

# MOR-EV

Massachusetts Offers Rebates  
for Electric Vehicles

## Year One Final Report

August 31, 2015



*Submitted to*  
Massachusetts Department of Energy Resources

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## Program Overview

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Funded by the Executive Office of Energy and Environmental Affairs (EEA) and Department of Energy Resources (DOER)<sup>1</sup> and administered by the Center for Sustainable Energy (CSE), Massachusetts Offers Rebates for Electric Vehicles (MOR-EV) promotes the production and use of zero-emission vehicles (ZEVs) through incentivizing vehicle acquisition and increasing consumer and dealer awareness of clean battery electric, plug-in hybrid electric and fuel cell electric vehicles.<sup>2</sup> Offering consumer rebates of up to \$2,500, MOR-EV launched in June 2014 in support of the state's goals to reach 300,000 zero-emission vehicles on the roads by 2025. The MOR-EV program is designed to accelerate deployment of ZEVs in the Commonwealth by incentivizing residents to purchase or lease vehicles that will help:

- Protect public health and air quality by reducing transportation-related air pollution that contributes to the formation of smog and related health effects such as asthma and heart attacks
- Reduce greenhouse gas (GHG) emissions that contribute to climate change
- Enhance energy diversity and security
- Save drivers money
- Promote economic growth

Project terms and conditions, including eligibility requirements, are provided on the MOR-EV website and in the rebate application. These requirements and other program guidelines are updated at least annually in the MOR-EV Implementation Manual. All project documents are available on the MOR-EV web page ([mor-ev.org](http://mor-ev.org)).

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<sup>1</sup> The agencies have authorized use of Regional Greenhouse Gas Initiative (RGGI) auction proceeds to fund MOR-EV program for year one.

<sup>2</sup> For the purposes of the MOR-EV program, ZEVs encompass multiple vehicle types including battery electric vehicles, fuel cell electric vehicles, plug-in hybrid electric vehicles and zero-emission motorcycles. Electric vehicle (EV) and ZEV are used interchangeably in this report.



The MOR-EV program provides consumers rebates of varying levels for five different vehicle types. Table 1 outlines vehicle type details and rebate levels.<sup>3</sup> Year one rebates were comprised of three vehicle types: BEV, PHEV+ and PHEV. The all-electric battery electric vehicle (BEV) receives the highest rebate amount of \$2,500. Electric vehicles powered by both an electric motor and a gas engine, called plug-in hybrid electric vehicles (PHEVs), are broken into two categories based on the vehicle’s battery capacity, each receiving a different rebate amount.

**Table 1. Vehicle Type Definitions and Rebate Amounts**

Vehicle Types	Definition	Energy Source	Rebate Amount
BEV	Battery Electric Vehicle	Electricity	\$2,500
FCEV	Fuel Cell Electric Vehicle	Hydrogen fuel cell	\$2,500
PHEV+	Plug-in Hybrid Electric Vehicle with battery capacity $\geq$ 10kWh	Electricity and gasoline	\$2,500
PHEV	Plug-in Hybrid Electric Vehicle with battery capacity $<$ 10kWh	Electricity and gasoline	\$1,500
ZEM	Zero-Emission Motorcycle	Electricity	\$750

To support program transparency and inform zero-emission vehicle market stakeholders, program data is available via an interactive dashboard and mapping tools on the program website ([mor-ev.org/program-statistics](http://mor-ev.org/program-statistics)). In addition, estimated cumulative greenhouse gas reduction totals also are provided to track program impact. In support of the transportation policies outlined in the Massachusetts Clean Energy and Climate Plan for 2020, the 789 new vehicles rebated by MOR-EV reduced GHG emissions by 2,238 short tons.<sup>4</sup> Examples of the program statistics page, rebate distribution maps and GHG reductions tool are in Appendix 1.

<sup>3</sup> The program website, [www.mor-ev.org](http://www.mor-ev.org), lists all eligible vehicle models by program category.

<sup>4</sup> Calculated as the difference in annual emissions for a BEV, PHEV+ or PHEV versus emissions from a typical internal combustion gasoline vehicle. A complete list of assumptions can be found on the GHG Reductions tab of the MOR-EV Statistics Page (<https://mor-ev.org/program-statistics>).

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The majority of rebated vehicles are BEVs (65%) and the most rebated vehicle is the Nissan Leaf with 196 rebates.

This report summarizes program activity and data from the program's first year that spanned from June 2014 through April 2015. From program launch date, June 18, 2014, through April 15, 2015, the MOR-EV program reserved rebates for 789 new electric vehicles (EVs), totaling \$1,858,500. Sixteen different eligible vehicle models participated in year one of MOR-EV. The majority of rebated vehicles are BEVs (65%) and the most rebated vehicle is the Nissan Leaf with 196 rebates. The ratio of leased to purchased vehicles is relatively balanced, with 57% of participating vehicles being purchases. Full details of rebated vehicles in year one are in Appendix 2.





## Outreach and Education

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Targeted marketing of the MOR-EV program has been critical to its success. Because consumers and dealers are two of the most important stakeholders in ZEV adoption, their understanding of MOR-EV availability, existence and guidelines is paramount.

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In year one, MOR-EV outreach staff participated in 13 consumer events with more than 500 program-specific interactions.

### Consumer Outreach

Consumer education is an integral part of increasing ZEV awareness and adoption. Using community events as a platform, outreach staff provides consumers with information on MOR-EV and basic ZEV knowledge. Participation at consumer events has successfully increased program exposure and availability of information about ZEV adoption. In year one, MOR-EV outreach staff participated in 13 consumer events with more than 500 program-specific interactions. While total consumer outreach influence is hard to track, MOR-EV staff counted materials distributed and person-to-person interactions to measure program-specific interactions. Consumers are attracted to the program-eligible vehicle poster, and outreach staff noticed increased interactions in events involving on-site eligible vehicles. Outreach staff also have been successful in collaborating with the Massachusetts Clean Cities Coalition and the MASS DRIVE CLEAN campaign ([massdriveclean.org](https://massdriveclean.org)) on a number of events. Consumer events, descriptions and associated MOR-EV interactions and leads are described in Table 2.

**Table 2. Consumer Outreach Events**

<b>Event</b>	<b>Description</b>	<b>Interactions &amp; Leads</b>
<b>Schneider Electric Company Picnic</b>	Employee event featuring on-site eligible vehicles	150 people
<b>Spindles Car Show</b>	Outdoor auto show including information on both conventional vehicles and ZEVs	38 people
<b>Cambridge/Harvard Farmers Market</b>	Farmers market event involving target demographic for ZEV adopters	50 people
<b>National Drive Electric Week (NDEW) - Wellesley Office Park</b>	Collaborative event with DOER during National Drive Electric Week, featuring on-site eligible vehicles	18 people
<b>NDEW - Worcester</b>	ZEV-specific event featuring on-site eligible vehicles	35 people
<b>NDEW - Boston</b>	ZEV-specific event featuring on-site eligible vehicles	25 people
<b>Norwood Hampton Inn Charging Station Grand Opening</b>	Charging station opening event featuring ZEV test drives and inclusion of business community members	16 people
<b>Comfort Inn of Revere Charging Station Grand Opening</b>	Charging station opening event featuring ZEV test drives and inclusion of business community members	13 people
<b>Green Solutions Expo</b>	Collaborative event with Mass. Clean Cities targeting “green” consumers	45 people
<b>AltWheels Fleet Day</b>	Collaborative event with Mass. Clean Cities targeting fleet managers and consumers	35 people
<b>New England International Auto Show</b>	Collaborative event with Mass. Clean Cities targeting consumers and eligible OEMs	23 people
<b>Mass Drive Clean: Devens</b>	First ride-and-drive event with Mass Drive Clean – featured ZEV test drives and included business community members	25 people
<b>Mass Drive Clean: Schneider Electric</b>	Employee ride-and-drive event featuring ZEV test drives, static display vehicles and environmental vendors	50 people

## Dealer Outreach

Educating and developing relationships with eligible-vehicle dealers is extremely vital to support the MOR-EV program’s efforts to accurately inform consumers on available incentives. CSE conducted two rounds of informational program webinars open to all eligible-vehicle dealers with an attendance of 36 dealer representatives. The Massachusetts State Automobile Dealers Association (MSADA) has participated in many of the state’s ZEV programs and provides opportunities to both share information with their membership and obtain dealer input. The MOR-EV program was promoted in the February edition of the MSADA legal bulletin and a section detailing the March 2015 webinar series was included in the corresponding issue of Auto Dealer magazine. In addition, MOR-EV outreach staff participated in dealer-organized training, presenting information on MOR-EV eligibility requirements and the application process. Table 3 lists dealer webinar and training participation numbers.

Given that dealers represent such a critical source of information to consumers, MOR-EV outreach staff conducts in-person outreach to enhance dealer understanding. CSE developed a targeted dealer outreach strategy that involves providing outreach to dealers that have only participated in the MOR-EV program once. Leveraging program data, CSE compiled a list of these low-participating dealers that staff used to conduct on-site dealer visits and provide program marketing materials. In year one, 15 in-person dealership visits were conducted and staff called 40 dealerships to provide program information.

**Table 3. Dealer Outreach Events**

Event Type	Description	Total Attendance
<b>Dealer Webinars</b>	CSE staff conducted nine informational webinars to describe funding levels, applicant eligibility, application processes and general project information.	36 dealer representatives
<b>Dealer Training</b>	MOR-EV staff presented program requirements and an overview of the application process to dealers at Nissan’s Massachusetts Dealer Training.	60 dealer representatives





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Consumers benefit from seeing the vehicles in combination with hearing about the advantages of ZEVs and MOR-EV program information.

## Future Outreach

Year one of MOR-EV program outreach focused on consumer and dealer outreach. Consumer outreach has proven successful and resulted in several lessons learned that can be applied to future outreach. On-site eligible vehicles serve as a major attraction at consumer events and future outreach will prioritize having eligible vehicles on static display and, when possible, available for test drives. Consumers benefit from seeing the vehicles in combination with hearing about the advantages of ZEVs and MOR-EV program information. In addition to engaging consumers, a poster with colorful photographs of eligible vehicles provided outreach staff and consumers the opportunity to discuss current eligible vehicle availability, creating an open dialogue surrounding vehicles that are not yet available in Massachusetts. Dealerships remain the primary method rebate recipients learn about the rebate, emphasizing the success of year one program dealer outreach as well as a need for continued education and outreach for dealerships. Year one participation rates will inform future outreach.

