



# CHEAPR Annual Report

*First Year*

June 2020 – July 2021

December 2022



Center for  
Sustainable  
Energy®

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# Program Overview



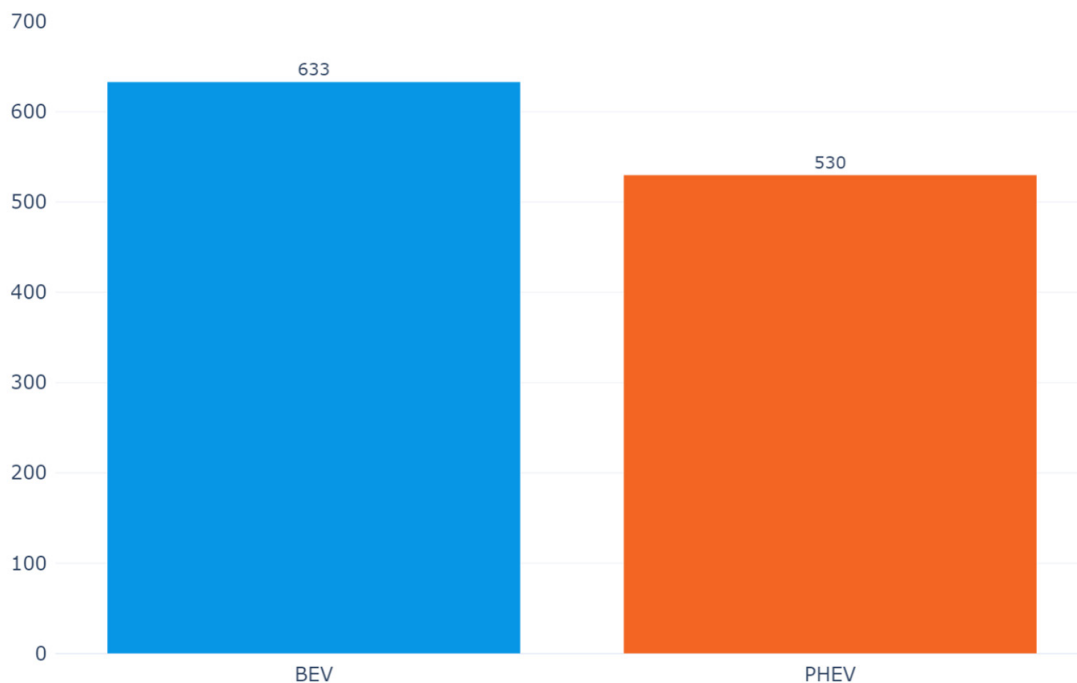
The Connecticut Hydrogen and Electric Automobile Purchase Rebate (CHEAPR) was created as an incentive pilot program in 2015 by the Connecticut Department of Energy and Environmental Protection (CT DEEP). CHEAPR was designed to close the upfront price gap between electric vehicles (EVs) and conventional internal combustion engine (ICE) vehicles to help reach the state's goal of putting 125,000 to 150,000 zero-emission vehicles (ZEVs) on Connecticut roadways by 2025.<sup>1</sup> The CHEAPR incentive program was initially created and funded through a commitment from Eversource Energy, formerly Northeast Utilities (NU), as part of a broader commitment to energy efficiency and related initiatives set forth in a settlement agreement related to the NU-NSTAR merger. This was followed by a similar funding commitment by Avangrid, as part of a broader commitment to energy efficiency, renewable generation, storage, alternative transportation, electric vehicles, and other clean technologies set forth in a settlement agreement between Iberdrola USA Inc. and UIL Holdings Corporation. The CHEAPR pilot program, which took place from May 2015–June 2021, was administered by the Center for Sustainable Energy (CSE).

<sup>1</sup> EV Roadmap for CT [http://www.dpuc.state.ct.us/DEEP/Energy.nsf/c6c6d525f7cdd1168525797d0047c5bf/f7ed4932eec438d0852585520001c81b/\\$FILE/EV%20Roadmap%20for%20Connecticut.pdf](http://www.dpuc.state.ct.us/DEEP/Energy.nsf/c6c6d525f7cdd1168525797d0047c5bf/f7ed4932eec438d0852585520001c81b/$FILE/EV%20Roadmap%20for%20Connecticut.pdf)

Between June 2020 and July 2021, a total of 4,479 eligible vehicle models were registered in Connecticut, according to the [IHS-Markit](#) vehicle registration dataset. This corresponds with 1,163 vehicles purchased in the same time period being either approved for or receiving a CHEAPR rebate, yielding an estimated participation rate of 49%. See **Figure 1** for the total number of vehicles rebated among model types between June 2020 and July 2021. Overall, there were more BEV registrations (1,403 BEV vs 986 PHEV) and rebates (633 BEV vs 530 PHEV). For further information on overall market participation in the CHEAPR program (see Section IV).

It should be noted that during this time period, the global automotive supply chain was impacted severely by the Covid pandemic and shortages in microchips.<sup>2</sup>

