\$7,000	0%
01020	9	\$31,500	0%
01022	1	\$3,500	0%
01026	1	\$3,500	0%
01027	31	\$108,000	0%
01028	15	\$52,500	0%
01030	5	\$16,500	0%
01032	2	\$7,000	0%
01033	8	\$29,500	0%
01035	11	\$38,500	0%
01036	2	\$7,000	0%
01037	1	\$3,500	0%
01038	2	\$7,000	0%
01039	3	\$10,500	0%
01040	20	\$70,000	0%
01053	3	\$10,500	0%
01054	5	\$19,000	0%
01056	13	\$45,500	0%
01057	3	\$10,500	0%
01060	18	\$63,000	0%
01062	15	\$52,500	0%
01063	1	\$3,500	0%
01069	3	\$10,500	0%
01072	3	\$10,500	0%
01073	4	\$14,000	0%
01075	21	\$72,500	0%
01077	6	\$20,000	0%
01081	2	\$7,000	0%
01082	7	\$22,500	0%
01082	1	\$3,500	0%
01085	10	\$35,000	0%
01089	17	\$59,500	0%
01092	1	\$5,000	0%

01093	3	\$10,500	0%
01095	17	\$58,500	0%
01096	2	\$7,000	0%
01098	1	\$3,500	0%
01103	1	\$3,500	0%
01104	4	\$14,000	0%
01105	2	\$7,000	0%
01106	31	\$108,000	0%
01107	1	\$3,500	0%
01108	4	\$14,000	0%
01109	7	\$25,000	0%
01118	11	\$40,000	0%
01119	1	\$3,500	0%
01128	2	\$7,000	0%
01129	3	\$10,500	0%
01201	14	\$49,000	0%
01223	2	\$7,000	0%
01225	2	\$7,000	0%
01226	3	\$10,500	0%
01229	1	\$3,500	0%
01230	3	\$10,500	0%
01236	3	\$9,500	0%
01237	1	\$3,500	0%
01238	5	\$17,500	0%
01240	4	\$13,000	0%
01242	1	\$3,500	0%
01245	1	\$3,500	0%
01247	3	\$10,500	0%
01253	1	\$3,500	0%
01254	3	\$9,500	0%
01257	4	\$14,000	0%
01258	1	\$3,500	0%
01259	1	\$3,500	0%
01262	1	\$3,500	0%
01264	1	\$3,500	0%
01266	2	\$8,500	0%
01267	23	\$79,500	0%
01301	18	\$63,500	0%
01330	3	\$9,500	0%
01331	5	\$17,500	0%
01337	2	\$7,000	0%
01339	4	\$12,000	0%

01340	1	\$3,500	0%
01341	7	\$23,500	0%
01342	5	\$16,500	0%
01344	1	\$3,500	0%
01346	1	\$3,500	0%
01351	3	\$10,500	0%
01354	2	\$7,000	0%
01355	2	\$7,000	0%
01360	2	\$7,000	0%
01364	3	\$10,500	0%
01366	2	\$7,000	0%
01368	2	\$7,000	0%
01370	5	\$17,500	0%
01373	6	\$21,000	0%
01375	5	\$17,500	0%
01376	1	\$3,500	0%
01378	2	\$7,000	0%
01379	1	\$3,500	0%
01420	12	\$42,000	0%
01430	2	\$7,000	0%
01431	2	\$7,000	0%
01432	15	\$52,500	0%
01434	5	\$17,500	0%
01436	1	\$3,500	0%
01440	6	\$22,500	0%
01450	31	\$110,000	0%
01451	22	\$77,000	0%
01452	4	\$14,000	0%
01453	23	\$80,500	0%
01460	26	\$91,000	0%
01462	10	\$35,000	0%
01463	17	\$57,500	0%
01464	13	\$45,500	0%
01468	2	\$7,000	0%
01469	2	\$7,000	0%
01473	7	\$24,500	0%
01474	1	\$3,500	0%
01475	4	\$14,000	0%
01501	22	\$77,000	0%
01503	3	\$10,500	0%
01504	7	\$26,000	0%
01505	9	\$31,500	0%

01506	1	\$3,500	0%
01507	5	\$17,500	0%
01510	10	\$35,000	0%
01515	2	\$7,000	0%
01516	3	\$10,500	0%
01518	2	\$7,000	0%
01519	20	\$70,000	0%
01520	24	\$85,500	0%
01521	3	\$9,500	0%
01522	7	\$24,500	0%
01523	5	\$17,500	0%
01524	6	\$22,500	0%
01527	18	\$63,000	0%
01529	2	\$7,000	0%
01532	49	\$171,500	1%
01534	6	\$21,000	0%
01536	38	\$132,000	0%
01537	1	\$3,500	0%
01540	2	\$7,000	0%
01541	5	\$17,500	0%
01543	10	\$35,000	0%
01545	160	\$559,000	2%
01550	1	\$3,500	0%
01560	31	\$108,500	0%
01562	5	\$17,500	0%
01564	13	\$45,500	0%
01566	4	\$14,000	0%
01568	19	\$66,500	0%
01569	12	\$41,000	0%
01570	9	\$31,500	0%
01571	4	\$14,000	0%
01581	91	\$318,500	1%
01583	4	\$14,000	0%
01588	7	\$24,500	0%
01590	8	\$28,000	0%
01602	17	\$59,500	0%
01603	14	\$49,000	0%
01604	26	\$91,000	0%
01605	12	\$42,000	0%
01606	13	\$47,000	0%
01607	5	\$17,500	0%
01608	2	\$7,000	0%

01609	13	\$44,500	0%
01610	4	\$13,000	0%
01611	1	\$3,500	0%
01612	5	\$17,500	0%
01701	65	\$227,500	1%
01702	51	\$177,500	1%
01718	1	\$3,500	0%
01719	30	\$105,000	0%
01720	112	\$390,000	1%
01721	70	\$244,000	1%
01730	59	\$206,500	1%
01731	1	\$3,500	0%
01740	13	\$44,500	0%
01741	36	\$125,000	0%
01742	81	\$281,500	1%
01745	4	\$14,000	0%
01746	43	\$147,500	0%
01747	8	\$28,000	0%
01748	122	\$427,000	1%
01749	18	\$62,000	0%
01752	55	\$192,500	1%
01754	19	\$66,500	0%
01756	9	\$30,500	0%
01757	37	\$129,500	0%
01760	133	\$461,500	1%
01770	16	\$55,000	0%
01772	39	\$136,500	0%
01773	24	\$84,000	0%
01775	25	\$86,500	0%
01776	67	\$233,500	1%
01778	70	\$243,000	1%
01801	80	\$278,000	1%
01803	74	\$259,000	1%
01810	95	\$331,500	1%
01821	62	\$217,000	1%
01824	73	\$251,500	1%
01826	36	\$127,500	0%
01827	10	\$34,000	0%
01830	12	\$43,500	0%
01832	13	\$47,000	0%
01833	7	\$24,500	0%
01834	8	\$28,000	0%

01835	11	\$37,500	0%
01840	2	\$7,000	0%
01841	8	\$28,000	0%
01843	10	\$35,000	0%
01844	33	\$115,500	0%
01845	57	\$198,500	1%
01850	4	\$14,000	0%
01851	33	\$115,500	0%
01852	24	\$85,500	0%
01854	29	\$101,500	0%
01860	5	\$17,500	0%
01862	17	\$59,500	0%
01863	18	\$63,000	0%
01864	21	\$72,500	0%
01867	38	\$133,000	0%
01876	28	\$98,000	0%
01879	16	\$56,000	0%
01880	45	\$157,500	1%
01886	134	\$467,000	1%
01887	52	\$183,500	1%
01890	72	\$250,000	1%
01901	2	\$7,000	0%
01902	11	\$40,000	0%
01904	13	\$45,500	0%
01905	8	\$28,000	0%
01906	28	\$97,000	0%
01907	18	\$63,000	0%
01908	7	\$24,500	0%
01913	14	\$49,000	0%
01915	49	\$169,500	1%
01921	12	\$42,000	0%
01922	5	\$17,500	0%
01923	28	\$98,500	0%
01929	6	\$21,000	0%
01930	23	\$82,000	0%
01938	19	\$68,000	0%
01940	23	\$80,500	0%
01944	14	\$49,000	0%
01945	32	\$111,000	0%
01949	22	\$77,000	0%
01950	21	\$72,500	0%
01951	3	\$10,500	0%