To further support the MOR-EV program, CSE has established and staffed an office in Cambridge. With this development, CSE staff will increase targeted dealership outreach including on-site dealership visits in future outreach. MOR-EV will aim to target a broader audience for program promotion by increasing program web and social media presence in year two. Through the use of Facebook, Twitter, op-ed articles and monthly newsletters, staff plans to promote the MOR-EV program as well as increase general ZEV awareness on a larger scale within the state. To assist in facilitating year two's digital media outreach initiative, CSE intends to partner with the Massachusetts Chapter Sierra Club that has a strong following and proven track record of engaging a dedicated statewide audience.





## Operations

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### Appeals

There were 29 applicant appeals received from year one funding due to rebate denial with the most common reason for an appeal being dealer program misinformation. Of the 29 appeals received, 27 were granted eligibility and approved. After consulting with Steve Russell, MOR-EV contract manager, CSE staff granted eligibility to these appeals because it is the responsibility of dealers and program staff alike to inform consumers of the program. However, there were two cases in which the applicants were not granted eligibility. The first was an applicant who appealed due to dealer program misinformation, but further review of the documentation revealed that the vehicle was owned by a business. The second appeal was an applicant who agreed to the terms and conditions when the application was first submitted but did not submit the supporting documentation within the required timeframe and missed the three-month eligibility window to reapply. MOR-EV program staff is working hard to inform consumers and dealers of the rebate program and requirements to minimize appeals for year two of the program.

**Table 4. Appeals by Reason and Number**

<b>Reason Denied Eligibility</b>	<b>Reason for Appeal</b>	<b>Total Appeals</b>	<b>Approved</b>
Exceeded 3-month Eligibility Requirement	Dealer Program Misinformation	21	20
Missing Required Information to Complete Application and Ultimately Exceeded 3-month Requirement	Claimed to Have Not Received Missing Document Email	3	3
Exceeded 3-month Eligibility Requirement	Did Not Want to Apply Until Certain They Would Keep Their Vehicle	1	1
24 Month Lease	Intends to Keep Vehicle for 36 Months	1	1
Business Application	Vehicle is Used as a Taxi for ZEV Exposure and Education	1	1
Took Delivery of Vehicle Before it was Added to Eligibility List	OEM Program Misinformation	1	1
Exceeded 3-month Eligibility Requirement	Unaware of 3-month Requirement but Agreed to Terms and Conditions	1	0
	<b>Total:</b>	<b>29</b>	<b>27</b>



## Canceled Rebates

Throughout year one funding, 96 rebate applications were canceled. Table 5 lists cancellation reasons, totals and indicates whether a successful reapplication occurred. In 48 cases, applicants reapplied, and their applications were ultimately approved. In some cases, such as used vehicles and out-of-state applications, applicants were not eligible to reapply due to their failure to meet program eligibility requirements.

**Table 5. Canceled Rebates by Reason and Number**

Cancellation Reason	Total Cancellations	Reapplied and Approved	Did Not Reapply
Missing Required Information to Complete Application	30	24	6
Did Not Submit Documents Within Time Allowed	21	8	13
Early Application (Applied Before Being Rebate Eligible)	9	9	0
Used Vehicle	7	N/A	7
Business Application	14	1	13
Took Possession of Vehicle Prior to Eligibility Date	4	N/A	4
Applied After 3 Months	9	6	3
Out-of-State Applicant	2	N/A	2
<b>Total:</b>	<b>96</b>	<b>48</b>	<b>48</b>





## Program Participation

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### Overall

MOR-EV participation (the percentage of registered eligible vehicles that received a rebate) is a key measure of statewide program awareness and helps direct future outreach efforts.<sup>5</sup> For this analysis, Registry of Motor Vehicle (RMV) vehicle registration data from June 18, 2014, through April 15, 2015, was compared to program rebate data from the same period.

During this period, a total of 1,440 program-eligible models were registered with the RMV. Of these, 789 received a MOR-EV rebate.<sup>6</sup> Table 6 highlights the differences in the percent of registered vehicles to MOR-EV rebated vehicles by vehicle model.

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<sup>5</sup> Program-eligible models with less than 36-month lease terms are not eligible to apply for a rebate. Indications from other EV markets show the number of lease terms with less than 36 months is expected to be a negligible percentage of the total number of registered EVs.

<sup>6</sup> Not all passenger EVs in the state are eligible for the MOR-EV program.

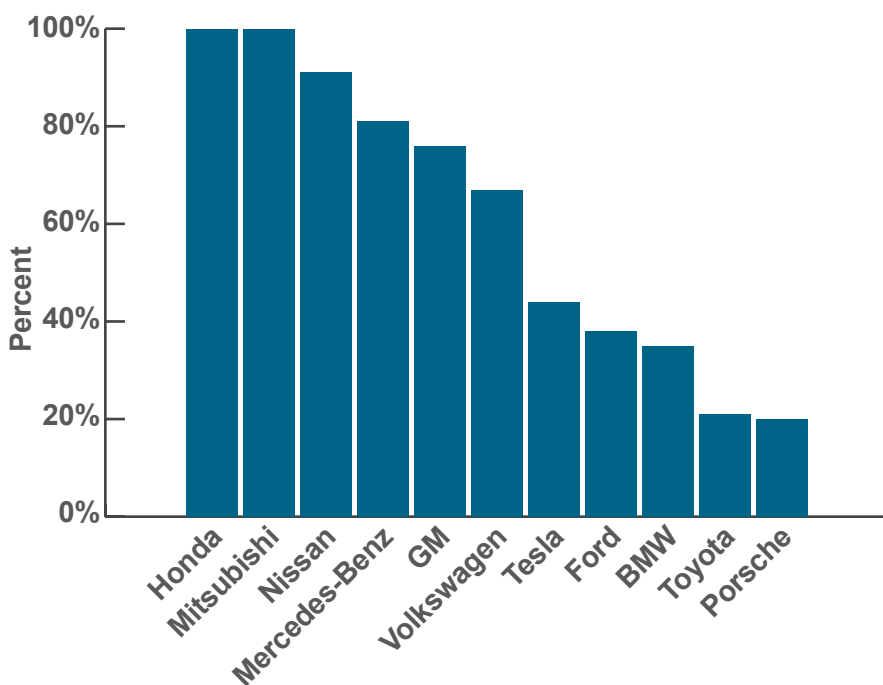
**Table 6. MOR-EV Participation Rates by Number of Registered Vehicles**

<b>MOR-EV Eligible Vehicle Model</b>	<b>Registered Vehicles</b>	<b>MOR-EV Rebates Issued</b>	<b>Percent Rebated</b>
Tesla Model S 85 kWh	253	107	42%
Nissan LEAF	241	196	81%
Chevrolet Volt	217	153	71%
Ford Fusion Energi	157	51	32%
Ford C-MAX Energi	135	50	37%
BMW i3 REx	106	37	35%
Smart Electric Fortwo Coupe	65	64	98%
Toyota Prius Plug-In Hybrid	48	10	21%
BMW i3	40	17	43%
Volkswagen e-Golf	34	26	76%
Tesla Model S 60 kWh	25	14	56%
Mercedes-Benz B-Class Electric Drive	25	18	72%
Cadillac ELR	25	9	36%
Ford Focus Electric	20	16	80%
BMW i8	15	3	20%
Smart Electric Fortwo Cabriolet	11	10	91%
Porsche Cayenne S E-Hybrid	8	3	38%
Porsche Panamera S E-Hybrid	7	0	0%
Zero (S, SR, DS, XU, FX)	3	0	0%
Honda Fit EV	3	3	100%
Mitsubishi i-MiEV	2	2	100%
<b>Total:</b>	<b>1,440</b>	<b>789</b>	<b>55%</b>

# Manufacturer

MOR-EV participation rates by automobile manufacturer vary greatly. Of the manufacturers with at least 10 vehicles registered during this time, Mercedes-Benz, which includes the Smart Electric models, has the highest participation rates of all manufacturers. More than 90% of all Smart Electric models and 72% of B-Class Electric Drive vehicles registered in the state received a rebate. In addition, the majority of Nissan LEAFs (81%) have received rebates. High participation rates could be attributed to manufacturers incorporating government incentives into messaging and sales training. Initial program participation rates indicate a need for manufacturer-targeted dealership outreach and will guide future program outreach efforts.

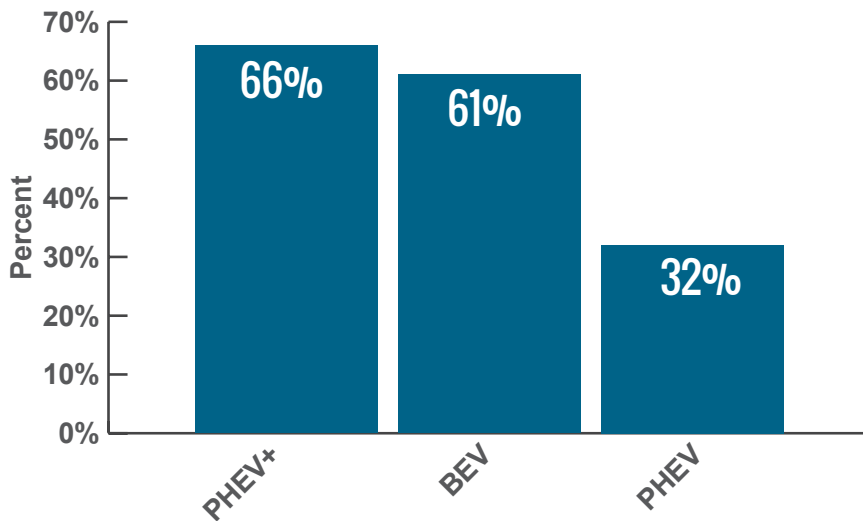
## Program Participation by Manufacturer



# Vehicle Type

Participation rate also varies based on vehicle type. BEV and PHEV+ models are twice as likely to receive a rebate as standard PHEV models.<sup>7</sup> Several PHEV models (Ford Fusion Energi, Ford C-MAX Energi and Toyota Prius Plug-In) have nonelectric counterparts, possibly leading to additional confusion for consumers and dealers on the eligibility of these models.