**FIGURE 1**  
Total Program Year Rebates by Vehicle Type

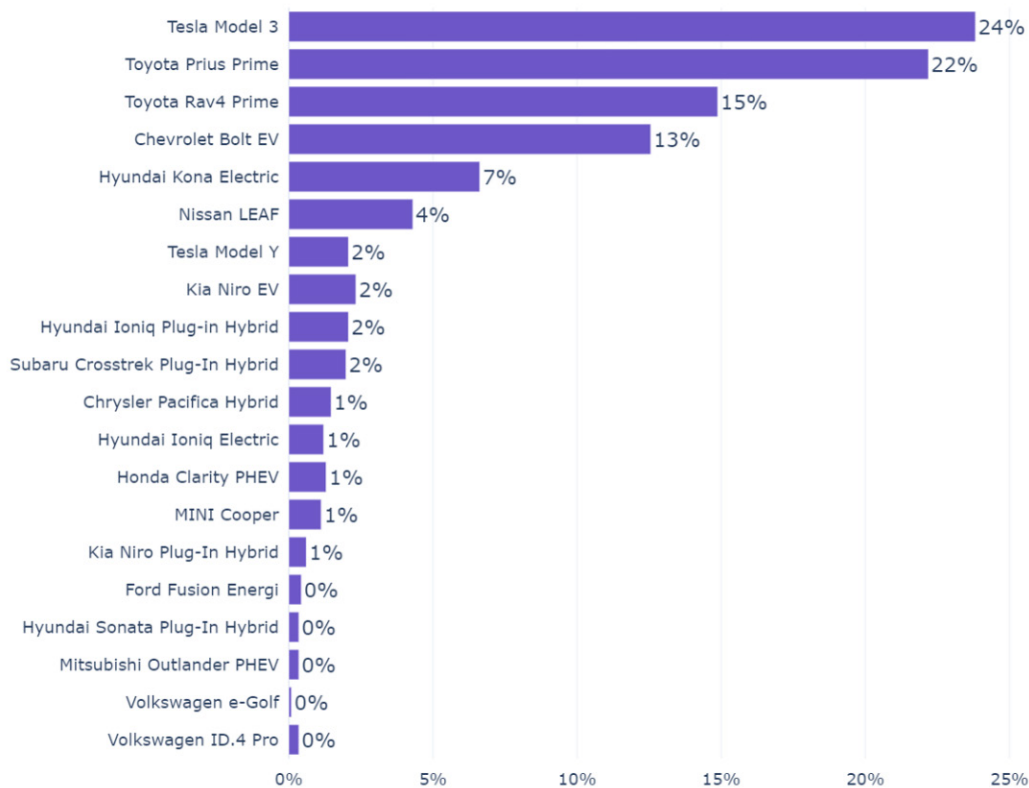


<sup>2</sup> [https://economics.td.com/us-automotive\\_supply\\_chain](https://economics.td.com/us-automotive_supply_chain)

**Figure 2** displays the percentage of rebates in the program between June 2020 and July 2021 that went to each vehicle model. The Tesla Model 3, Toyota Prius Prime, and Toyota Rav4 were the most rebated vehicle models.

**FIGURE 2**

Percent of Rebates by Vehicle Model through Program Year One



Program data is available via an interactive dashboard and mapping tools on the [CHEAPR Program Statistics webpage](#). This data supports program transparency and informs zero-emission vehicle market stakeholders. CSE makes program data transparent to stakeholders by maintaining the CHEAPR Program Statistics online dashboard. The interactive visualizations on the CHEAPR Program Statistics online dashboard not only inform program monitoring, evaluation, and improvement, but also provide free EV market intelligence to stakeholders (dealers, customers, OEMs), empowering them to take strategic actions that support EV market growth. Examples of the CHEAPR Program Statistics online dashboard, rebate distribution maps, and other data are in [Appendix 1](#).

# Program Update

In 2020, the Connecticut General Assembly passed legislation codifying the pilot program by providing \$3 million in funding per year for six years. The codified program can be found in [section 22a-202 of the Connecticut General Statutes](#), and is funded through fees on new motor vehicle sales and motor vehicle registration renewals. On April 27th, 2020, the Center for Sustainable Energy (CSE) was selected by DEEP to administer the newly reestablished CHEAPR incentive program, which launched on June 7, 2021.

The CHEAPR program consist of three incentives. The standard rebate is a point-of-sale rebate, meaning the money is offered “on the hood” and immediately reduces the price of the vehicle. In the course of purchasing or leasing an eligible EV from a participating licensed Connecticut new automobile dealer the purchaser is qualified to receive the standard rebate, which will be deducted from the purchase or lease price of their new EV. The CHEAPR program also offers eligible income-qualified purchasers or lessees of new EVs an additional rebate through CHEAPR Rebate+. Income-qualified purchasers and lessees of eligible used EVs are also eligible for an incentive under the CHEAPR Rebate+ Used program. Both the Rebate+ New and Rebate+ Used incentives are paid directly to a consumer who applies for it after the purchase or lease of an eligible EV. The CHEAPR program is additionally able to process rebate applications for individual consumers who purchase or lease an eligible EV directly from an original equipment manufacturer (OEM) that does not have licensed franchised new automobile dealers in Connecticut (e.g., Tesla) as long as the purchaser is a Connecticut resident.

[Eligible EVs](#) include certain plug-in hybrid electric vehicles (PHEVs), battery electric vehicles (BEVs) and fuel cell electric vehicles (FCEVs)<sup>3</sup>. An auto dealer representative must apply online at <https://apply.drivecheapr-ct.org/> with the consumer no later than 45 calendar days after the purchase or lease date of an eligible new EV. 36% of applications are submitted the day of purchase. Dealers must collect required supporting documentation from consumers and upload it to the CHEAPR dealership application portal no later than 45 days after the purchase or lease of an eligible new vehicle.

Vehicle purchaser and lessee rebate requirements are determined by the CHEAPR Board, who review incentive levels on an annual basis and reserve the right to make changes at any time such as, but not limited to, eligible vehicles, rebate amounts, and vehicle price caps. Other vehicle purchaser or lessee requirements are as set forth in the CHEAPR Implementation Manual, which may be amended from time to time.

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3 <https://portal.ct.gov/-/media/DEEP/air/mobile/CHEAPR/CHEAPRImplementationManualpdf.pdf>

The CHEAPR website ([drivecheapr.org](http://drivecheapr.org)) provides program information and access to the application processing platform. The layout consists of a CHEAPR homepage, Rebate+ page, a comprehensive list of new and used eligible vehicles with rebate amounts, a program statistics page (updated monthly), a resources page with links to the program's Implementation Manual, instructional videos for dealerships and consumers, outreach materials, program logos, a list of FAQs, a contact page, the CHEAPR application portal for dealerships and consumers, CHEAPR Board page, a link to the EV Connecticut page, and a link to DEEP's Mobile Sources page. This design promotes the benefits of CHEAPR to applicants and provides easy access to information they need to apply for a rebate. The CHEAPR Implementation Manual on the Resources Page of the CHEAPR website provides terms and conditions, including eligibility requirements, customer/dealer responsibilities, application process, and the appeal process. These requirements and other program guidelines are updated, at minimum, annually.

During the rebate process CSE also conducts an Electric Vehicle (EV) Driver Survey. Understanding CHEAPR participant behaviors and perspectives is critical to help inform program design improvements, policy discussions on program funding and planning, and overall EV market development. Section 6 in this report details the survey used to gather data and report on participants' information sources, decision-making process, dealership experience, charging access, and demographics.

CSE and DEEP staff communicate regularly and collaborate to ensure the CHEAPR program operates effectively within program design parameters. Ongoing monitoring of funding estimates and forecasts and assessment of program design parameters (e.g., changes in rebate, vehicle eligibility criteria, MSRP limits) form a collaborative framework for CSE and DEEP.

CSE staff also provides DEEP representatives and the Board with regular end-of-funding estimates. As needed and resources allowing, staff have assessed and projected potential savings resulting from program design modifications (e.g., changes in rebate, vehicle eligibility criteria, MSRP limits).

### MSRP Limits

Throughout the pilot and into the new program, vehicle eligibility has been limited by manufacturer suggested retail price (MSRP) to control program expenditures, ensure continued program solvency, and eliminate the need to create rebate "waitlists" that stall program momentum while inconveniencing both auto dealers and EV consumers. Responding to new model availability and funding opportunity, DEEP changed the eligible MSRP throughout the pilot program. Throughout the CHEAPR pilot program, the manufacturer suggested retail price (MSRP) for eligible EVs was adjusted as needed to ensure the availability of rebate funds. Effective October 15, 2019, eligible PHEV and BEV models were required to have a base MSRP \$42,000 or less and eligible FCEV models, a MSRP of \$60,000 or less.