01952	4	\$14,000	0%
01960	31	\$110,000	0%
01966	11	\$38,500	0%
01969	4	\$14,000	0%
01970	38	\$133,000	0%
01982	11	\$38,500	0%
01983	8	\$28,000	0%
01984	6	\$21,000	0%
01985	8	\$28,000	0%
02019	32	\$112,000	0%
02021	45	\$156,500	0%
02025	16	\$56,000	0%
02026	30	\$102,000	0%
02030	18	\$63,000	0%
02032	15	\$52,500	0%
02035	28	\$97,000	0%
02038	57	\$198,500	1%
02043	38	\$133,000	0%
02045	8	\$28,000	0%
02048	40	\$140,000	0%
02050	28	\$97,000	0%
02052	24	\$82,000	0%
02053	27	\$94,500	0%
02054	9	\$31,500	0%
02056	27	\$93,500	0%
02061	23	\$80,500	0%
02062	28	\$98,000	0%
02066	30	\$106,500	0%
02067	70	\$243,000	1%
02071	1	\$3,500	0%
02072	22	\$77,000	0%
02081	36	\$125,000	0%
02090	51	\$178,500	1%
02093	15	\$52,500	0%
02108	4	\$14,000	0%
02109	2	\$7,000	0%
02110	3	\$10,500	0%
02111	9	\$31,500	0%
02113	3	\$10,500	0%
02114	10	\$35,000	0%
02115	18	\$64,500	0%
02116	19	\$65,500	0%

02118	33	\$114,500	0%
02119	17	\$59,500	0%
02120	9	\$31,500	0%
02121	5	\$17,500	0%
02122	18	\$63,500	0%
02124	38	\$135,000	0%
02125	33	\$114,000	0%
02126	9	\$31,500	0%
02127	29	\$101,500	0%
02128	23	\$82,000	0%
02129	15	\$52,500	0%
02130	80	\$273,000	1%
02131	51	\$178,500	1%
02132	50	\$175,000	1%
02134	19	\$62,500	0%
02135	39	\$141,000	0%
02136	18	\$63,000	0%
02138	67	\$232,500	1%
02139	48	\$168,000	1%
02140	44	\$154,500	0%
02141	27	\$94,500	0%
02142	9	\$31,500	0%
02143	32	\$111,000	0%
02144	48	\$166,000	1%
02145	41	\$145,500	0%
02148	100	\$349,500	1%
02149	44	\$153,000	0%
02150	18	\$62,000	0%
02151	35	\$121,500	0%
02152	14	\$49,000	0%
02155	107	\$375,000	1%
02163	3	\$10,500	0%
02169	118	\$411,500	1%
02170	41	\$145,000	0%
02171	55	\$190,500	1%
02176	68	\$237,000	1%
02180	41	\$143,500	0%
02184	124	\$432,000	1%
02186	62	\$215,000	1%
02188	8	\$28,000	0%
02189	12	\$40,000	0%
02190	38	\$132,000	0%

02191	13	\$44,500	0%
02199	1	\$3,500	0%
02205	1	\$3,500	0%
02210	11	\$38,500	0%
02215	12	\$42,000	0%
02301	21	\$72,500	0%
02302	10	\$36,500	0%
02322	5	\$17,500	0%
02324	18	\$63,000	0%
02330	1	\$3,500	0%
02332	18	\$63,000	0%
02333	7	\$24,500	0%
02338	2	\$7,000	0%
02339	14	\$49,000	0%
02341	4	\$14,000	0%
02343	7	\$24,500	0%
02346	11	\$38,500	0%
02347	9	\$31,500	0%
02351	6	\$20,000	0%
02356	21	\$73,500	0%
02359	10	\$35,000	0%
02360	68	\$236,000	1%
02364	6	\$21,000	0%
02368	44	\$153,000	0%
02370	10	\$35,000	0%
02375	13	\$44,500	0%
02379	4	\$14,000	0%
02382	6	\$21,000	0%
02420	87	\$301,500	1%
02421	97	\$336,000	1%
02445	35	\$121,500	0%
02446	42	\$146,000	0%
02451	42	\$147,000	0%
02452	23	\$80,500	0%
02453	44	\$153,000	0%
02458	32	\$111,000	0%
02459	78	\$271,500	1%
02460	40	\$139,000	0%
02461	42	\$146,000	0%
02462	4	\$14,000	0%
02464	14	\$49,000	0%

02465	36	\$126,000	0%
02466	31	\$108,500	0%
02467	52	\$183,500	1%
02468	27	\$94,500	0%
02472	77	\$268,500	1%
02474	86	\$302,500	1%
02476	57	\$199,000	1%
02478	82	\$285,000	1%
02481	38	\$134,500	0%
02482	42	\$147,000	0%
02492	62	\$214,000	1%
02493	29	\$99,500	0%
02494	34	\$119,000	0%
02532	4	\$14,000	0%
02534	1	\$3,500	0%
02535	3	\$10,500	0%
02536	14	\$49,000	0%
02537	4	\$14,000	0%
02539	8	\$28,000	0%
02540	14	\$47,000	0%
02543	2	\$7,000	0%
02554	5	\$17,500	0%
02556	3	\$10,500	0%
02557	7	\$23,500	0%
02559	4	\$14,000	0%
02562	3	\$10,500	0%
02563	10	\$35,000	0%
02568	5	\$16,500	0%
02571	6	\$21,000	0%
02574	1	\$3,500	0%
02575	7	\$24,500	0%
02576	3	\$10,500	0%
02601	14	\$49,000	0%
02630	4	\$14,000	0%
02631	16	\$57,500	0%
02632	5	\$19,000	0%
02633	4	\$14,000	0%
02635	2	\$7,000	0%
02638	3	\$10,500	0%
02639	1	\$3,500	0%
02641	3	\$10,500	0%
02642	8	\$29,500	0%

02643	1	\$3,500	0%
02645	9	\$31,500	0%
02646	2	\$7,000	0%
02647	1	\$3,500	0%
02648	5	\$17,500	0%
02649	15	\$52,500	0%
02650	1	\$3,500	0%
02652	1	\$3,500	0%
02653	7	\$24,500	0%
02655	3	\$10,500	0%
02657	5	\$17,500	0%
02659	2	\$7,000	0%
02660	7	\$24,500	0%
02664	7	\$23,500	0%
02666	6	\$20,000	0%
02667	6	\$21,000	0%
02668	4	\$14,000	0%
02670	1	\$3,500	0%
02671	3	\$10,500	0%
02673	3	\$10,500	0%
02675	5	\$17,500	0%
02702	3	\$10,500	0%
02703	42	\$146,000	0%
02715	3	\$9,500	0%
02717	5	\$17,500	0%
02718	2	\$7,000	0%
02719	6	\$21,000	0%
02720	12	\$41,000	0%
02721	4	\$14,000	0%
02722	1	\$3,500	0%
02724	4	\$14,000	0%
02725	1	\$3,500	0%
02726	12	\$42,000	0%
02738	9	\$31,500	0%
02739	10	\$35,000	0%
02740	8	\$28,000	0%
02743	4	\$14,000	0%
02744	4	\$14,000	0%
02745	5	\$17,500	0%
02747	13	\$45,500	0%
02748	9	\$31,500	0%
02760	53	\$187,000	1%

02762	11	\$38,500	0%
02763	4	\$14,000	0%
02764	5	\$17,500	0%
02766	18	\$63,000	0%
02767	14	\$49,000	0%
02769	6	\$21,000	0%
02770	2	\$7,000	0%
02771	10	\$35,000	0%
02777	9	\$30,500	0%
02779	4	\$14,000	0%
02780	17	\$58,500	0%
02790	13	\$45,500	0%
Total	8,979	\$31,330,000	100%

### C. Light-duty BEV rebates issued by municipality:

Light-duty BEV rebates issued by municipality: 2021-2022

The number of rebates issued per capita is calculated using the 2020 Massachusetts Census Data<sup>10</sup>.