**Program Participation by Vehicle Type**



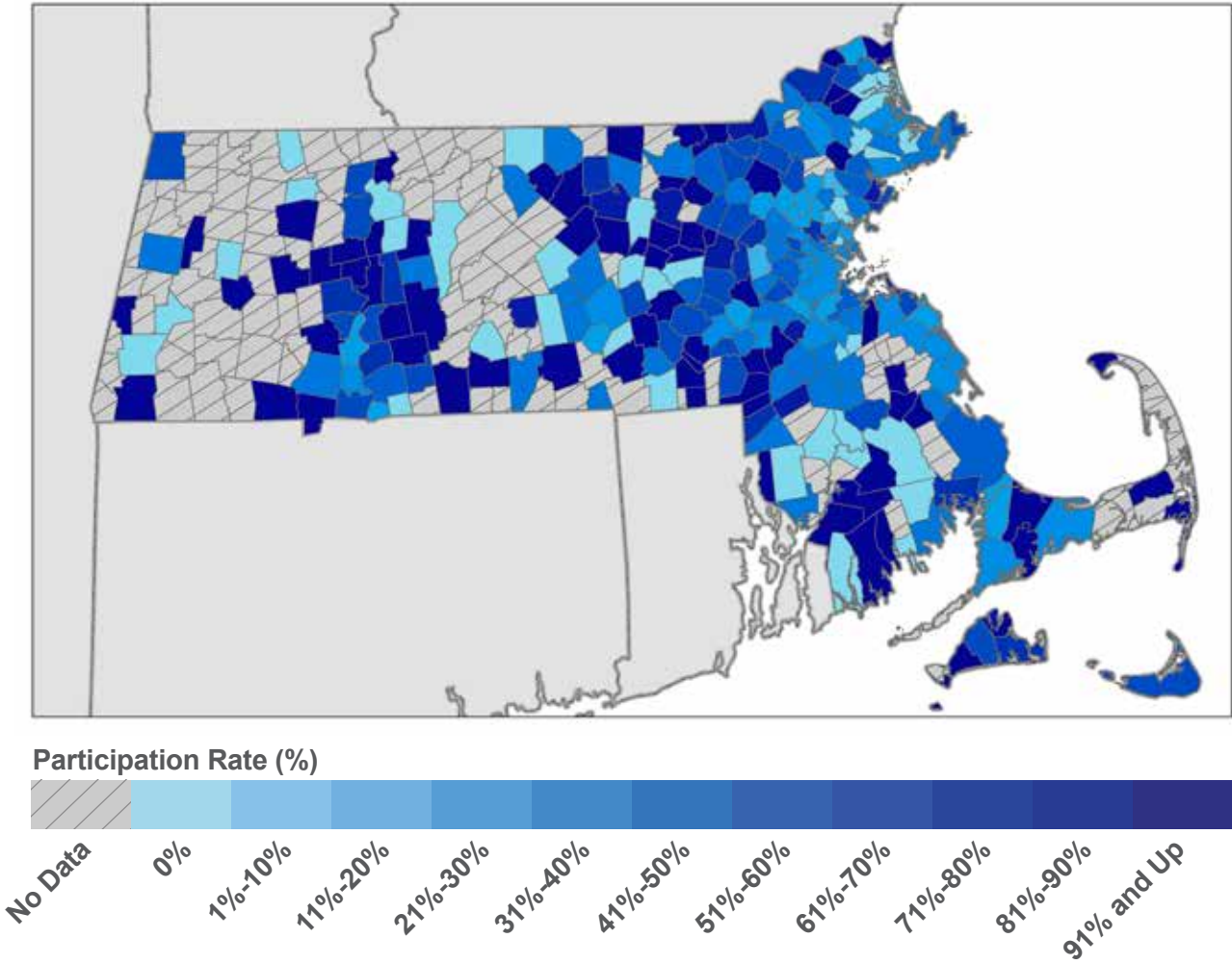
Multiple manufacturers produce eligible vehicle models in several vehicle type categories. Participation rate by vehicle type varies indicating that program awareness is not exclusively associated with specific manufacturers and their dealer networks, but also with specific vehicles. For example, the battery electric Ford Focus has an 80% participation rate, while the PHEV Ford models have an average participation rate of just 35%. This finding further supports the assumption that both consumers and dealers associate all-electric vehicles with consumer incentives and that further education with a focus on all program-eligible vehicles is necessary.

<sup>7</sup> The large majority (86%) of PHEV+ registrations in this analysis were one model, the Chevy Volt.

# Geography

MOR-EV participation varied significantly by geography across the state. No clear patterns in participation rates by city are apparent, indicating MOR-EV awareness is roughly equal across the state with no large geographic areas specifically standing out as having especially low or especially high awareness. Future outreach will target dealerships in regions of the state with the lowest participation.

**Program Participation by City**







# Survey Results & Analysis

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## Methodology

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413 complete and unique survey responses were received, indicating a 52% response rate.

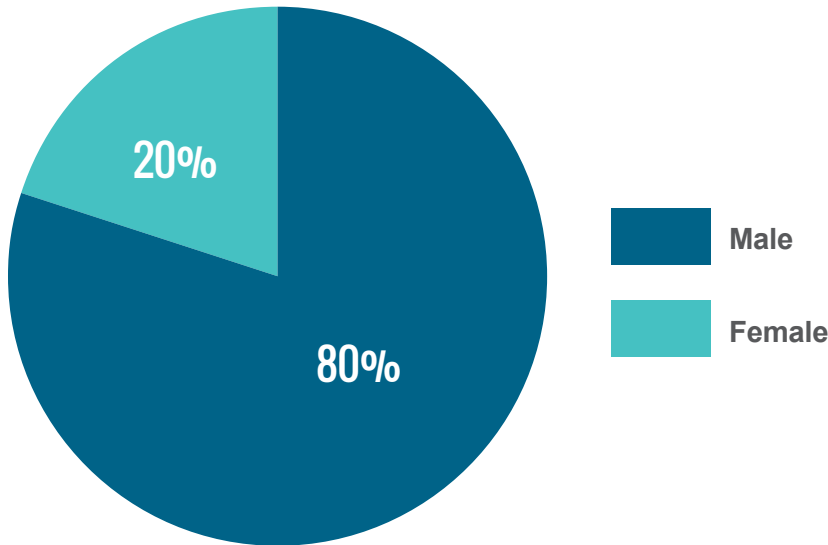
MOR-EV rebate recipients are invited to participate in a voluntary survey via email upon application approval. The 39-question survey takes approximately 15 minutes to complete; respondents have the ability to save and complete the survey at a later time if desired. The survey covers various topics, including but not limited to demographics, adoption motivations, importance of the MOR-EV rebate and dealership experience. The survey instrument was designed to mirror other ongoing ZEV survey activities taking place in the country, specifically in California and Connecticut, to ensure comparable data metrics.

This survey analysis encompasses responses for year one rebate recipients. Of the 789 rebate applicants, 413 completed the survey, indicating a 52% response rate. The survey respondents were compared to the pool of nonrespondents and no statistically significant difference was found between the two groups along various measures: (1) decision to buy or lease the vehicle, (2) geographic location both at the county and city level, (3) choice of vehicle manufacturer, (4) choice of vehicle model and (5) length of lease term chosen. Given that the two groups are statistically alike along these parameters, no weighting is applied to the following analysis and we make the assumption that survey respondents are representative of all MOR-EV participants.

# Survey Results

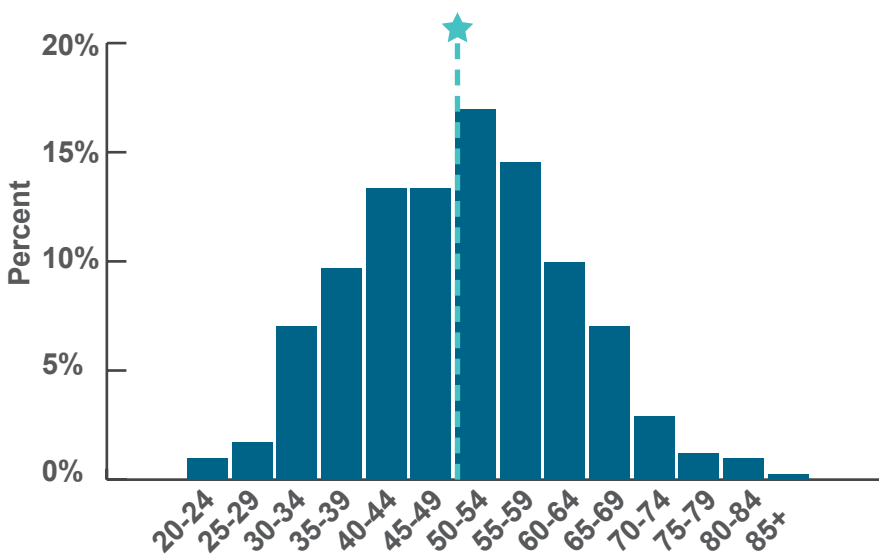
## Massachusetts Zero-Emission Vehicle Drivers

Gender



Similar to the California ZEV adopter population,<sup>8</sup> MOR-EV participants are predominantly male.

Age Distribution

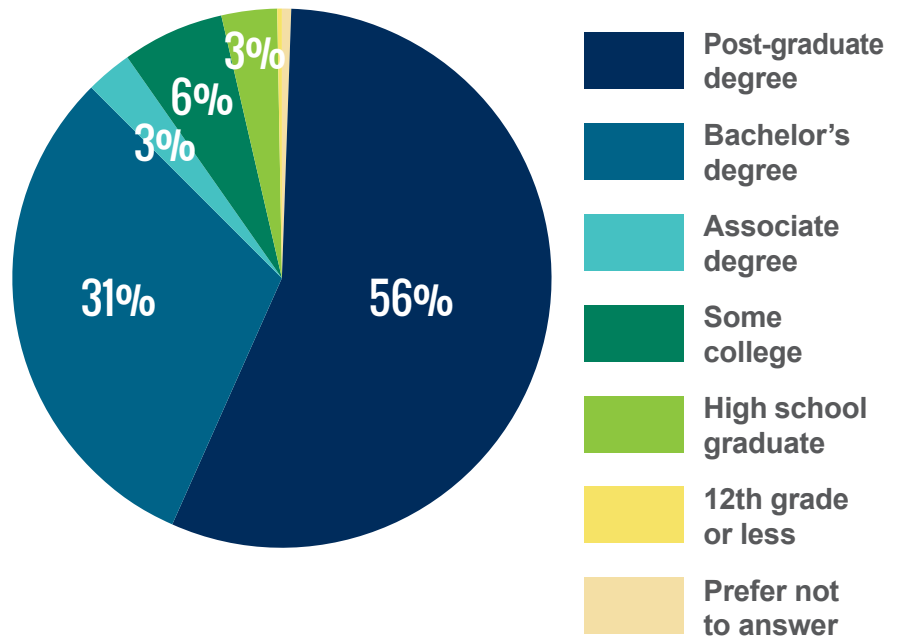


The average participant is 50 years old. The range of MOR-EV participant age is 21 years to 90 years old.