## I. Changes to Rebate Amounts

CHEAPR experienced one change to rebate levels during Year One (June 2020 – July 2021) of the program. The program provided consumer rebates of varying levels for four different vehicle types: PHEVs, FCEVs and two categories of BEVs, based on the vehicle's battery capacity up until June 6, 2021 (**Table 1**). After June 6, 2021, new CHEAPR rebate amounts were established, and two additional rebates (Rebate+ New & Rebate+ Used) were added for income qualifying individuals (**Table 2**).

**TABLE 1**

**Vehicle Rebate Levels (October 15, 2019 – June 6, 2021)**

Vehicle Type	Definition	Energy Source	Rebate Amount (Base MSRP <\$42,000)
FCEV	Fuel Cell Electric Vehicle	Fuel Cell	\$5,000
BEV+	Battery Electric Vehicle with EPA-rated electric range of 200 miles or greater	Electricity	\$1,500
BEV	Battery Electric Vehicle with EPA-rated electric range of less than 200 miles	Electricity	\$500
PHEV	Plug-in Hybrid Electric Vehicle	Electricity and gasoline	\$500

**TABLE 2**

**Vehicle Rebate Levels (June 7, 2021 – Current)**

Rebate	BEV	PHEV	FCEV
Standard Rebate	\$2,250	\$750	\$7,500
Rebate+ New	\$2,000	\$1,500	\$2,000
Rebate+ Used	\$3,000	\$1,125	\$7,500

## II. New Eligible Vehicles

CHEAPR added five new electric vehicle models to the eligible vehicles list during the first year of the program. They were the Ford Escape PHEV, Toyota RAV4 Prime PHEV, Mini Cooper Hardtop BEV, Tesla Model Y SR BEV, and VW ID.4 PHEV. The increase in eligible vehicles and wider variety of EVs available in Connecticut should continue to attract new EV consumers. The CHEAPR eligible vehicle list is another tool to inform consumers of model availability and EV purchase information. The complete list of New Eligible vehicles is available on the CHEAPR webpage.

With the addition of the CHEAPR Rebate+ USED rebate, a list of eligible used vehicles was also added to CHEAPR webpage after June 6, 2021.

# Outreach, Education & Marketing

## I. Consumer Outreach and Education

Consumer outreach in 2020 was focused on providing program information through printed materials, website, and a consumer phoneline. CHEAPR program information was made available to consumers on CHEAPR webpages or upon request to CSE and DEEP staff. Consumers could also contact the administrators via email or by phone. CSE staff are available from 11 a.m. – 8 p.m. EST to answer questions, with 24-hour voicemail access. CSE staff returned all voicemails by the next business day. CSE returned 324 voicemails in the First Year of the program and 995 emails.

## II. Dealer Outreach and Education

In the first year of the program there were several dealer outreach efforts.

DEEP posted all program information to the CHEAPR website. Dealers could also contact CSE via email or by phone. Program staff were available from 11 a.m. – 8 p.m. EST to answer questions, with 24-hour voicemail access. Program staff returned all voicemails by the next business day.

CSE provided direct dealer outreach through efforts that included an informational and instructional webinar, which was hosted to inform Connecticut dealers about the benefits of driving electric vehicles, the State of Connecticut's Electric Vehicle Roadmap, and how to use the CHEAPR program to provide incentives and apply for a rebate for their customers. A recording of the webinar was distributed to all registrants and posted online for access at any time.

**TABLE 3**  
**CARA Newsletter Submissions**

Month of Publication	Summary
February, 2021	Short announcement of program changes for Summer 2021
May, 2021	Short announcement of new Dealer Portal
June, 2021	Program Launch NEW and USED Email Template

For the CHEAPR relaunch in June 2021, several pieces of program collateral were developed for dealers to promote the program to their customers, including a CHEAPR dealership content kit, a CHEAPR Dealership Poster, and a recordings of instructional webinars which are all located on the [Resource Page](#) of the CHEAPR website.

The CHEAPR program began to work with the Connecticut Automotive Retailers Association (CARA) in late 2021 to provide a pathway for future publications in the CARA monthly newsletter (see **Table 3**).

### III. Marketing

A Marketing campaign was created to coincide with the relaunch of the CHEAPR Program in June 2021. It consists of weekly Social Media posts on the CHEAPR Rebate Facebook Page and a dealership newsletter.

#### Dealer Newsletter

In 2021, an email newsletter focused on dealer-specific information was developed and deployed to a database of nearly 300 Connecticut dealers. Emails also were sent in April and June to announce the new Rebate+ programs and the new Dealer Portal. An average open rate of 53% indicated the messaging was well received by its target audience. Newsletter frequency will increase to quarterly in 2022.

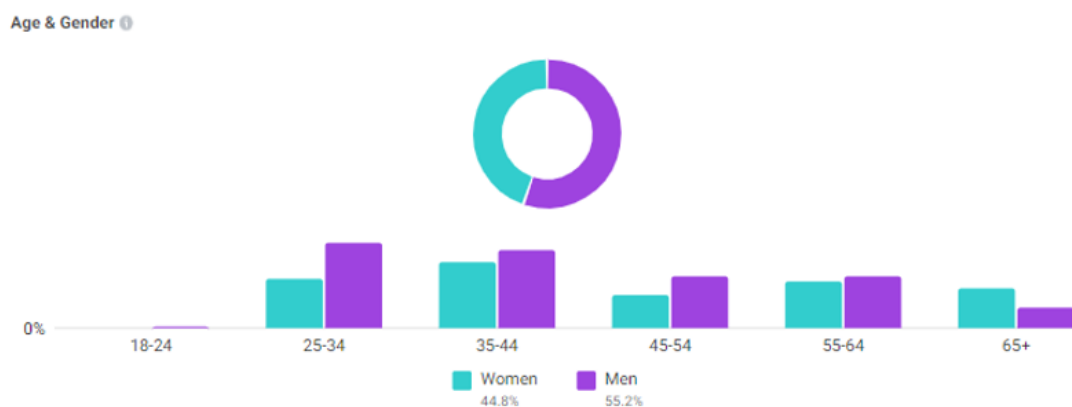
#### CHEAPR's Facebook Page

Organic Social Media Key Metrics:

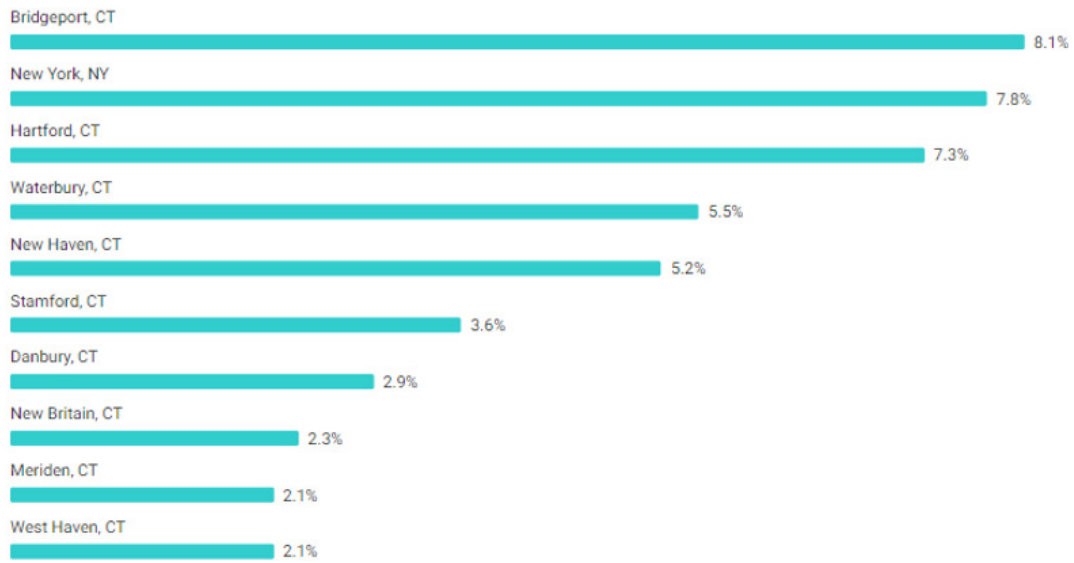
- Facebook page reach increased 100%
- 385-page followers (demographic breakdown in Table 6)
- Clicks on links: 215
- Total Reached: 19,713 people
- Total Impressions: 69,170

FIGURE 3

Demographic Breakdown of the CHEAPR Facebook Audience



#### Top Cities

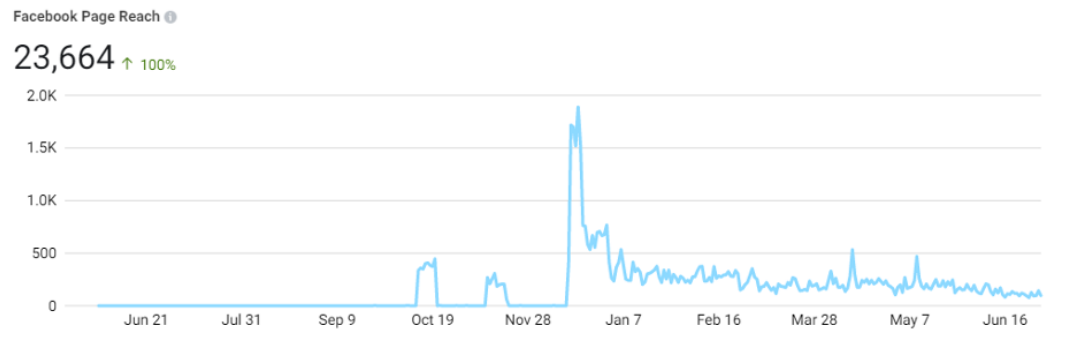


**TABLE 4**  
Paid Social Media Key Metrics

Reach	Impressions	Amount Spent	Frequency	Link Clicks
19,713 People	69,170 Total	\$1,475.16 Total Spent	\$3.51 Per Person	215 Total

**Figure 4** shows an increase of reach peaking in January, then remaining consistent from February 2021 through July 2021. III.

**FIGURE 4**  
Facebook Page Reach (July 2020 – June 2021)



# Operations



To becoming a fully point-of-sale program for new vehicles, CHEAPR also extended its reach to used vehicles and added a post-purchase rebate for income-qualified participants. CSE also continued to improve and streamline the application process by launching a new online portal for dealerships and residents to submit applications. By extending the functionality of the dealer portal, dealerships now have the ability to update payment information, review application statuses, and complete the entirety of the application process online. A successful point-of-sale program requires that the dealership is fully responsible for submitting the complete, correct application within a timely manner. The functionality of the new portal gives the dealership the necessary tools to complete the application process easily and quickly. CSE also migrated the internal system to increase efficiency and output when processing applications. Initially, CSE encountered issues with batching payments after the system migration and dealerships payments were delayed, however, these system challenges were corrected, and payments are sent on a weekly basis. Dealerships are reimbursed for the rebate and paid the dealer incentive in less than 10 days.

# Program Participation

To measure program participation and how the CHEAPR program is utilized, CSE calculated the percentage of newly registered eligible vehicles in Connecticut that received a rebate in 2020. To accomplish this, we compared Markit IHS vehicle registration data<sup>4</sup> for the year 2020 to program rebate data during the same period, dividing the number of rebates in the time period by the number of eligible vehicles registered in that period. Note that this is based on vehicles purchased in 2020, which does not perfectly overlap with rebate applications in 2020.



## I. Participation by Vehicle Model

Between June 2020 and July 2021, 2,389 eligible vehicle models were registered in Connecticut, according to the IHS dataset. This corresponds with 1,163 vehicles purchased in the same time period being either approved for or receiving a rebate, yielding an estimated CHEAPR program participation rate of 49%. See **Figure 5** for percentage of program participation among model types between June 2020 and July 2021. The top five models with

highest participation were Honda Clarity PHEV, Tesla Model 3, Tesla Model Y, Nissan Leaf, and Kia Niro EV. The especially high participation rate for the Honda Clarity PHEV reflects a fairly low overall purchase rate: only 15 were registered in the time period and all were rebated.