Municipality	Number of Rebates issued	Value of rebates issued	Percentage of total rebate spend in 2021-2022	Rebates Issued Per Capita per 1000 residents
Abington	1	\$2,500	0%	0.06
Acton	16	\$40,000	1%	0.67
Agawam	2	\$5,000	0%	0.07
Alford	1	\$2,500	0%	2.06
Allston	7	\$17,500	0%	N/A
Amesbury	8	\$20,000	0%	0.46
Amherst	13	\$32,500	1%	0.33
Andover	18	\$45,000	1%	0.49
Aquinnah	2	\$5,000	0%	4.56

<sup>&</sup>lt;sup>10</sup> Massachusetts Census Data (malegislature.gov)

46

Arlington	37	\$92,500	2%	0.80
Ashburnham	1	\$2,500	0%	0.16
Ashfield	1	\$2,500	0%	0.59
Ashland	17	\$42,500	1%	0.90
Athol	1	\$2,500	0%	0.08
Attleboro	6	\$15,000	0%	0.13
Auburn	2	\$5,000	0%	0.12
Auburndale	9	\$22,500	0%	N/A
Ayer	2	\$5,000	0%	0.24
Barnstable	2	\$5,000	0%	0.04
Bedford	9	\$22,500	0%	0.63
Belchertown	2	\$5,000	0%	0.13
Bellingham	5	\$12,500	0%	0.30
Belmont	30	\$75,000	1%	1.21
Berkley	1	\$2,500	0%	0.15
Berlin	1	\$2,500	0%	0.32
Bernardston	1	\$2,500	0%	0.48
Beverly	10	\$25,000	0%	0.23
Billerica	2	\$5,000	0%	0.05
Blackstone	2	\$5,000	0%	0.22
Blandford	1	\$2,500	0%	0.82
Bolton	3	\$7,500	0%	0.53
Boston	75	\$187,500	4%	0.11
Boxborough	4	\$10,000	0%	0.73
Boxford	3	\$7,500	0%	0.37
Boylston	1	\$2,500	0%	0.21
Braintree	12	\$30,000	1%	0.31
Brant Rock	1	\$2,500	0%	N/A
Brewster	2	\$5,000	0%	0.19
Bridgewater	4	\$10,000	0%	0.14
Brighton	8	\$20,000	0%	N/A
Brockton	2	\$5,000	0%	0.02
Brookline	19	\$47,500	1%	0.30
Buckland	1	\$2,500	0%	0.55
Burlington	10	\$25,000	0%	0.38
Byfield	1	\$2,500	0%	N/A
Cambridge	35	\$87,500	2%	0.30
Canton	8	\$20,000	0%	0.33
Carlisle	5	\$12,500	0%	0.95
Carver	1	\$2,500	0%	0.09
Centerville	2	\$5,000	0%	N/A
Charlestown	3	\$7,500	0%	N/A

Charlton	4	\$10,000	0%	0.30
Chatham	2	\$5,000	0%	0.30
Chelmsford	13	\$32,500	1%	0.36
Chelsea	2	\$5,000	0%	0.05
Chestnut Hill	9	\$22,500	0%	N/A
Chicopee	7	\$17,500	0%	0.13
Chilmark	1	\$2,500	0%	0.83
Clarksburg	1	\$2,500	0%	0.60
Clinton	3	\$7,500	0%	0.19
Cohasset	6	\$15,000	0%	0.72
Concord	25	\$62,500	1%	1.35
Conway	1	\$2,500	0%	0.57
Cotuit	1	\$2,500	0%	N/A
Cummington	1	\$2,500	0%	1.21
Dalton	2	\$5,000	0%	0.32
Danvers	4	\$10,000	0%	1.43
Dartmouth	2	\$5,000	0%	0.06
Dedham	8	- 1	0%	0.32
Deerfield	1	\$20,000		
		\$2,500	0%	0.20
Dorchester	5	\$12,500	0%	N/A
Dorchester Center	1	\$2,500	0%	N/A
Douglas	1	\$2,500	0%	0.11
Dover	5	\$12,500	0%	0.84
Dracut	3	\$7,500	0%	0.09
Dudley	1	\$2,500	0%	0.08
Dunstable	1	\$2,500	0%	0.30
Duxbury	2	\$5,000	0%	0.12
E Falmouth	3	\$7,500	0%	N/A
E Watertown	1	\$2,500	0%	N/A
East Boston	1	\$2,500	0%	N/A
East Cambridge	2		0%	N/A
East Cambridge  East Freetown	2	\$5,000	0%	N/A
		\$5,000		
East Longmeadow	4	\$10,000	0%	0.24
East Orleans	1	\$2,500	0%	N/A
East Sandwich	1	\$2,500	0%	N/A
East Taunton	1	\$2,500	0%	N/A
East Valpole	3	\$7,500	0%	N/A
East waipoic	11	\$27,500	1%	0.68
Edgartown	1	\$2,500	0%	0.19
Essex	2	\$5,000	0%	0.54
LSSCX		\$5,000	U 70	0.34

Everett	7	\$17,500	0%	0.14
Fairhaven	1	\$2,500	0%	0.06
Fall River	5	\$12,500	0%	0.05
Falmouth	1	\$2,500	0%	0.03
Fayville	1	\$2,500	0%	N/A
Feeding Hills	2	\$5,000	0%	N/A
Fiskdale	2	\$5,000	0%	N/A
Fitchburg	2	\$5,000	0%	0.05
Florence	9	\$22,500	0%	N/A
Forestdale	1	\$2,500	0%	N/A
Foxborough	4	\$10,000	0%	0.21
Framingham	26	\$65,000	1%	0.36
Franklin	13	\$32,500	1%	0.39
Gardner	1	\$2,500	0%	0.05
Georgetown	4	\$10,000	0%	0.47
Gloucester	7	\$17,500	0%	0.24
Grafton	4	\$10,000	0%	0.20
Great Barrington	5	\$12,500	0%	0.70
Greenfield	10	\$25,000	0%	0.56
Groton	3	\$7,500	0%	0.27
Groveland	1	\$2,500	0%	0.15
Hadley	5	\$12,500	0%	0.94
Halifax	2	\$5,000	0%	0.26
Hampden	1	\$2,500	0%	0.20
Hanover	4	\$10,000	0%	0.27
Hanscom AFB	1	\$2,500	0%	N/A
Hanson	1	\$2,500	0%	0.09
Hardwick	2	\$5,000	0%	0.75
Harvard	4	\$10,000	0%	0.58
Harwich	2	\$5,000	0%	0.15
Hatfield	2	\$5,000	0%	0.60
Haverhill	8	\$20,000	0%	0.12
Haydenville	1	\$2,500	0%	N/A
Hingham	8	\$20,000	0%	0.33
Holbrook	1	\$2,500	0%	0.09
Holden	4	\$10,000	0%	0.20
Holliston	14	\$35,000	1%	0.93
Holyoke	9	\$22,500	0%	0.24
Hopedale	1	\$2,500	0%	0.17
Hopkinton	17	\$42,500	1%	0.91
Hudson	5	\$12,500	0%	0.25
Hull	8	\$20,000	0%	0.79