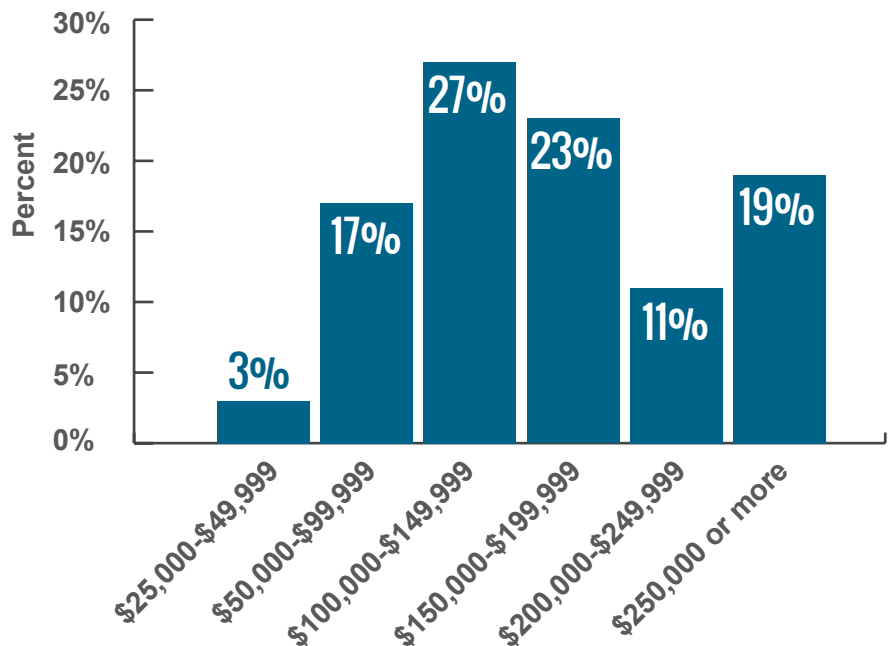
8 Center for Sustainable Energy (2015). California Air Resources Board Clean Vehicle Rebate Project, EV Consumer Survey Dashboard. Retrieved 8/11/2015 from <http://cleanvehiclerebate.org/survey-dashboard>.

MOR-EV participants boast a high educational attainment with nearly all (87%) holding a four-year degree and over half with a post-graduate degree.

### Educational Attainment



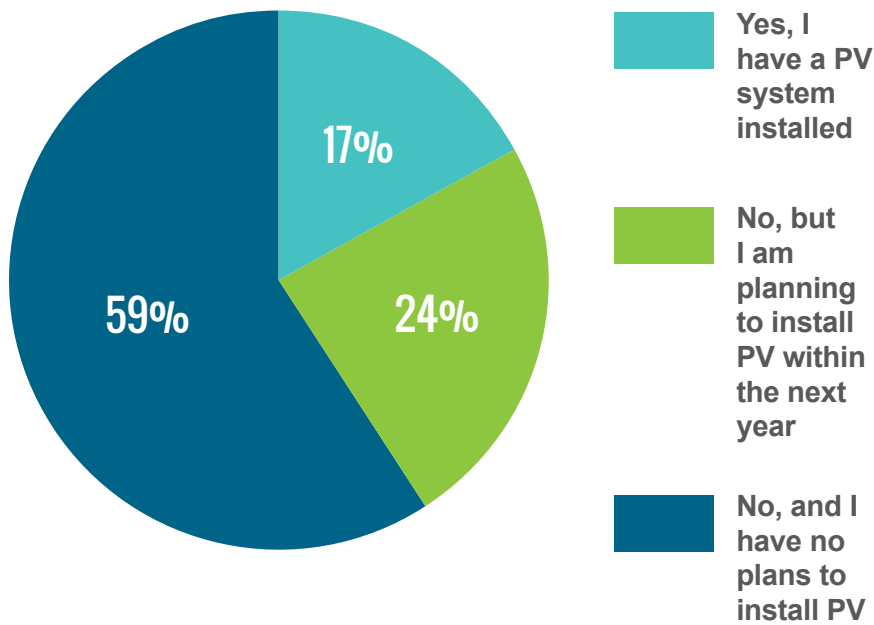
### Annual Household Income



The median household income is \$150,000 to \$199,999. Sixteen percent of respondents did not provide information about annual household income and have been excluded from this graph. The distribution of income is comparable to that of the California ZEV adopter population.<sup>9</sup>

<sup>9</sup> Center for Sustainable Energy (2015). California Air Resources Board Clean Vehicle Rebate Project, EV Consumer Survey Dashboard. Retrieved 8/11/2015 from <http://cleanvehiclerebate.org/survey-dashboard>.

## Is There an Operating Photovoltaic (PV) System Installed at Your Residence?

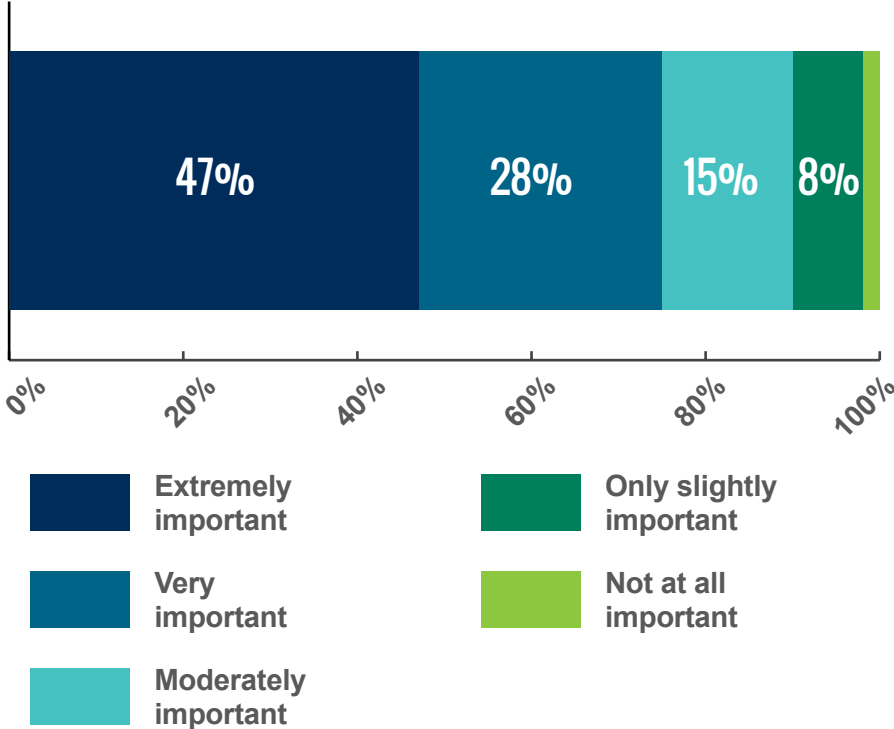


Forty-one percent of survey respondents currently have or are planning to install a PV system in the next year. This correlation compares to roughly 1.25% of all Massachusetts households that have currently installed PV systems.

## MOR-EV Impact

The importance of the MOR-EV rebate was measured based on factors making it possible to acquire an EV. Seventy-five percent of adopters say the MOR-EV rebate was an “extremely” or “very” important factor in the decision making process. Those who stated they would not have purchased or leased their EV without the rebate said it was extremely important with greater frequency than those who stated otherwise (69% vs 24%).

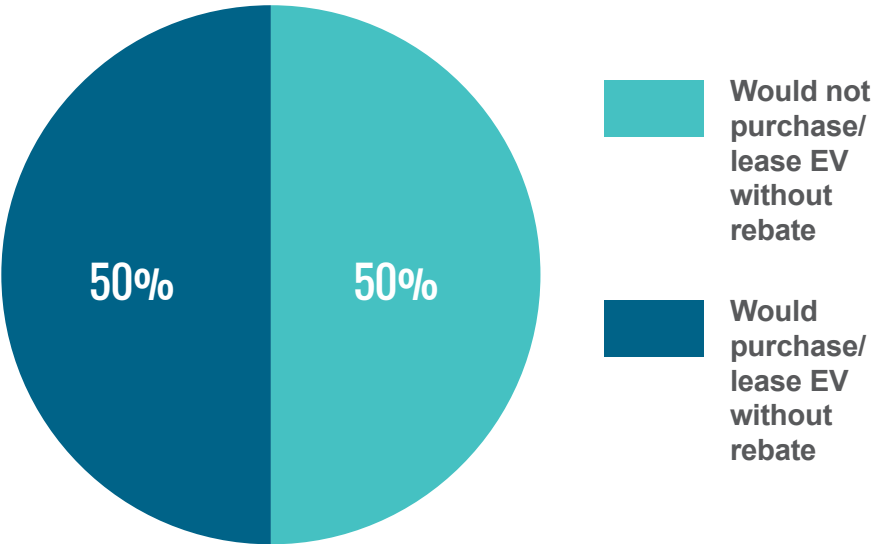
Importance of MOR-EV Rebate in EV Purchase/Lease Decision



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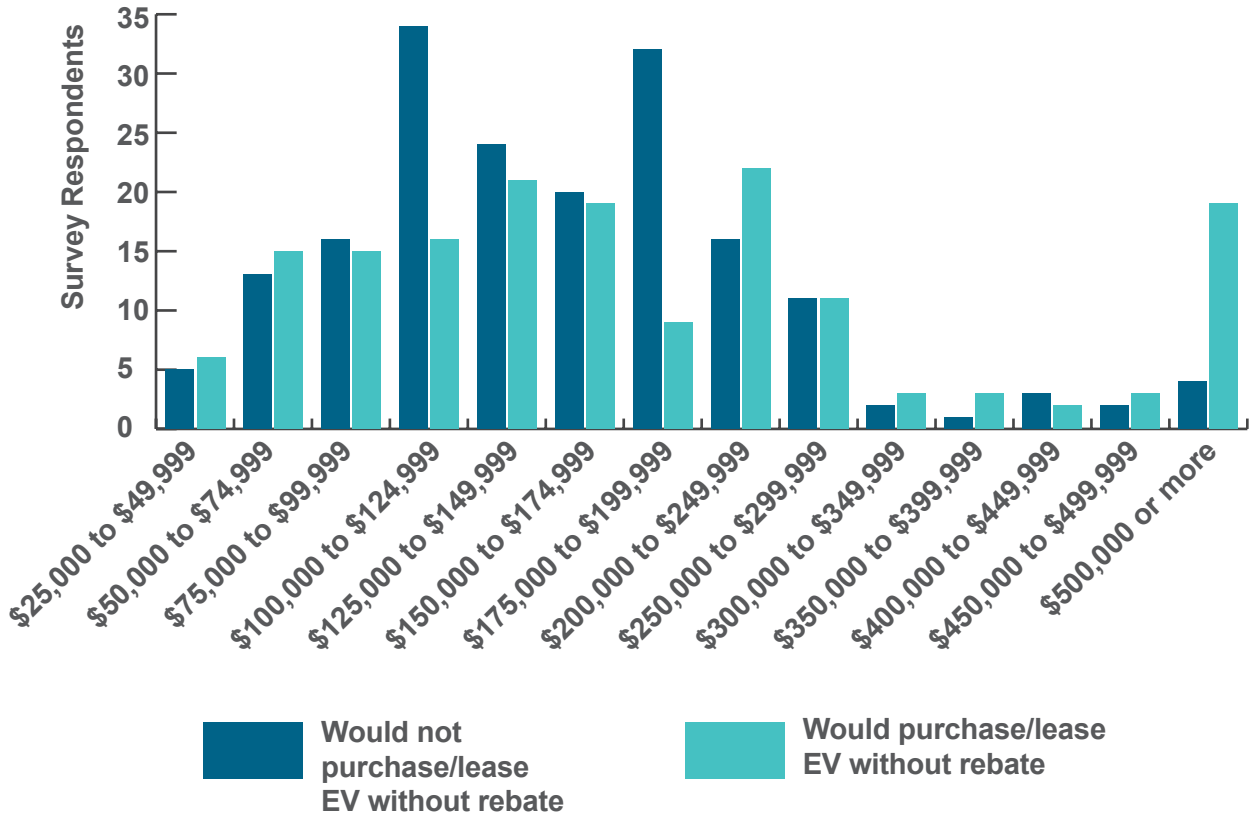
Half of respondents would not have purchased or leased their EV without the MOR-EV rebate.