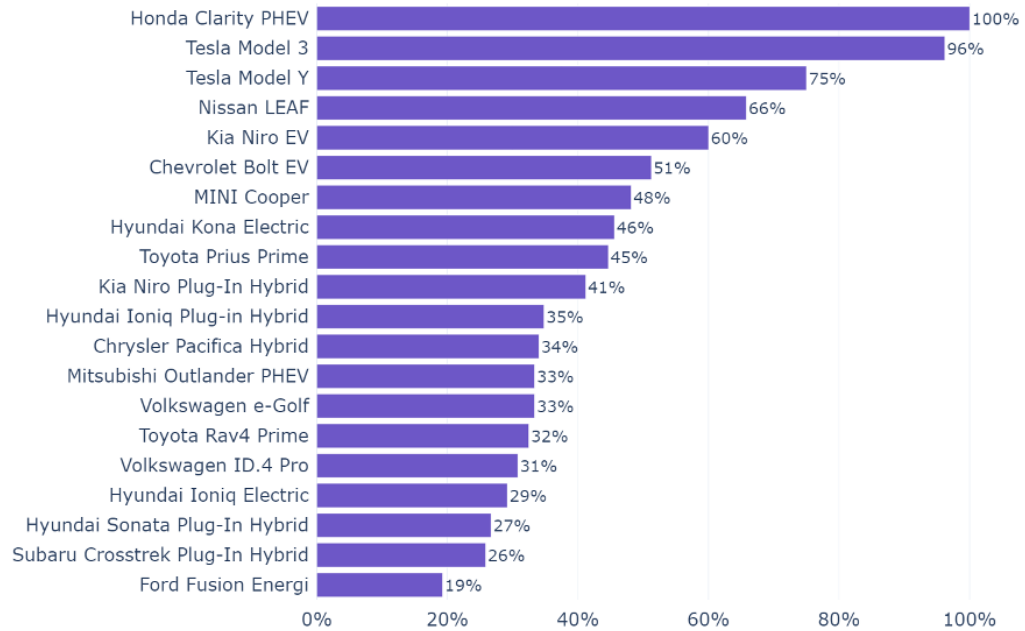
Additionally, high participation rates could be attributed to increased awareness among consumers or to dealers and manufacturers incorporating available incentive information into their sales process. Lower program participation rates may indicate a need for additional outreach or less desired model characteristics.

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<sup>4</sup> IHS-Markit data was filtered to include only eligible models below the MSRP cap of \$42,000

**FIGURE 5**

**Participation Rate by Vehicle Models Eligible for CHEAPR Rebate**

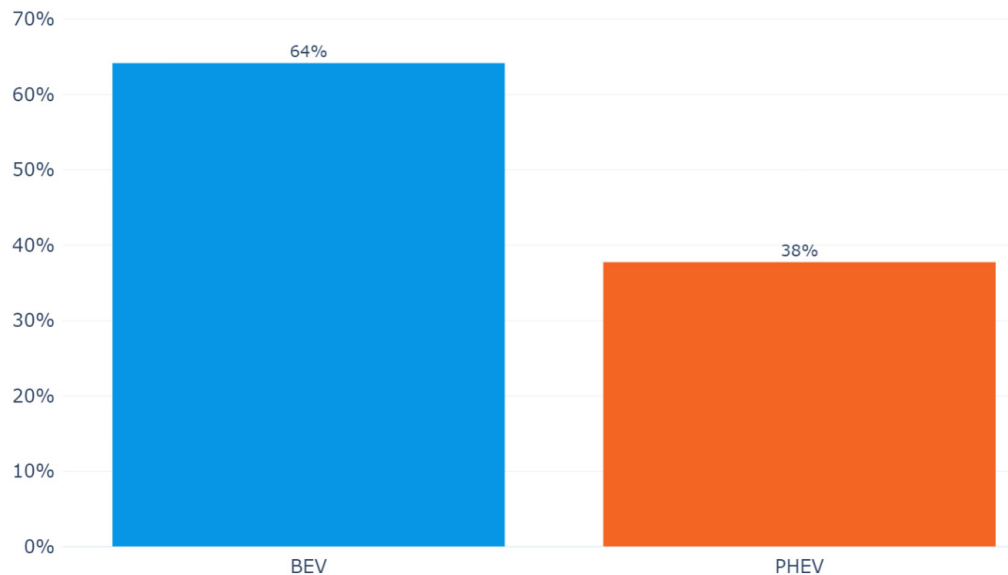


## II. Participation by Vehicle Type

Figure 6 shows overall, there were more PHEV registrations (1,403 PHEV vs 986 BEV) but more BEV rebates (633 BEV vs 530 PHEV). And so the participations are  $633 / 986 = 0.641$  for BEV and  $530 / 1403 = 0.377$  for PHEV, matching the figure

**FIGURE 6**

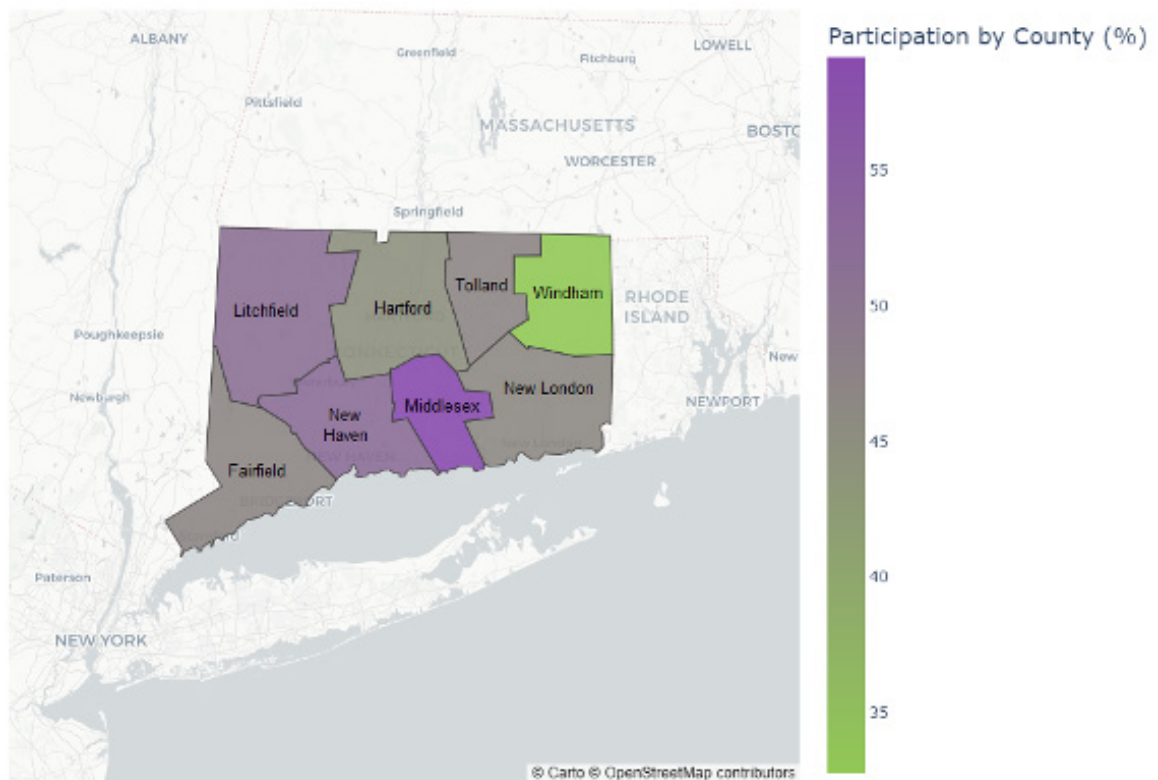
**Participation Rate by Vehicle Type**



### III. Participation by Geography

Program participation varied across Connecticut, as depicted in **Figure 7**. Windham County had the lowest participation rate at 33%, while Middlesex had the highest participation rate at 59%. The comparatively low rate in Windham County is partially due to the low overall registrations in the county; there were 61 registrations and 20 rebates in the county, which compares with 774 registrations and 361 rebates in Fairfield County, the most county with the most registered (and rebated) EVs.