Huntington	1	\$2,500	0%	0.48
Hyannis	1	\$2,500	0%	N/A
Hyde Park	5	\$12,500	0%	N/A
Ipswich	10	\$25,000	0%	0.73
Jamaica Plain	10	\$25,000	0%	N/A
Kingston	6	\$15,000	0%	0.44
Lakeville	1	\$2,500	0%	0.09
Lancaster	3	\$7,500	0%	0.36
Lanesborough	1	\$2,500	0%	0.33
Lawrence	5	\$12,500	0%	0.06
Lee	2	\$5,000	0%	0.35
Leeds	1	\$2,500	0%	N/A
Leominster	9	\$22,500	0%	0.21
Leverett	3	\$7,500	0%	1.61
Lexington	44	\$110,000	2%	1.28
Leyden	1	\$2,500	0%	1.36
Lincoln	14	\$35,000	1%	2.00
Littleton	8	\$20,000	0%	0.79
Longmeadow	5	\$12,500	0%	0.32
Lowell	16	\$40,000	1%	0.14
Ludlow	2	\$5,000	0%	0.10
Lunenburg	3	\$7,500	0%	0.25
Lynn	6	\$15,000	0%	0.06
Lynnfield	4	\$10,000	0%	0.31
Malden	17	\$42,500	1%	0.26
Manchester-by- the-Sea	3	\$7,500	0%	0.56
Mansfield	7	\$17,500	0%	0.29
Marblehead	10	\$25,000	0%	0.49
Marion	4	\$10,000	0%	0.75
Marlborough	8	\$20,000	0%	0.19
Marshfield	2	\$5,000	0%	0.08
Mashpee	3	\$7,500	0%	0.20
Mattapan	1	\$2,500	0%	N/A
Mattapoisett	2	\$5,000	0%	0.31
Maynard	5	\$12,500	0%	0.47
Medfield	7	\$17,500	0%	0.55
Medford	32	\$80,000	2%	0.54
Medway	5	\$12,500	0%	0.38
Melrose	17	\$42,500	1%	0.57
Mendon	1	\$2,500	0%	0.16
Merrimac	1	\$2,500	0%	0.15

Methuen	6	\$15,000	0%	0.11
Middleboro	6 2		0%	
		\$5,000		0.08
Middleton	1	\$2,500	0%	0.10
Milford	4	\$10,000	0%	0.13
Millbury	3	\$7,500	0%	0.22
Millis	2	\$5,000	0%	0.24
Millville	2	\$5,000	0%	0.63
Milton	14	\$35,000	1%	0.49
Monson	4	\$10,000	0%	0.49
N Attleboro	6	\$15,000	0%	0.19
N Billerica	3	\$7,500	0%	N/A
N Chelmsford	2	\$5,000	0%	N/A
N Dighton	1	\$2,500	0%	N/A
Nahant	1	\$2,500	0%	0.30
Nantucket	3	\$27,500	1%	0.21
Natick	27	\$67,500	1%	0.73
Needham	30	\$75,000	1%	0.93
Needham	6	\$15,000	0%	N/A
Heights				
New Bedford	3	\$7,500	0%	0.03
Newbury	1	\$2,500	0%	0.15
Newburyport	10	\$25,000	0%	0.55
Newton	30	\$75,000	1%	0.34
Newton Center	4	\$10,000	0%	N/A
Newton	3	\$7,500	0%	N/A
Highlands				
Newton Lower	1	\$2,500	0%	N/A
Newtonville	1	\$2,500	0%	N/A
Norfolk	7	\$17,500	0%	0.60
North Adams	3	\$7,500	0%	0.23
North Andover	5	\$12,500	0%	0.16
North Brookfield	1	\$2,500	0%	0.21
North Easton	7	\$17,500	0%	N/A
North Falmouth	1	\$2,500	0%	N/A
North Grafton	3	\$7,500	0%	N/A
North Quincy	1	\$2,500	0%	N/A
North Reading	5	\$12,500	0%	0.32
North Weymouth	2	\$5,000	0%	N/A
Northampton	13	\$32,500	1%	0.44
Northborough	12	\$30,000	1%	0.76
Northbridge	2	\$5,000	0%	0.12
Northfield	1	\$2,500	0%	0.35
TAOLUIIICIU	1	φ2,300	U / 0	0.33

Norton	3	\$7,500	0%	0.16
Norwell	2	\$5,000	0%	0.18
Norwood	12	\$30,000	1%	0.38
Oak Bluffs	6	\$15,000	0%	1.12
Orange	1	\$2,500	0%	0.13
Orleans	4	\$10,000	0%	0.63
Osterville	2	\$5,000	0%	N/A
Oxford	1	\$2,500	0%	0.07
Palmer	1	\$2,500	0%	0.08
Peabody	4	\$10,000	0%	0.07
Pelham	4	\$10,000	0%	3.13
Pembroke	5	\$12,500	0%	0.27
Pepperell	2	\$5,000	0%	0.17
Phillipston	1	\$2,500	0%	0.58
Pittsfield	1	\$2,500	0%	0.02
Plymouth	25	\$62,500	1%	0.41
Princeton	1	\$2,500	0%	0.29
Provincetown	1	\$2,500	0%	0.27
Quincy	34	\$85,000	2%	0.33
Randolph	1	\$2,500	0%	0.03
Raynham	1	\$2,500	0%	0.07
Reading	17	\$42,500	1%	0.67
Rehoboth	1	\$2,500	0%	0.08
Revere	6	\$15,000	0%	0.10
Rochester	1	\$2,500	0%	0.17
Rockland	2	\$5,000	0%	0.11
Rockport	4	\$10,000	0%	0.57
Roslindale	16	\$40,000	1%	N/A
Rowley	2	\$5,000	0%	0.32
Roxbury	2	\$5,000	0%	N/A
Royalston	1	\$2,500	0%	0.80
Rutland	5	\$12,500	0%	0.55
S Weymouth	3	\$7,500	0%	N/A
S Yarmouth	1	\$2,500	0%	N/A
Salem	9	\$22,500	0%	0.20
Salisbury	1	\$2,500	0%	0.11
Sandwich	6	\$15,000	0%	0.30
Saugus	4	\$10,000	0%	0.14
Scituate	3	\$7,500	0%	0.16
Seekonk	6	\$15,000	0%	0.39
Sharon	16	\$40,000	1%	0.86
Sheffield	1	\$2,500	0%	0.30

Shelburne Falls	4	\$10,000	0%	N/A
Sherborn	5	\$12,500	0%	2.65
Shirley	1	\$2,500	0%	0.13
Shrewsbury	21	\$52,500	1%	0.55
Shutesbury	4	\$10,000	0%	2.33
Somerset	5	\$12,500	0%	0.27
Somerville	35	\$87,500	2%	0.43
South Dartmouth	2	\$5,000	0%	N/A
South Deerfield	3	\$7,500	0%	N/A
South Easton	5	\$11,500	0%	N/A
South Grafton	3	\$7,500	0%	N/A
South Hadley	4	\$10,000	0%	0.22
South Hamilton	2	\$5,000	0%	N/A
South Walpole	1	\$2,500	0%	N/A
South Waltham	1	\$2,500	0%	N/A
South Weymouth	2	\$5,000	0%	N/A
South Yarmouth	1	\$2,500	0%	N/A
Southborough	8	\$20,000	0%	0.77
Southbridge	1	\$2,500	0%	0.06
Southwick	2	\$5,000	0%	0.22
Spencer	2	\$5,000	0%	0.17
Springfield	7	\$17,500	0%	0.04
Sterling	1	\$2,500	0%	0.13
Stoneham	9	\$22,500	0%	0.39
Stoughton	6	\$15,000	0%	0.20
Stow	8	\$20,000	0%	1.12
Sturbridge	2	\$5,000	0%	0.20
Sudbury	18	\$45,000	1%	0.95
Sunderland	1	\$2,500	0%	0.27
Sutton	1	\$2,500	0%	0.11
Swampscott	2	\$5,000	0%	1.32
Swansea	2	\$5,000	0%	0.12
Taunton	8	\$20,000	0%	0.13
Tewksbury	5	\$12,500	0%	0.61
Topsfield	2	\$5,000	0%	0.06
Turners Falls	1	\$2,500	0%	N/A
Tyngsboro	2	\$5,000	0%	0.16
Upton	4	\$10,000	0%	0.50
Uxbridge	2	\$5,000	0%	0.14
Vineyard Haven	6	\$15,000	0%	N/A
W Hatfield	1	\$2,500	0%	N/A
W Springfield	3	\$7,500	0%	0.10