Effect of Rebate on Purchase/Lease Decision



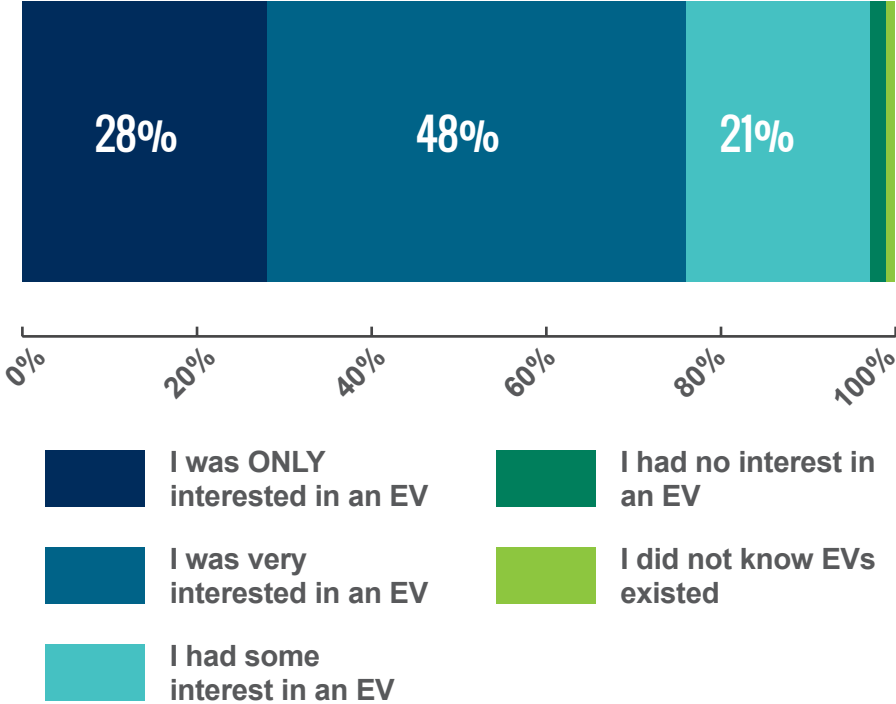


### Effect of Rebate on Purchase/Lease Decision by Income Level



In total, 208 respondents would not have purchased or leased an EV without the MOR-EV rebate. Forty-two percent of all respondents that provided income level information reported annual income levels between \$100,000 and \$199,000, with 63% of this group indicating that they would not have purchased or leased their EV without the rebate. Respondents in the \$200,000 or higher income levels were more likely to purchase or lease their EV without the rebate, with 62% stating that they would purchase/lease an EV without the rebate. Sixty-six respondents (16%) did not provide information about annual household income and have been excluded from this graph.

**Initial Interest in EVs**

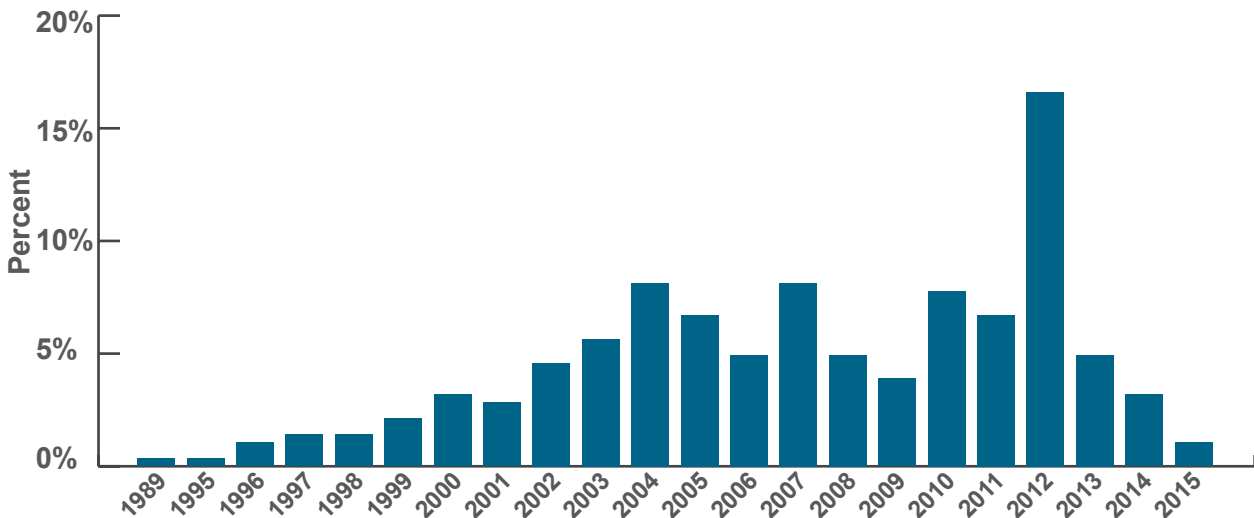


While the majority of participants indicate they had a strong interest in an EV when they began the car searching process, nearly a quarter of participants only had a slight interest and approximately 2% had no interest in acquiring an EV when they set out to search for a new vehicle.

## Replacement Vehicles

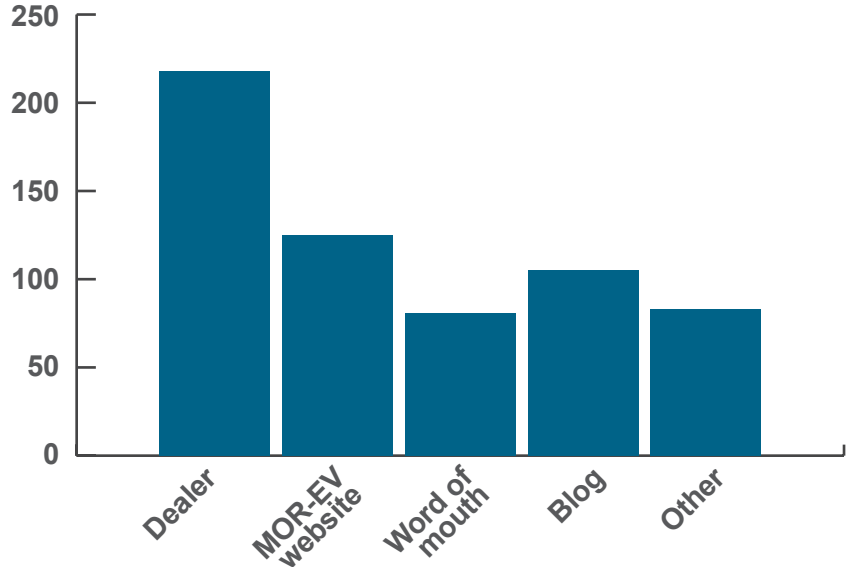
For most participants this is the first EV they have ever purchased or leased (87%). More importantly the data suggests that the program is not simply incentivizing individuals to add cars to their fleet; the majority of vehicles purchased/leased replace an older vehicle. In fact, 70% of eligible vehicles rebated are replacement vehicles, while only 30% are additional vehicles to the home fleet. Of the replacements, more than 50% of the vehicles replaced were 2007 models or older. Whether the EV is an additional vehicle or a replacement vehicle in the home fleet is independent of whether it is the first EV ever owned.

## Vehicles Replaced by Model Year



## Rebate Availability

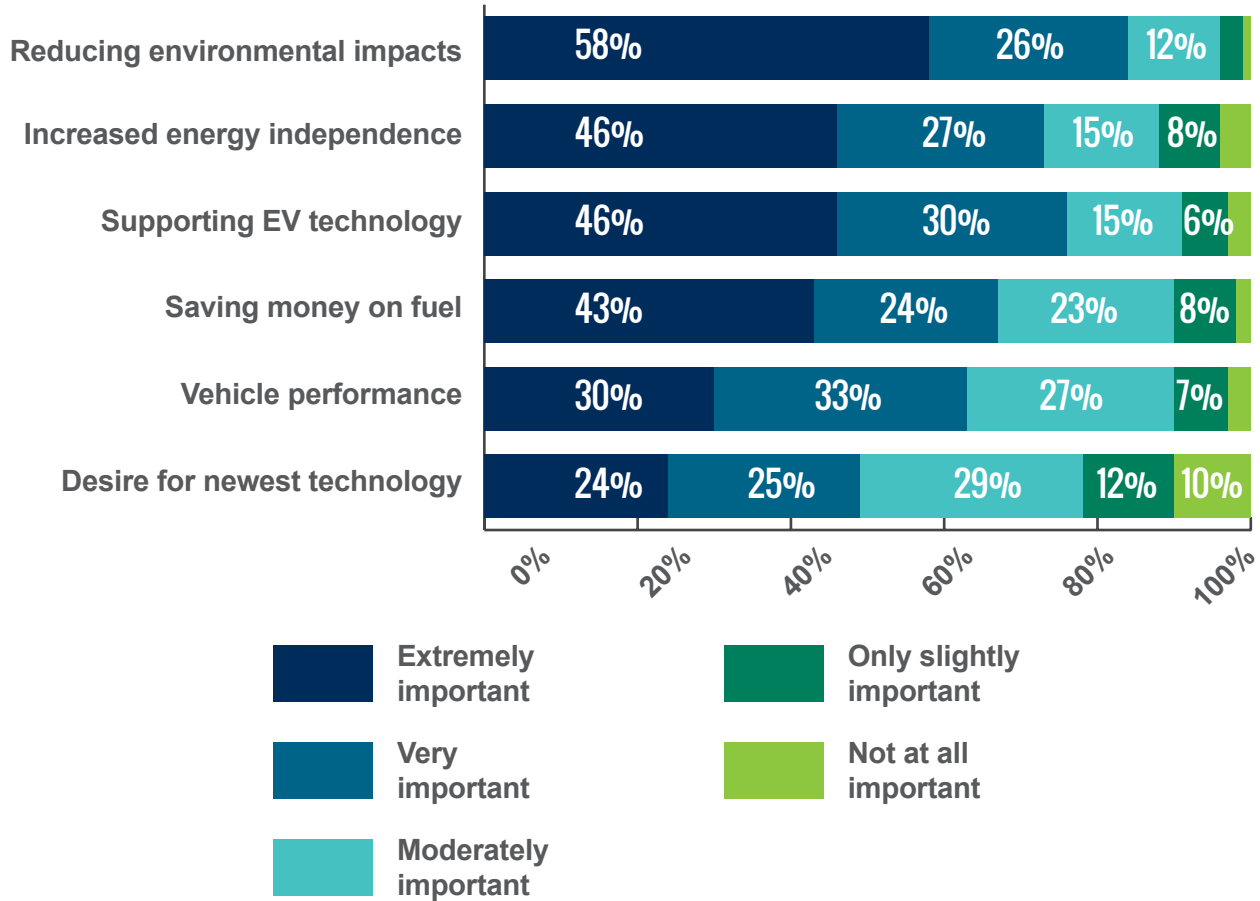
### How Participants Learned about MOR-EV Rebate