**FIGURE 7**  
Participation Rate by County

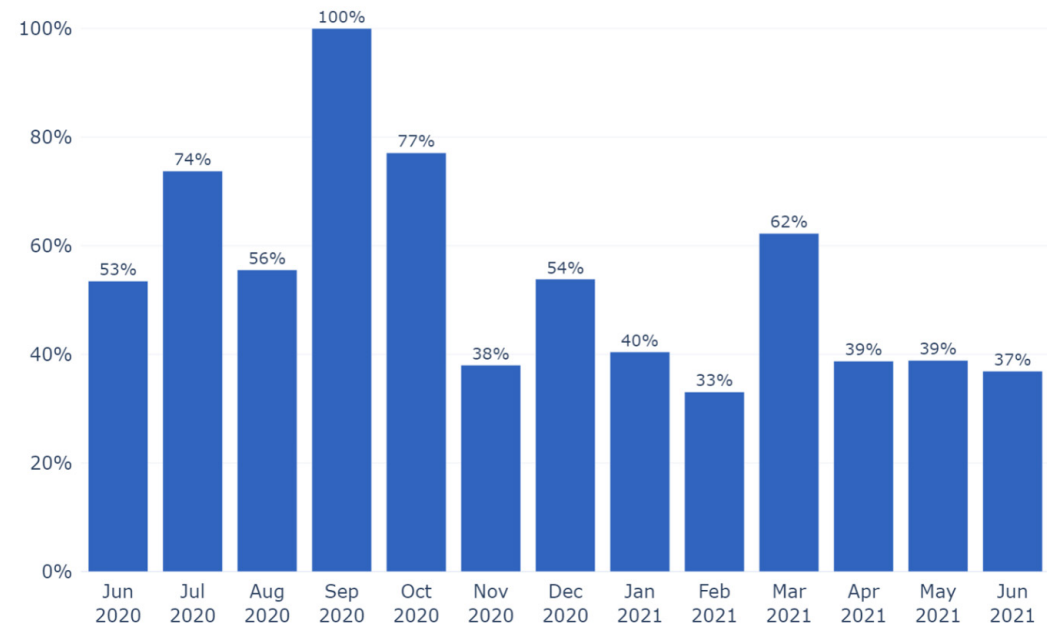


### IV. Participation Over Time

Program participation varied over time as well (see **Figure 8**). Note that vehicle registration is not perfectly related to vehicle purchase date: vehicle registration can take some time to complete. For this reason, **Figure 8** should be viewed as approximate and not a perfect representation of monthly program participation rate.

**FIGURE 8**

**Participation Rate by Month**



## V. Summary

The previous analysis suggests that participation in the CHEAPR program between June 2020 and July 2021 averaged about 49% among all eligible vehicles when compared to IHS-Markit registration data. The comparatively high participation rate of 64% among eligible BEVs could indicate general awareness of dealers or consumers about the rebate, while the lower rate (38%) of eligible PHEV participation could indicate that this market segment requires more outreach at the dealer or consumer level.

One limitation of this analysis, mentioned above, is that registration and vehicle purchase date don't perfectly overlap. This leads to some uncertainty in the participation numbers, which primarily applies to the vehicle model participation rates and the monthly participation rate, due to their granularity. An additional limitation of this analysis is the coverage of the MSRP information in the IHS data. Around 3% of records were missing MSRP information, in these cases the average MSRP was used, as that can give an indication if the vehicle is possibly eligible or not.

# Survey Results and Analysis



## I. Methodology

CSE conducts ongoing voluntary surveys of rebate recipients to receive feedback on program facilitation and effectiveness. CSE analyzed the responses of survey participants and determined if sentiments varied by demographics. The survey covered various topics, including demographics, motivations, importance of the CHEAPR rebate, and dealership experience. To ensure that the survey accurately reflected some categories in the program data, the survey data was weighted via the raking method. The categories used in weighting were vehicle model, purchase/lease status, and county. Of the 1,141 rebated vehicles purchased or leased in the report time period, 268 applicants completed the survey, yielding a 23% response rate.

## II. Consumer Survey Results

The following graphs detail consumer survey findings. Note that these results do not represent the entire Connecticut ZEV market because the survey is voluntary and not all ZEV customers participate in the CHEAPR program. However, these findings are important indications of the demographics and perspectives of those that participate in the CHEAPR program. Survey results displayed below are the result of rebates received between June 4, 2020, and June 17, 2021.

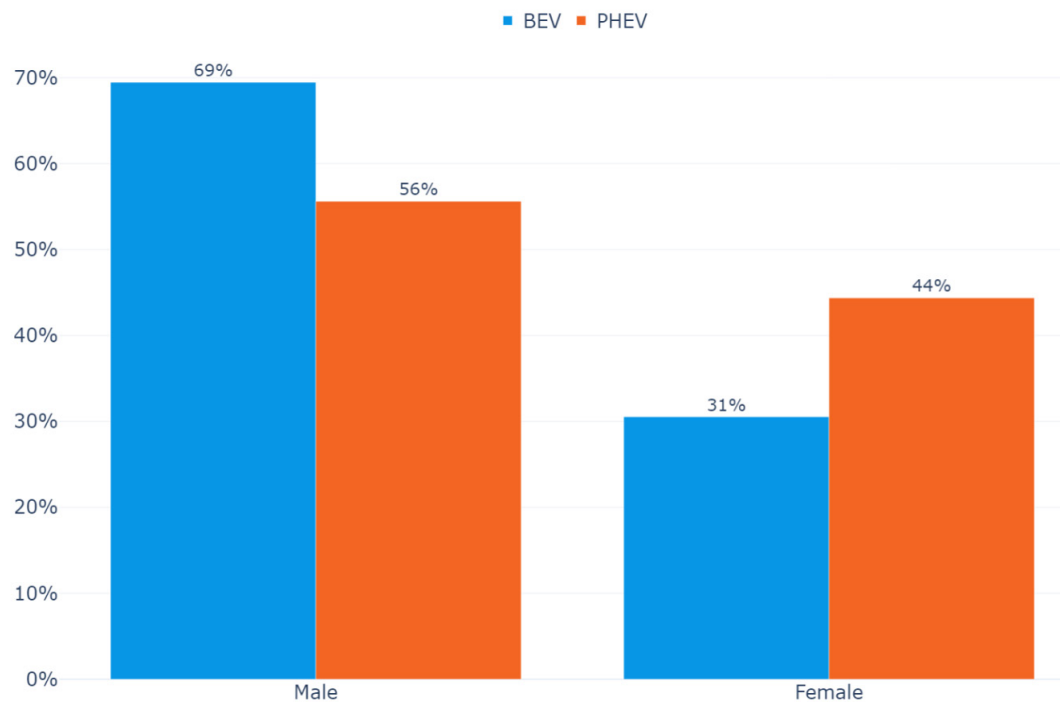
### III. Demographic Findings

As demonstrated in **Figure 9**, CHEAPR survey respondents tend to be male. When asked if they were male or female, 69% of respondents with BEVs identified as male and 31% identified as female. The gap is slightly less for respondents with PHEVs; 56% identified as male and 44% identified as female.