Waban	11	\$27,500	1%	N/A
Wakefield	7	\$17,500	0%	0.26
Walpole	11	\$27,500	1%	0.42
Waltham	23	\$57,500	1%	0.35
Ware	2	\$5,000	0%	1.88
Watertown	24	\$60,000	1%	0.68
Wayland	16	\$40,000	1%	1.15
Webster	1	\$2,500	0%	0.06
Wellesley	16	\$40,000	1%	0.54
Wellesley Hills	4	\$10,000	0%	N/A
Wellfleet	2	\$5,000	0%	0.56
Wenham	1	\$2,500	0%	0.20
West Barnstable	2	\$5,000	0%	N/A
West Boylston	1	\$2,500	0%	0.13
West	4	\$10,000	0%	0.52
Bridgewater				
West Brookfield	3	\$7,500	0%	0.78
West Dennis	1	\$2,500	0%	N/A
West Newbury	5	\$12,500	0%	1.11
West Newton	4	\$10,000	0%	N/A
West Roxbury	7	\$17,500	0%	N/A
West	1	\$2,500	0%	N/A
Stockbridge		Φ. σ. ο ο ο	00/	1.40
West Tisbury	2	\$5,000	0%	1.49
West Yarmouth	1	\$2,500	0%	N/A
Westborough	15	\$37,500	1%	0.70
Westfield	5	\$12,500	0%	0.12
Westford	20	\$50,000	1%	0.81
Westminster	2	\$5,000	0%	0.24
Weston	5	\$12,500	0%	0.42
Westport	2	\$5,000	0%	0.12
Westwood	14	\$35,000	1%	0.86
Weymouth	8	\$20,000	0%	0.14
Whitinsville	1	\$2,500	0%	N/A
Wilbraham	4	\$10,000	0%	0.27
Williamsburg	2	\$5,000	0%	0.80
Williamstown	2	\$5,000	0%	0.27
Wilmington	7	\$17,500	0%	0.30
Winchendon	1	\$2,500	0%	0.10
Winchester	21	\$52,500	1%	0.91
Winthrop	4	\$10,000	0%	0.21
Woburn	12	\$30,000	1%	0.29

Woods Hole	1	\$2,500	0%	N/A
Worcester	22	\$55,000	1%	0.11
Wrentham	2	\$5,000	0%	0.16
Total	2004	\$5,029,000	100%	

Light-duty BEV rebates issued by municipality: 2023

The number of rebates issued per capita is calculated using the 2020 Massachusetts Census Data<sup>11</sup>.

Municipality	Number of Rebates issued	Value of rebates issued	Percentage of total rebate spend in 2023	Rebates Issued Per Capita per 1000 residents
Abington	6	\$20,000	0%	0.35
Acton	113	\$393,500	1%	4.70
Acushnet	4	\$14,000	0%	0.38
Agawam	8	\$28,000	0%	0.28
Alford	1	\$3,500	0%	2.06
Allston	14	\$45,000	0%	N/A
Amesbury	14	\$49,000	0%	0.81
Amherst	50	\$174,000	1%	1.27
Andover	95	\$331,500	1%	2.60
Arlington	143	\$501,500	2%	3.09
Ashburnham	2	\$7,000	0%	0.32
Ashby	2	\$7,000	0%	0.63
Ashfield	3	\$9,500	0%	1.77
Ashland	70	\$244,000	1%	3.72
Assonet	3	\$10,500	0%	N/A
Athol	4	\$14,000	0%	0.33
Attleboro	41	\$142,500	0%	0.88
Attleboro Falls	2	\$7,000	0%	N/A

<sup>&</sup>lt;sup>11</sup> Massachusetts Census Data (malegislature.gov)

55

Auburn	22	\$77,000	0%	1.30
Auburndale	31	\$108,500	0%	N/A
Avon	5	\$17,500	0%	1.05
Ayer	15	\$52,500	0%	1.77
Baldwinville	1	\$3,500	0%	N/A
Barnstable	4	\$14,000	0%	0.08
Becket	2	\$7,000	0%	1.04
Bedford	59	\$206,500	1%	4.10
Belchertown	12	\$42,000	0%	0.78
Bellingham	32	\$112,000	0%	1.89
Belmont	82	\$285,000	1%	3.00
Berkley	4	\$14,000	0%	0.59
Berlin	3	\$10,500	0%	0.95
Bernardston	1	\$3,500	0%	0.48
Beverly	49	\$169,500	1%	1.15
Billerica	62	\$217,000	1%	1.47
Blackstone	7	\$26,000	0%	0.76
Blandford	1	\$3,500	0%	0.82
Bolton	13	\$44,500	0%	2.29
Boston	310	\$1,087,000	3%	0.46
Bourne	3	\$10,500	0%	0.15
Boxborough	30	\$105,000	0%	5.45
Boxford	12	\$42,000	0%	1.46
Boylston	9	\$31,500	0%	1.86
Bradford	2	\$7,000	0%	N/A
Braintree	124	\$432,000	1%	3.17
Brewster	16	\$57,500	0%	1.55
Bridgewater	18	\$63,000	0%	0.63
Brighton	31	\$113,000	0%	N/A
Brockton	31	\$109,000	0%	0.29
Brookfield	1	\$3,500	0%	0.29
Brookline	77	\$267,500	1%	1.22
Burlington	74	\$259,000	1%	40.75
Buzzards Bay	1	\$3,500	0%	N/A
Byfield	3	\$10,500	0%	N/A
Cambridge	195	\$681,000	2%	1.65
Canton	45	\$156,500	0%	1.85
Carlisle	36	\$125,000	0%	6.87
Carver	1	\$3,500	0%	0.09
Cataumet	1	\$3,500	0%	N/A
Centerville	5	\$19,000	0%	N/A
Charlemont	4	\$12,000	0%	3.38
	i .			i

Charlestown	12	\$42,000	0%	N/A
Charlton	5	\$17,500	0%	0.38
Chatham	4	\$14,000	0%	0.61
Chelmsford	73	\$251,500	1%	2.01
Chelsea	19	\$65,500	0%	0.47
Cherry Valley	1	\$3,500	0%	N/A
Cheshire	2	\$7,000	0%	0.61
Chesterfield	2	\$7,000	0%	1.69
Chestnut Hill	52	\$183,500	1%	N/A
Chicopee	12	\$42,000	0%	0.22
Chilmark	3	\$10,500	0%	2.48
Clinton	10	\$35,000	0%	0.65
Cohasset	16	\$56,000	0%	1.91
Colrain	1	\$3,500	0%	0.62
Concord	81	\$281,500	1%	4.38
Conway	7	\$23,500	0%	3.98
Cotuit	2	\$7,000	0%	N/A
Cummington	1	\$3,500	0%	1.21
Dalton	3	\$10,500	0%	0.47
Danvers	28	\$98,500	0%	1.00
Dartmouth	6	\$21,000	0%	0.18
Dedham	30	\$102,000	0%	1.18
Deerfield	5	\$16,500	0%	0.98
Dennis	3	\$10,500	0%	0.20
Dennisport	1	\$3,500	0%	N/A
Devens	5	\$17,500	0%	N/A
Dighton	3	\$9,500	0%	0.37
Dorchester	45	\$156,500	0%	N/A
Dorchester Center	4	\$14,000	0%	N/A
Douglas	3	\$10,500	0%	0.33
Dover	18	\$63,000	0%	3.04
Dracut	36	\$127,500	0%	1.10
Dudley	4	\$14,000	0%	0.34
Dunstable	10	\$34,000	0%	2.98
Duxbury	18	\$63,000	0%	1.12
E Sandwich	3	\$10,500	0%	N/A
East Boston	8	\$28,000	0%	N/A
East Bridgewater	7	\$24,500	0%	0.48
East Brookfield	2	\$7,000	0%	0.90
East Dennis	3	\$10,500	0%	N/A
East Falmouth	11	\$38,500	0%	N/A
East Freetown	5	\$17,500	0%	N/A