When asked to select all of the sources that informed respondents of the MOR-EV rebate, more than 50% of respondents learned about the rebate from the dealer and 30% of all respondents learned about the rebate from the MOR-EV website. Online blogs informed 25% of respondents about the rebate and identified this outreach medium as an important tool for future program outreach. Additionally, respondents rated online discussion forums (41%) and blogs (34%) as extremely or very important as a source in their decision to acquire an EV. Additionally, 48% encountered technology blogs before acquiring their EV. One of the new program outreach strategies is to increase the exposure of the MOR-EV rebate on online blogs and forums.

## Purchase and Lease Motivation

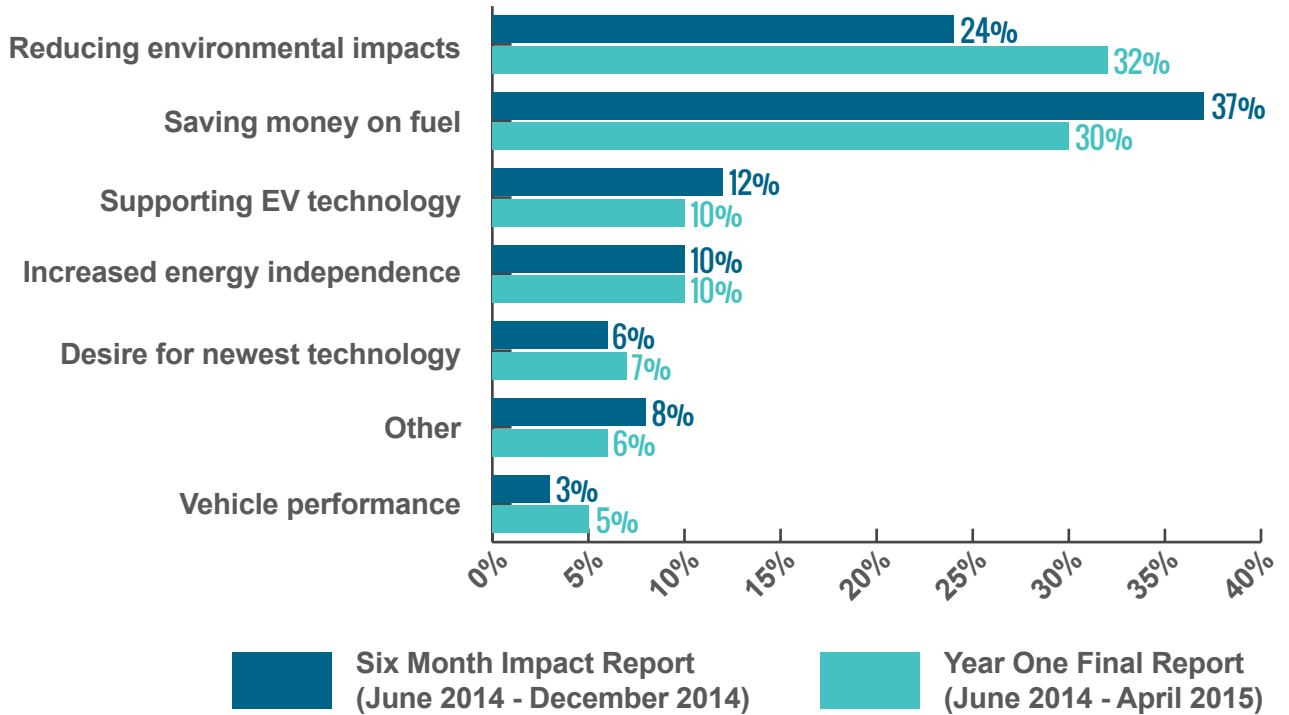
### Importance of Factors in Decision to Acquire EV



When asked to gauge the importance of factors in their decision to acquire an EV, respondents indicated that reducing environmental impacts was the most important factor. Surprisingly, saving money on fuel was not in the top three most important factors, although it was ranked as one of the most important primary motivators.



### Primary Motivations for Purchase/Lease Over Time



The primary motivation for EV purchase/lease changed since the MOR-EV Six Month Impact Report (December 2014), with respondents now choosing the reduction of environmental impacts over saving money on fuel. While respondents still choose saving money on fuel as a primary motivator, 32% of respondents indicated that reducing environmental impact was their primary motivation to adopt an EV. Those who stated reducing environmental impacts was their primary motivation have a statistically higher income than all others.

## Valued Dealership Services

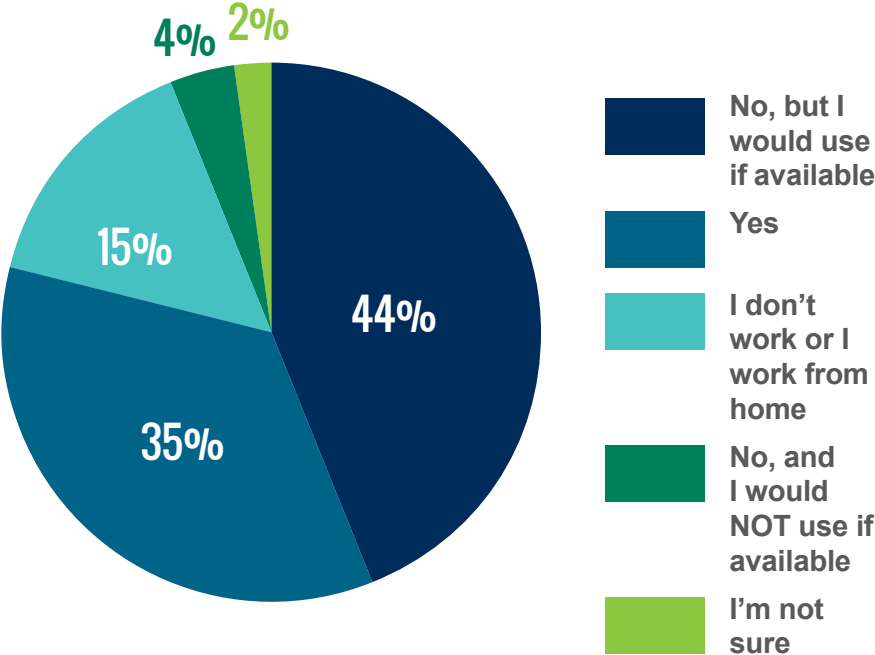
Table 7. Valued Dealership Services

Most Valuable Dealership Services		Percentage of Dealerships That Offered this Service
#1	An EV specialist to answer EV questions	23%
#2	Preparation of rebate/tax applications	23%
#3	Assistance setting up and explaining EV related smartphone “apps”	62%

Table 7 lists the three most valuable dealership services as ranked by respondents and the percent of dealerships currently offering them. Respondents ranked “an EV specialist to answer EV questions” as the most valuable dealership service. In addition, 68% of participants ranked “preparation of rebate/tax applications” as a valuable dealership service. With less than a quarter of dealerships offering the top two valued services, this information indicates a need for further informational services regarding both dealership and consumer outreach. MOR-EV program staff continue to provide in-person dealership training and targeted dealership outreach in order to educate dealerships on program requirements, program eligibility and the rebate application process. Acknowledging that dealership staff turnover rates are high, consistent program marketing is crucial to the continued success of the program.

# Workplace Charging Availability

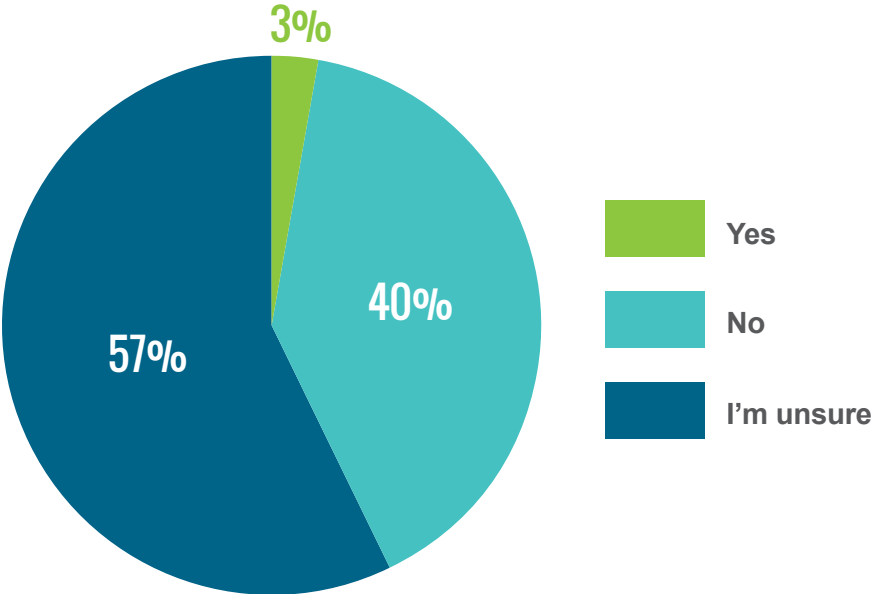
Do You Have Access to Charging at Your Workplace?