**TABLE 5**  
Breakdown of Gender and Age

What is your age?	Female	Male	% Female	% Male
16 - 29	4	14	2%	6%
30 - 39	15	28	6%	11%
40 - 49	19	35	8%	14%
50 - 59	22	35	9%	14%
60 - 69	22	30	9%	12%
70 - 79	10	13	4%	5%
80+	0	6	0%	2%

**FIGURE 9**  
Gender of Survey Respondents by Vehicle Type

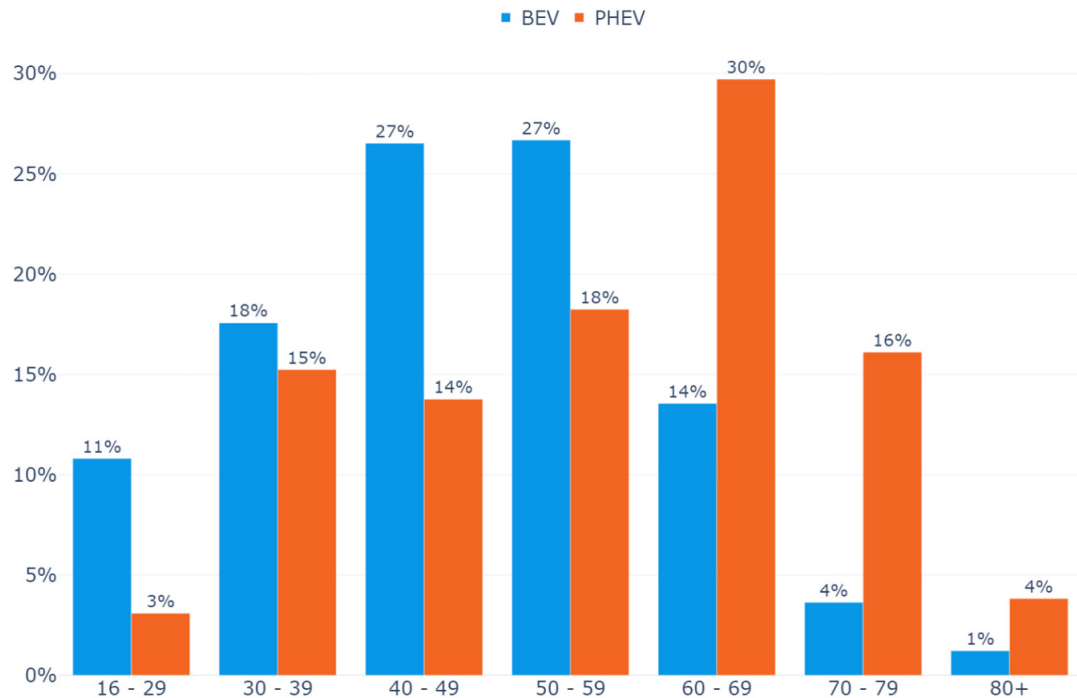


Genders of CHEAPR Survey Respondents by vehicle type. Responses from PHEV and BEV consumers are significantly different (chi-squared test:  $\chi^2=5$ ,  $p<0.03$ ,  $n=259$ ).

In general, younger respondents preferred BEVs and older respondents preferred PHEVs (see **Figure 10**). In particular, note variations among vehicle types for age ranges 40-49 and 60-69. For example, 27% of respondents with BEVs are in the age range 40-49, whereas 14% of respondents of PHEVs are within that age range. Conversely, 14% of respondents with BEVs are in the age range 60-69, and 30% of the respondents with PHEVs are in that age range.

**FIGURE 10**

**Age Ranges of CHEAPR Survey Respondents by Vehicle Type**

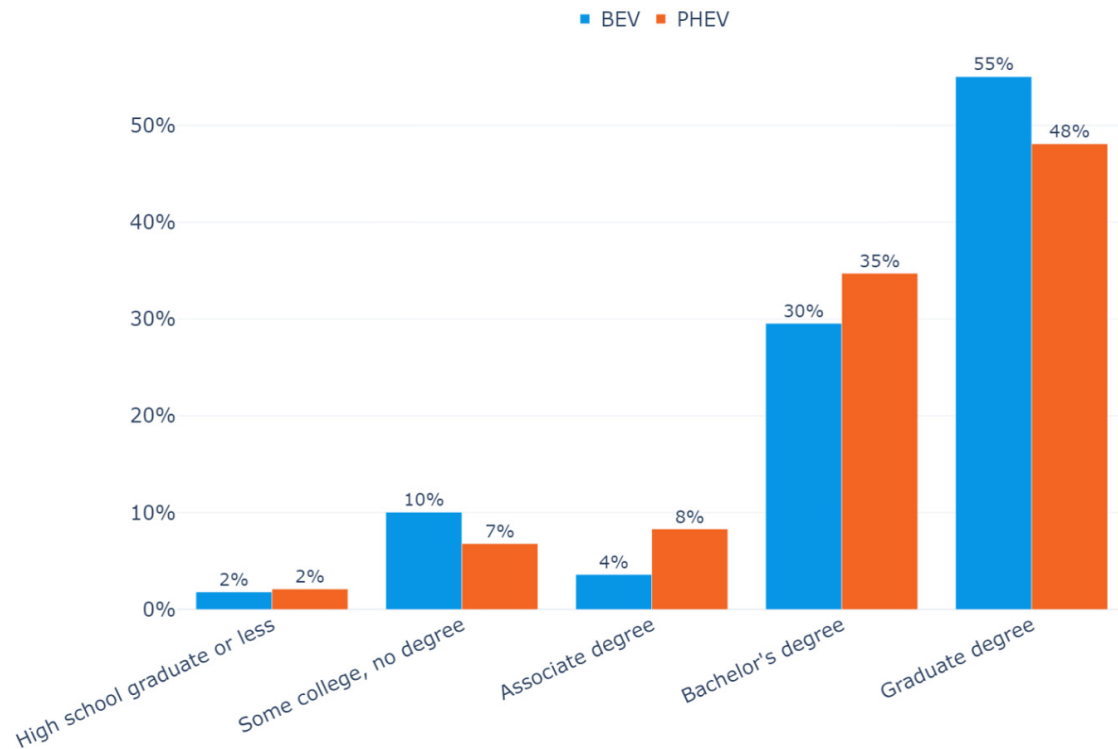


Age ranges of survey respondents by vehicle type. Responses from PHEV and BEV consumers are significantly different (chi-squared test:  $\chi^2=33$ ,  $p<0.00001$ ,  $n=258$ ).