East Harwich	1	\$3,500	0%	N/A
East	15	\$52,500	0%	0.91
Longmeadow				
East Orleans	1	\$3,500	0%	N/A
East Sandwich	1	\$3,500	0%	N/A
East Taunton	2	\$7,000	0%	N/A
East Walpole	15	\$52,500	0%	N/A
East Weymouth	5	\$16,500	0%	N/A
Eastham	8	\$29,500	0%	1.39
Easthampton	29	\$101,000	0%	1.79
Edgartown	8	\$28,000	0%	1.55
Erving	1	\$3,500	0%	0.60
Essex	6	\$21,000	0%	1.63
Everett	44	\$153,000	0%	0.90
Fairhaven	6	\$21,000	0%	0.38
Fall River	21	\$72,500	0%	0.22
Falmouth	14	\$47,000	0%	0.43
Fayville	1	\$3,500	0%	N/A
Feeding Hills	5	\$16,500	0%	N/A
Fiskdale	2	\$7,000	0%	N/A
Fitchburg	12	\$42,000	0%	0.29
Florence	12	\$42,000	0%	N/A
Foxborough	28	\$97,000	0%	1.50
Framingham	116	\$405,000	1%	1.60
Franklin	57	\$198,500	1%	1.71
Gardner	6	\$22,500	0%	0.28
Georgetown	7	\$24,500	0%	0.83
Gill	1	\$3,500	0%	0.64
Glendale	1	\$3,500	0%	N/A
Gloucester	23	\$82,000	0%	0.77
Goshen	2	\$7,000	0%	2.08
Grafton	20	\$70,000	0%	1.02
Granby	8	\$29,500	0%	1.31
Great Barrington	3	\$10,500	0%	0.42
Greenfield	18	\$63,500	0%	1.01
Groton	31	\$110,000	0%	2.74
Groveland	8	\$28,000	0%	1.18
Hadley	11	\$38,500	0%	2.07
Halifax	2	\$7,000	0%	0.26
Hampden	2	\$7,000	0%	0.40
Hanover	14	\$49,000	0%	0.94
Hanscom AFB	1	\$3,500	0%	N/A

Hanson	4	\$14,000	0%	0.38
Hardwick	2	\$7,000	0%	0.75
Harvard	22	\$77,000	0%	3.21
Harwich	8	\$28,000	0%	0.60
Harwich Port	2	\$7,000	0%	N/A
Hatfield	2	\$7,000	0%	0.60
Haverhill	34	\$121,000	0%	0.50
Haydenville	3	\$10,500	0%	N/A
Heath	1	\$3,500	0%	1.38
Hingham	38	\$133,000	0%	1.56
Holbrook	7	\$24,500	0%	0.61
Holden	24	\$85,500	0%	1.21
Holland	3	\$9,500	0%	1.15
Holliston	43	\$147,500	0%	2.87
Holyoke	20	\$70,000	0%	0.52
Hopedale	8	\$28,000	0%	1.33
Hopkinton	122	\$427,000	1%	6.50
Housatonic	3	\$9,500	0%	N/A
Hubbardston	4	\$14,000	0%	0.92
Hudson	18	\$62,000	0%	0.90
Hull	8	\$28,000	0%	0.79
Hyannis	14	\$49,000	0%	N/A
Hyannis Port	1	\$3,500	0%	N/A
Hyde Park	10	\$35,000	0%	N/A
Ipswich	19	\$68,000	0%	1.38
Jamaica Plain	51	\$172,500	1%	N/A
Jefferson	7	\$24,500	0%	N/A
Kingston	6	\$21,000	0%	0.44
Lakeville	9	\$31,500	0%	0.78
Lancaster	5	\$17,500	0%	0.59
Lanesborough	1	\$3,500	0%	0.33
Lawrence	20	\$70,000	0%	0.22
Lee	5	\$17,500	0%	0.86
Leeds	3	\$10,500	0%	N/A
Leicester	6	\$22,500	0%	0.54
Lenox	4	\$13,000	0%	0.79
Lenox Dale	1	\$3,500	0%	N/A
Leominster	23	\$80,500	0%	0.53
Leverett	5	\$19,000	0%	2.68
Lexington	184	\$637,500	2%	5.34
Leyden	1	\$3,500	0%	1.36
Lincoln	24	\$84,000	0%	3.42

Littleton	26	\$91,000	0%	2.56
Longmeadow	30	\$104,500	0%	1.89
Lowell	90	\$316,500	1%	0.78
Ludlow	13	\$45,500	0%	0.62
Lunenburg	10	\$35,000	0%	0.85
Lynn	34	\$120,500	0%	0.34
Lynnfield	23	\$80,500	0%	1.77
Malden	100	\$349,500	1%	1.51
Manchester-by-	14	\$49,000	0%	2.59
the-Sea	14	\$49,000	070	2.39
Mansfield	40	\$140,000	0%	1.68
Marblehead	32	\$111,000	0%	1.57
Marion	9	\$31,500	0%	1.68
Marlborough	55	\$192,500	1%	1.32
Marshfield	28	\$97,000	0%	1.08
Marstons Mills	5	\$17,500	0%	N/A
Mashpee	15	\$52,500	0%	1.00
Mattapan	5	\$17,500	0%	N/A
Mattapoisett	10	\$35,000	0%	1.54
Maynard	19	\$66,500	0%	1.77
Medfield	24	\$82,000	0%	1.88
Medford	107	\$375,000	1%	1.79
Medway	27	\$94,500	0%	2.06
Melrose	68	\$237,000	1%	2.28
Mendon	9	\$30,500	0%	1.45
Merrimac	5	\$17,500	0%	0.74
Methuen	33	\$115,500	0%	0.62
Middleborough	11	\$38,500	0%	0.45
Middleton	22	\$77,000	0%	2.25
Milford	37	\$129,500	0%	1.22
Millbury	18	\$63,000	0%	1.30
Millis	9	\$31,500	0%	1.06
Millville	2	\$7,000	0%	0.63
Milton	62	\$215,000	1%	2.17
Monson	3	\$10,500	0%	0.37
Montague	3	\$10,500	0%	0.35
Monterey	1	\$3,500	0%	0.91
Mount Hermon	1	\$3,500	0%	N/A
Mount	1	\$3,500	0%	6.25
Washington		12,200	· · ·	0.20
Nahant	7	\$24,500	0%	2.10
Nantucket	5	\$17,500	0%	0.35

Natick	133	\$461,500	1%	3.59
Needham	88	\$305,000	1%	2.74
Needham Heights	8	\$28,000	0%	N/A
New Bedford	17	\$59,500	0%	0.17
New Salem	2	\$7,000	0%	2.03
Newbury	5	\$17,500	0%	0.74
Newburyport	21	\$72,500	0%	1.15
Newton	195	\$679,000	2%	2.19
Newton Center	12	\$41,000	0%	N/A
Newton Centre	6	\$21,000	0%	N/A
Newton	12	\$42,000	0%	N/A
Highlands				
Newton Upper	2	\$7,000	0%	N/A
Newtonville	6	\$21,000	0%	N/A
Norfolk	27	\$93,500	0%	2.32
North Adams	3	\$10,500	0%	0.23
North Andover	57	\$198,500	1%	1.84
North	55	\$194,000	1%	1.78
Attleborough	1.5	A # 0 # 0 0	00/	37/4
North Billerica	17	\$59,500	0%	N/A
North Chatham	1	\$3,500	0%	N/A
North Chelmsford	18	\$63,000	0%	N/A
North Dartmouth	9	\$31,500	0%	N/A
North Dighton	5	\$17,500	0%	N/A
North Easton	21	\$73,500	0%	N/A
North Falmouth	3	\$10,500	0%	N/A
North Grafton	38	\$132,000	0%	N/A
North Oxford	1	\$3,500	0%	N/A
North Quincy	1	\$2,500	0%	N/A
North Reading	21	\$72,500	0%	1.35
North Waltham	2	\$7,000	0%	N/A
North Weymouth	5	\$17,500	0%	N/A
Northampton	22	\$77,000	0%	0.74
Northborough	49	\$171,500	1%	3.11
Northbridge	6	\$21,000	0%	0.37
Northfield	2	\$7,000	0%	0.70
Norton	18	\$63,000	0%	0.94
Norwell	23	\$80,500	0%	2.03
Norwood	28	\$98,000	0%	0.89
Oak Bluffs	7	\$23,500	0%	1.31
Orange	3	\$10,500	0%	0.40
Orleans	7	\$24,500	0%	1.11
L		1	1	1