Almost half of survey respondents indicated that they would use workplace charging if it was available where they work. Thirty-three percent of participants reported access to workplace charging to be an extremely or very important factor in making it possible for them to acquire an EV. MOR-EV program staff has collaborated with the MassEVIP: Workplace Charging program to distribute workplace charging incentive information to MOR-EV rebate recipients on a monthly basis. MOR-EV staff has provided MassEVIP: Workplace Charging program information to 724 rebate recipients.

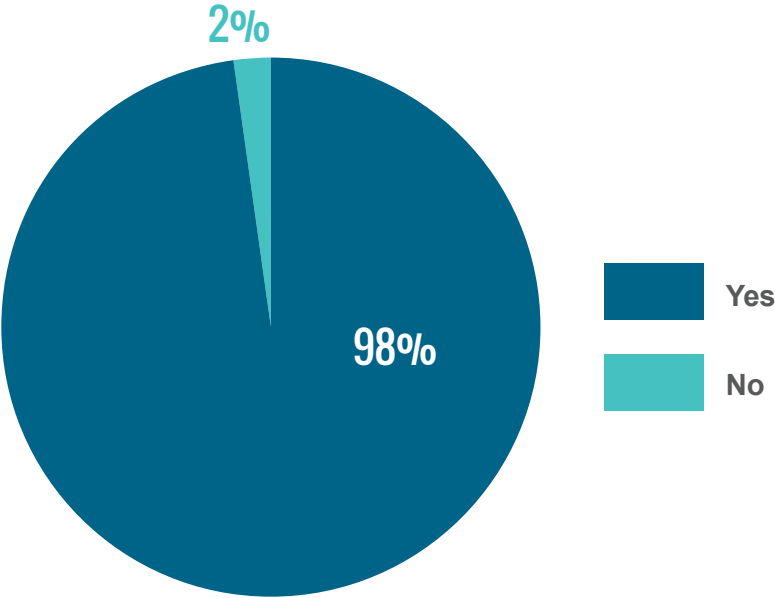
## Utility Time-of-Use Rate Availability

Does Your Electric Utility Offer Special Rates for Residential Electric Vehicle Charging?



Of the 40% of respondents who indicated that their electric utility did not offer a special rate for charging, nearly all said that they would take advantage of charging rates even if it meant charging their EV at special times during the day or night.

**If a Special Rate for Charging Your EV Were Available, Would You Take Advantage of It Even if It Meant Charging Your Vehicle at Special Times of Day or Night?**



This overwhelmingly large response of interested EV drivers indicates a high demand for time-of-use rates. MOR-EV program staff is currently supporting Eversource Energy on the PlugMyRide@HOME program, a pilot program to collect residential charging information in order to design an effective time-of-use rate for customers. Utilizing MOR-EV program data, MOR-EV program staff have distributed PlugMyRide@HOME information to 269 rebate recipients who reside in Eversource service territory.





## Conclusion

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The MOR-EV program successfully launched in 2014 and supported 789 new ZEVs on the road in the Commonwealth during its first year. The wide variety of vehicle models rebated points to growth in consumer choices in the ZEV market. Through the program survey results, considerable information can be gleaned to inform stakeholders about the state's ZEV driver population and their motivations to adopt cleaner vehicles.

EEA and DOER were successful in funding the MOR-EV program for a second year. Increased and varied education and outreach efforts will be incorporated into the second program year, while many year one activities will remain in effect (e.g., consumer surveys and project data transparency tools). According to current rebate reservation rates, second-year funding is projected to be fully expended by mid-February 2016.







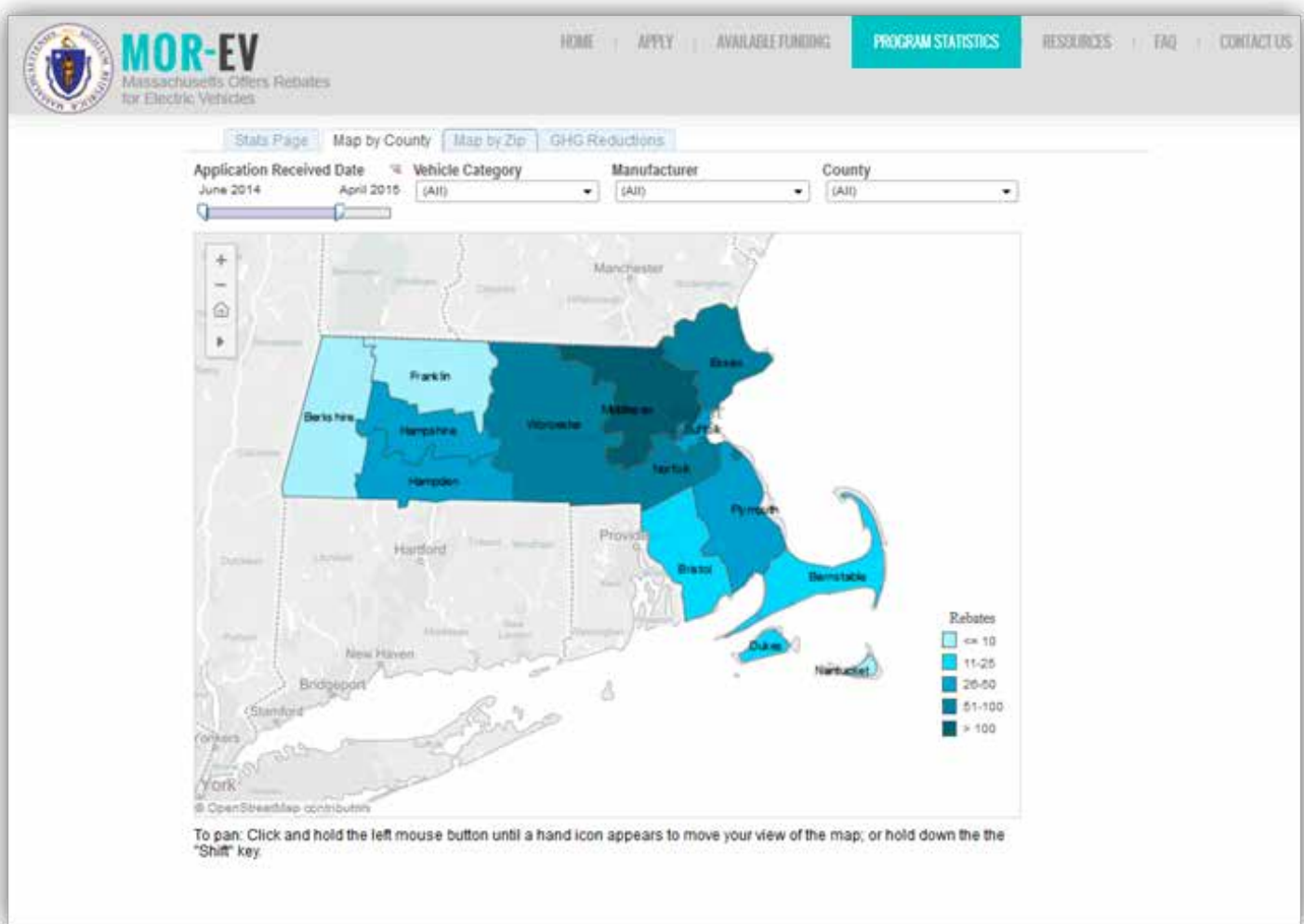
# Appendix 1: Program Website Interactive Data Tools

## Program Statistics



www.mor-ev.org

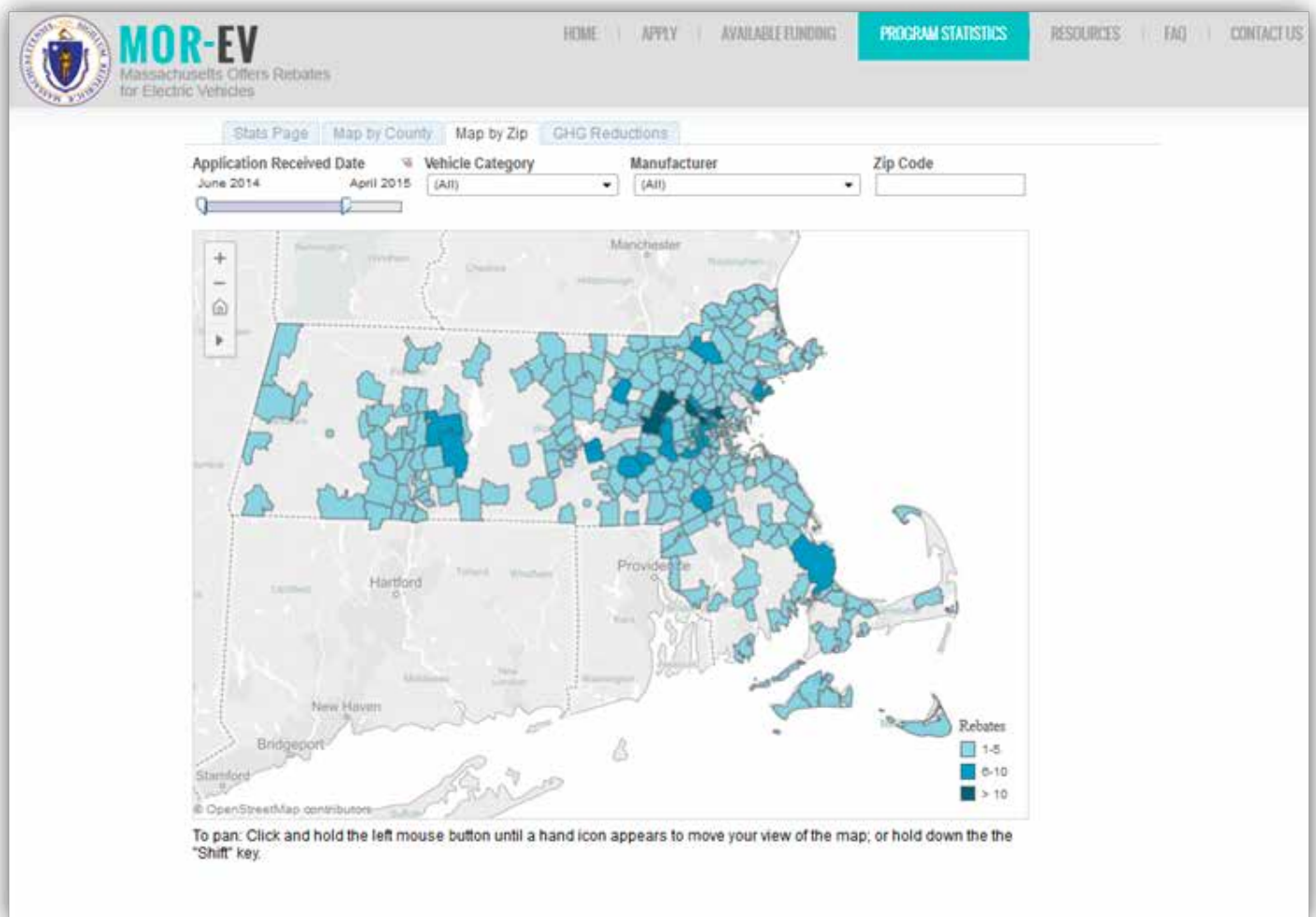
# Rebate Distribution Map by County



[www.mor-ev.org](http://www.mor-ev.org)