Osterville	3	\$10,500	0%	N/A
Otis	1	\$3,500	0%	0.61
Oxford	2	\$7,000	0%	0.15
Palmer	3	\$10,500	0%	0.24
Paxton	5	\$17,500	0%	1.00
Peabody	31	\$110,000	0%	0.57
Pelham	5	\$16,500	0%	3.91
Pembroke	10	\$35,000	0%	0.54
Pepperell	17	\$57,500	0%	1.47
Petersham	2	\$7,000	0%	1.68
Phillipston	1	\$3,500	0%	0.58
Pittsfield	14	\$49,000	0%	0.32
Plainville	11	\$38,500	0%	1.11
Plymouth	68	\$236,000	1%	1.11
Pocasset	4	\$14,000	0%	N/A
Princeton	5	\$17,500	0%	1.43
Provincetown	5	\$17,500	0%	1.36
Quincy	212	\$741,000	2%	2.09
Randolph	44	\$153,000	0%	1.26
Raynham	14	\$49,000	0%	0.92
Reading	38	\$133,000	0%	1.49
Rehoboth	6	\$21,000	0%	0.48
Revere	35	\$121,500	0%	0.56
Richmond	3	\$9,500	0%	2.13
Rochester	2	\$7,000	0%	0.35
Rockland	10	\$35,000	0%	0.56
Rockport	11	\$38,500	0%	1.57
Roslindale	40	\$140,000	0%	N/A
Rowley	4	\$14,000	0%	0.65
Roxbury	2	\$7,000	0%	N/A
Roxbury Crossing	2	\$7,000	0%	N/A
Royalston	2	\$7,000	0%	1.60
Rutland	10	\$35,000	0%	1.11
S Dartmouth	1	\$3,500	0%	N/A
S Hamilton	2	\$7,000	0%	N/A
S Weymouth	4	\$14,000	0%	N/A
Sagamore Beach	3	\$10,500	0%	N/A
Salem	38	\$133,000	0%	0.85
Salisbury	4	\$14,000	0%	0.43
Sandwich	10	\$35,000	0%	0.49
Saugus	28	\$97,000	0%	0.98
Scituate	30	\$106,500	0%	1.57

Seekonk	10	\$35,000	0%	0.64
Sharon	70	\$243,000	1%	3.77
Sheffield	4	\$14,000	0%	1.20
Shelburne Falls	5	\$17,500	0%	2.65
Sherborn	16	\$55,000	0%	3.64
Shirley	13	\$45,500	0%	1.75
Shrewsbury	160	\$559,000	2%	4.17
Shutesbury	3	\$10,500	0%	1.75
Somerset	13	\$45,500	0%	0.71
Somerville	121	\$422,500	1%	1.49
South Attleboro	1	\$3,500	0%	N/A
South Plates	8	\$28,000	0%	N/A
South Chatham	2	\$7,000	0%	N/A
South Dartmouth	6	\$21,000	0%	N/A
South Deerfield	6	\$21,000	0%	N/A
South Dennis	7	\$24,500	0%	N/A
South Easton	13	\$44,500	0%	N/A
South Grafton	31	\$108,500	0%	N/A
South Hadley	21	\$72,500	0%	1.16
South Hamilton	9	\$31,500	0%	N/A
South Walpole	1	\$3,500	0%	N/A
South Waltham	1	\$3,500	0%	N/A
South Weymouth	15	\$52,500	0%	N/A
South Yarmouth	7	\$23,500	0%	N/A
Southampton	4	\$14,000	0%	0.64
Southborough	42	\$147,000	0%	4.02
Southbridge	1	\$3,500	0%	0.06
SOUTHFIELD	1	\$3,500	0%	N/A
Southwick	6	\$20,000	0%	0.65
	5			
Spencer	37	\$17,500	0%	0.42
Springfield		\$131,500	0%	0.24
Sterling	13	\$45,500	0%	1.63
STOCKBRIDGE	1	\$3,500	0%	0.50
Stoneham	41	\$143,500	0%	1.76
Stoughton	22	\$77,000	0%	0.75
Stow	25	\$86,500	0%	3.48
Sturbridge	4	\$14,000	0%	0.41
Sudbury	67	\$233,500	1%	3.54
Sunderland	5	\$17,500	0%	1.37
Sutton	8	\$28,000	0%	0.85
Swampscott	18	\$63,000	0%	1.19
Swansea	9	\$30,500	0%	0.52

Taunton	17	\$58,500	0%	0.29
Teaticket	2	\$7,000	0%	N/A
Templeton	2	\$7,000	0%	0.25
Tewksbury	28	\$98,000	0%	0.89
Topsfield	8	\$28,000	0%	1.22
Townsend	3	\$10,500	0%	0.33
Truro	7	\$23,500	0%	2.85
Turners Falls	1	\$3,500	0%	N/A
Tyngsborough	16	\$56,000	0%	1.29
Tyringham	1	\$3,500	0%	2.34
Upton	19	\$66,500	0%	2.38
Uxbridge	12	\$41,000	0%	0.85
Vineyard Haven	5	\$16,500	0%	N/A
W Falmouth	1	\$3,500	0%	N/A
Waban	27	\$94,500	0%	N/A
Wakefield	45	\$157,500	1%	1.66
Wales	2	\$7,000	0%	1.09
Walpole	36	\$125,000	0%	1.36
Waltham	106	\$370,000	1%	1.63
Waquoit	1	\$3,500	0%	N/A
Ware	6	\$19,000	0%	0.60
Wareham	6	\$21,000	0%	0.26
Warren	1	\$3,500	0%	0.20
Warwick	2	\$7,000	0%	2.56
Watertown	77	\$268,500	1%	2.18
Wayland	70	\$243,000	1%	5.02
Webster	9	\$31,500	0%	0.51
Wellesley	71	\$250,000	1%	2.40
Wellesley Hills	9	\$31,500	0%	N/A
Wellfleet	6	\$21,000	0%	1.68
Wendell	1	\$3,500	0%	1.08
Wenham	6	\$21,000	0%	1.21
West Barnstable	4	\$14,000	0%	N/A
West Boylston	4	\$14,000	0%	0.51
West Bridgewater	4	\$14,000	0%	0.52
West Dennis	1	\$3,500	0%	N/A
West Harwich	3	\$10,500	0%	N/A
West Newbury	8	\$28,000	0%	1.78
West Newton	13	\$45,500	0%	#DIV/0!
West Roxbury	40	\$140,000	0%	N/A
West Springfield	17	\$59,500	0%	0.59
West Stockbridge	1	\$5,000	0%	0.74

West Tisbury	7	\$24,500	0%	1.97
West Wareham	3	\$10,500	0%	N/A
West Warren	1	\$5,000	0%	N/A
West Yarmouth	3	\$10,500	0%	N/A
Westborough	91	\$318,500	1%	4.22
Westfield	10	\$35,000	0%	0.24
Westford	134	\$467,000	1%	5.44
Westhampton	2	\$7,000	0%	1.23
Westminster	7	\$24,500	0%	0.85
Weston	29	\$99,500	0%	2.45
Westport	13	\$45,500	0%	0.80
Westwood	51	\$178,500	1%	3.14
Weymouth	42	\$144,000	0%	0.73
Whately	3	\$10,500	0%	1.87
Whitinsville	7	\$24,500	0%	N/A
Whitman	6	\$21,000	0%	0.40
Wilbraham	17	\$58,500	0%	1.16
Williamsburg	2	\$7,000	0%	0.80
Williamstown	23	\$79,500	0%	3.06
Wilmington	52	\$183,500	1%	2.23
Winchendon	4	\$14,000	0%	0.39
Winchester	72	\$250,000	1%	3.13
Winthrop	14	\$49,000	0%	0.72
Woburn	80	\$278,000	1%	1.96
Woods Hole	2	\$7,000	0%	N/A
Worcester	106	\$370,500	1%	0.51
Worthington	1	\$3,500	0%	0.84
Wrentham	15	\$52,500	0%	1.23
Yarmouth Port	5	\$17,500	0%	N/A
Total	8979	\$31,330,000	100%	

## D. Rebates issued by vehicle type and weight

Rebates issued by vehicle type and weight: 2021-2022

Vehicle Type	Number of Rebates	Value of rebates	Percentage of total rebate
	issued	issued	spend in 2023
Light Duty	2004	\$5,029,000	80%
Passenger			
Light Duty Pick	116	\$870,750	14%
Up			
Class 2b	19	\$142,500	2%
Class 3	0	\$0	0%
Class 4	0	\$0	0%
Class 5	1	\$45,000	1%
Class 6	0	\$0	0%
Class 7	2	\$165,000	3%
Class 8	0	\$0	0%
Total	2,142	\$6,252,250	100%

Rebates issued by vehicle type and weight: 2023

Vehicle Type	Number of Rebates	Value of rebates	Percentage of total rebate
	issued	issued	spend in 2023
Light Duty	8979	\$31,330,000	93%
Passenger			
Light Duty Pick	150	\$1,132,500	3%
Up			
Class 2b	132	\$990,000	3%
Class 3	0	\$0	0%
Class 4	0	\$0	0%
Class 5	2	\$90,000	0%
Class 6	2	\$120,000	0%
Class 7	0	\$0	0%
Class 8	0	\$0	0%
Total	9,265	\$33,662,500	100%

# E. Light-duty BEV rebates issued by make

Light-duty-BEV rebates issued by make: 2021-2022

Make	Number of Rebates issued	Value of rebates issued	Percentage of total rebate spend in 2021-2022
BMW	5	\$32,500	1%
Chevrolet	269	\$672,500	13%
Ford	219	\$547,500	11%
Hyundai	282	\$704,000	14%
Kia	119	\$297,500	6%
MINI	75	\$187,500	4%
Nissan	228	\$570,000	11%
Polestar	11	\$27,500	1%
Tesla	483	\$1,207,500	24%
Volkswagen	313	\$782,500	16%
Total	2,004	\$5,029,000	100%

Light-duty BEV rebates issued by make: 2023

Make	Number of Rebates issued	Value of rebates issued	Percentage of total rebate spend in 2023
Audi	3	\$10,500	0%
BMW	33	\$118,500	0%
Chevrolet	797	\$2,729,500	9%
Fiat	1	\$5,000	0%
Ford	98	\$330,500	1%
Hyundai	471	\$1,636,000	5%
Kia	143	\$503,500	2%
MINI	68	\$227,000	1%
Nissan	230	\$798,500	3%
Polestar	10	\$35,000	0%
Subaru	103	\$365,000	1%
Tesla	6130	\$21,463,500	69%
Toyota	78	\$279,000	1%
Volkswagen	813	\$2,825,000	9%
(blank)	1	\$3,500	0%
Total	8,979	\$31,330,000	100%

## F. Light-duty BEV rebates issued by model

Light-duty BEV rebates issued by mode: 2021-2022

Model	Number of Rebates issued	Value of rebates issued	Percentage of total rebate spend in 2021-2022
2	11	\$27,500	1%
Bolt EUV	206	\$515,000	10%
Bolt EV	63	\$157,500	3%
Cooper SE Hardtop 2 Door	75	\$187,500	4%
EV6	13	\$32,500	1%
F-150 Lightning Pro	4	\$10,000	0%
i3	5	\$32,500	1%
ID.4 1st Edition	12	\$30,000	1%
ID.4 Pro	84	\$210,000	4%
ID.4 Pro S	217	\$542,500	11%
Ioniq 5	176	\$440,000	9%
Ioniq Electric	11	\$26,500	1%
Kona Electric	95	\$237,500	5%
LEAF	136	\$340,000	7%
Leaf Plus	92	\$230,000	5%
Model 3	474	\$1,185,000	24%
Model Y	9	\$22,500	0%
Mustang Mach-E	215	\$537,500	11%
Niro EV	106	\$265,000	5%
Total	2,004	\$5,029,000	100%

Light-duty BEV rebates issued by mode: 2023

Model	Number of Rebates issued	Value of rebates issued	Percentage of total rebate spend in 2023
2	10	\$35,000	0%
500e	1	\$5,000	0%
Ariya	89	\$313,000	1%
Bolt	18	\$70,500	0%
Bolt EUV	565	\$1,925,000	6%
Bolt EV	214	\$734,000	2%
bZ4X	78	\$279,000	1%
Cooper SE Hardtop 2 Door	68	\$227,000	1%
e-Golf	2	\$7,000	0%
EV6	57	\$201,000	1%
F-150 Lightning Pro	14	\$49,000	0%
i4 eDrive35	33	\$118,500	0%
ID.4 1st Edition	5	\$17,500	0%
ID.4 Pro	259	\$900,500	3%
ID.4 Pro S	545	\$1,893,000	6%
ID.4 S	2	\$7,000	0%
Ioniq 5	338	\$1,174,000	4%
Ioniq 6	51	\$180,000	1%
Ioniq Electric	2	\$7,000	0%
Kona Electric	80	\$275,000	1%
LEAF	102	\$355,000	1%
Leaf Plus	39	\$130,500	0%
Model 3	2114	\$7,385,000	24%
Model Y	4016	\$14,078,500	45%
Mustang Mach-E	84	\$281,500	1%
Niro Electric	1	\$3,500	0%
Niro EV	85	\$299,000	1%
Q4 e-tron (50)	3	\$10,500	0%
Solterra	103	\$365,000	1%
(blank)	1	\$3,500	0%
Total	8,979	\$31,330,000	100%

G. Light-duty BEV rebates issued by applicant type

Light-duty BEV rebates issued by applicant type: 2021-2022

Applicant Type	Number of Rebates issued	Value of rebates issued	Percentage of total rebate spend in 2023
Business	38	\$114,000	2%
Individual	1966	\$4,915,000	98%
Total	2,004	\$5,029,000	100%

Light-duty BEV rebates issued by applicant type: 2023

Applicant Type	Number of Rebates issued	Value of rebates issued	Percentage of total rebate spend in 2023
Business	83	\$282,500	1%
Individual	8896	\$31,047,500	99%
Total	8,979	\$31,330,000	100%

#### H. Light-duty BEV rebates issued by new programs

As stated above, in August of 2023, MOR-EV launched the MOR-EV Used rebate and the MOR-EV+ adder. Therefore, there is only data from 2023 and no historical data to be provided.

New	Number of	Value of rebates	Percentage of total rebate spend
Programs	Rebates issued	issued	in 2023
MOR-EV	59	\$226,000	1%
Used			
MOR-EV+	52	\$260,000	1%
Total	8,979	\$31,330,000	100%

## Acknowledgements

DOER Commissioner Mahony would like to acknowledge the following people for their assistance in the analysis and development of this report.

#### Department of Energy Resources

- Catie Dimas-Snyder, Deputy Director, Leading by Example Division
- Morgan Bowler, Clean Energy and Sustainability Coordinator
- Huda Elhout, Graduate Student Intern (UMass Amherst)
- Mark Scribner, Electric Transportation Program Manager

# Executive Office of Energy & Environmental Affairs

- Crystal Johnson, Assistant Secretary of Environmental Justice
- Krishana Abrahim-Petrie, Environmental Justice Program Manager

## Center for Sustainable Energy

• Marlene Mauer, Manager, U.S. Transportation Programs