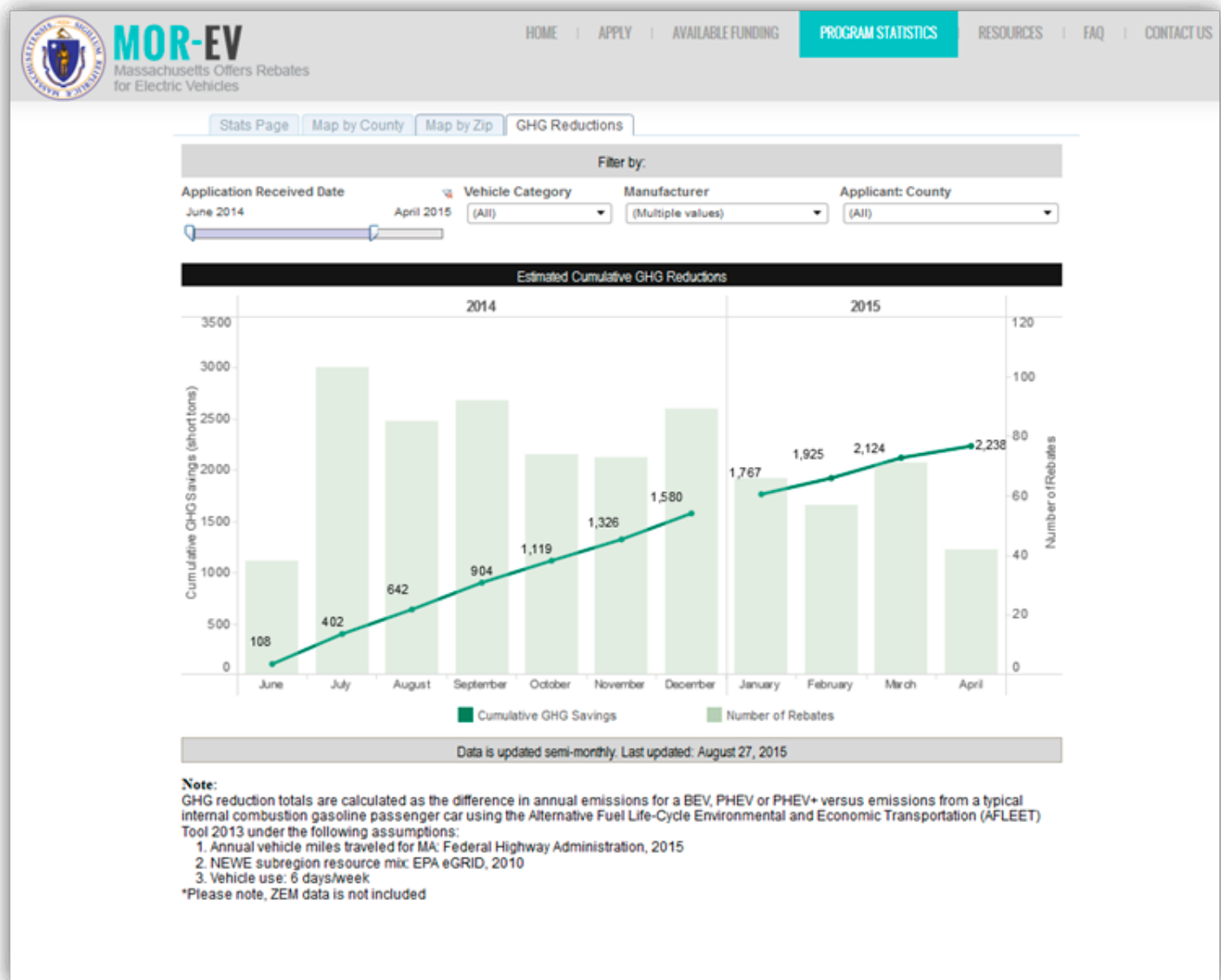


# Rebate Distribution Map by ZIP Code



[www.mor-ev.org](http://www.mor-ev.org)

# GHG Reductions



www.mor-ev.org

# Appendix 2

## Year One Final Report Data

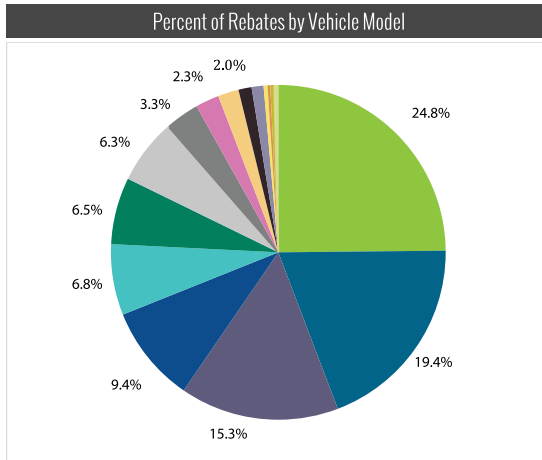
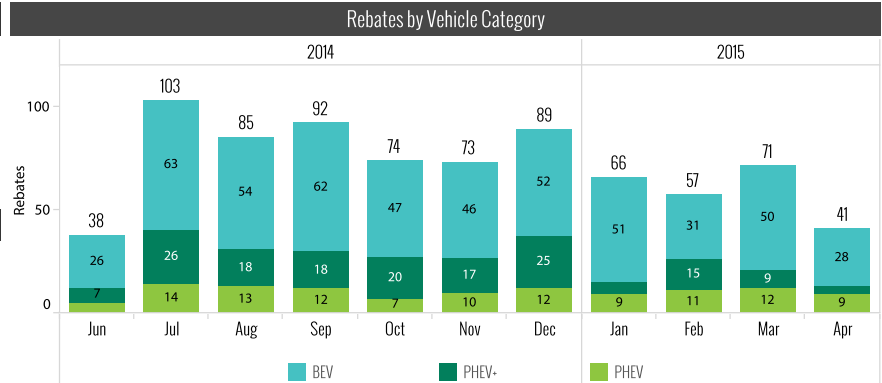


### Year One Final Report

Program Summary	
Rebates Issued and Reserved	789
Funding Issued and Reserved	\$1,858,500

Rebates by Rebate Amount	
Rebate Amount	
\$ 1,500	114
\$ 2,500	675



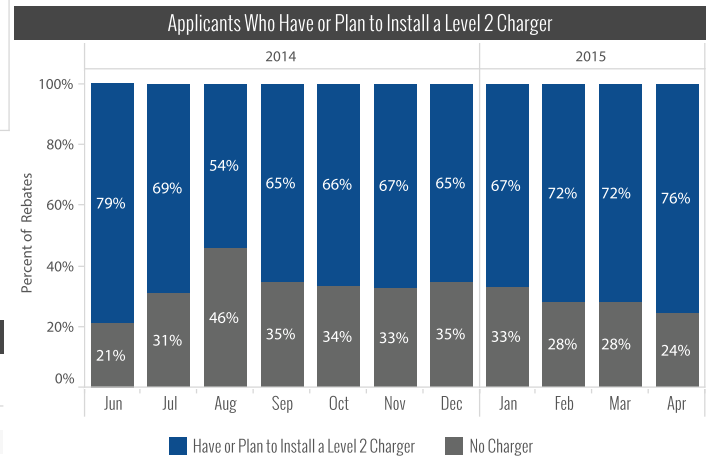
Rebates by Ownership Type

Ownership Type	2014							2015				Grand Total
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
Lease	18	50	36	41	29	42	35	30	26	26	10	343
Purchase	20	53	49	51	45	31	54	36	31	45	31	446
Grand Total	38	103	85	92	74	73	89	66	57	71	41	789

- Nissan LEAF
- Chevrolet Volt
- Tesla Model S
- Smart Electric Fortwo
- BMW i3 and i3 REX
- Ford Fusion Energi
- Ford C-MAX Energi
- Volkswagen e-Golf
- Mercedes-Benz B-Class
- Ford Focus Electric
- Toyota Prius Plug-in Hybrid
- Cadillac ELR
- Honda Fit EV
- Mitsubishi i-MiEV
- BMW i8
- Porsche Cayenne S E-Hybrid

Rebates by Vehicle Model

Vehicle Models	Total Rebates	Percent of Rebates
Nissan LEAF	196	24.8%
Chevrolet Volt	153	19.4%
Tesla Model S	121	15.3%
Smart Electric Fortwo	74	9.4%
BMW i3 and i3 REX	54	6.8%
Ford Fusion Energi	51	6.5%
Ford C-MAX Energi	50	6.3%
Volkswagen e-Golf	26	3.3%
Mercedes-Benz B-Class	18	2.3%
Ford Focus Electric	16	2.0%
Toyota Prius Plug-in Hybrid	10	1.3%
Cadillac ELR	9	1.1%
BMW i8	3	0.4%
Honda Fit EV	3	0.4%
Porsche Cayenne S E-Hybrid	3	0.4%
Mitsubishi i-MiEV	2	0.3%
Grand Total	789	100.0%



10 Largest EV Dealership Markets

Dealership City	Total Rebates	Percent of Rebates
1 Natick	111	14.1%
2 Somerville	53	6.7%
3 Braintree	50	6.3%
4 Lynnfield	44	5.6%
5 Norwood	30	3.8%
6 Acton	29	3.7%
7 Marlborough	26	3.3%
8 Watertown	23	2.9%
9 Hadley	21	2.7%
10 Lawrence	19	2.4%

Notes: Tables and charts show rebate data of year one of the MOR-EV program from June 18, 2014 through April 15, 2015.

Vehicle categories are defined as BEV Battery Electric Vehicle (all electric), PHEV+ Plug-in Hybrid Electric Vehicle with battery capacity ≥ 10kWh (powered by electricity and gasoline) and PHEV Plug-in Hybrid Electric Vehicle with battery capacity < 10kWh (powered by electricity and gasoline).



As a mission-driven nonprofit organization, CSE works with energy policymakers, regulators, public agencies and businesses as an expert implementation partner and trusted information resource. Together, we are the catalysts for sustainable energy market development and transformation.

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