As demonstrated in **Figure 11**, survey respondents tend to be college graduates and those with graduate degrees. For example, 30% and 55% of respondents purchasing BEVs have bachelor's degrees and graduate degrees, respectively. Similarly, 35% and 48% of respondents with PHEVs have bachelor's degrees and graduate degrees, respectively.

**FIGURE 11**

**Education Levels of CHEAPR Survey Respondents by Vehicle Type**

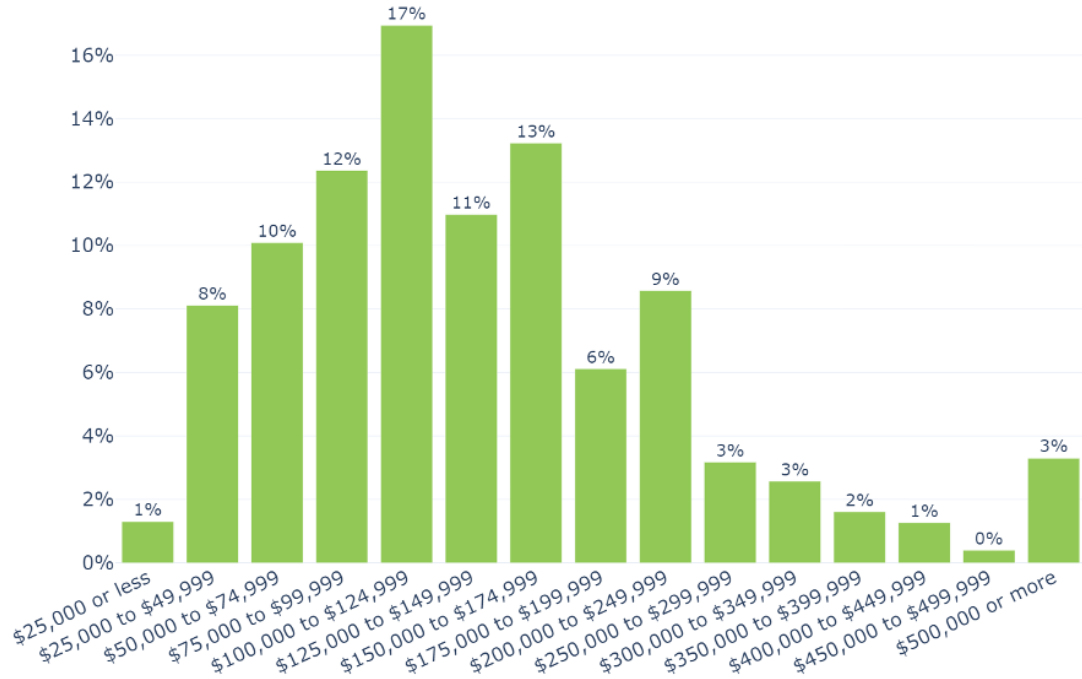


Education levels of survey respondents by vehicle type (n=265, no significant difference between BEV and PHEV respondents).

See **Figure 12** for the range of survey participants' household incomes. The bulk of participants' household income range between \$50,000 to \$250,000. The most abundant household income range at 17% is \$100,000 to \$124,999.

**FIGURE 12**

**Annual Household Incomes of CHEAPR Survey Respondents**

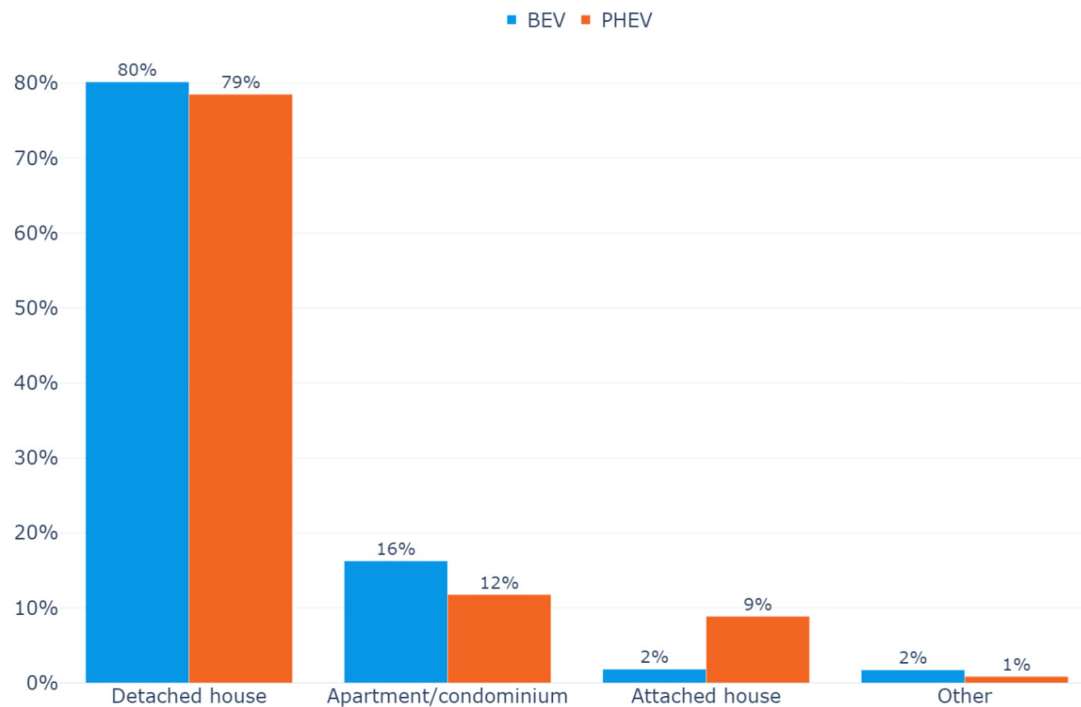


Annual household incomes of survey respondents (n=220, no significant difference between BEV and PHEV respondents).

As demonstrated in **Figure 13**, most respondents live in detached houses (80% of respondents with BEVs and 79% of respondents with PHEVs) as opposed to apartments/condominiums, attached houses, or other dwelling types.

**FIGURE 13**

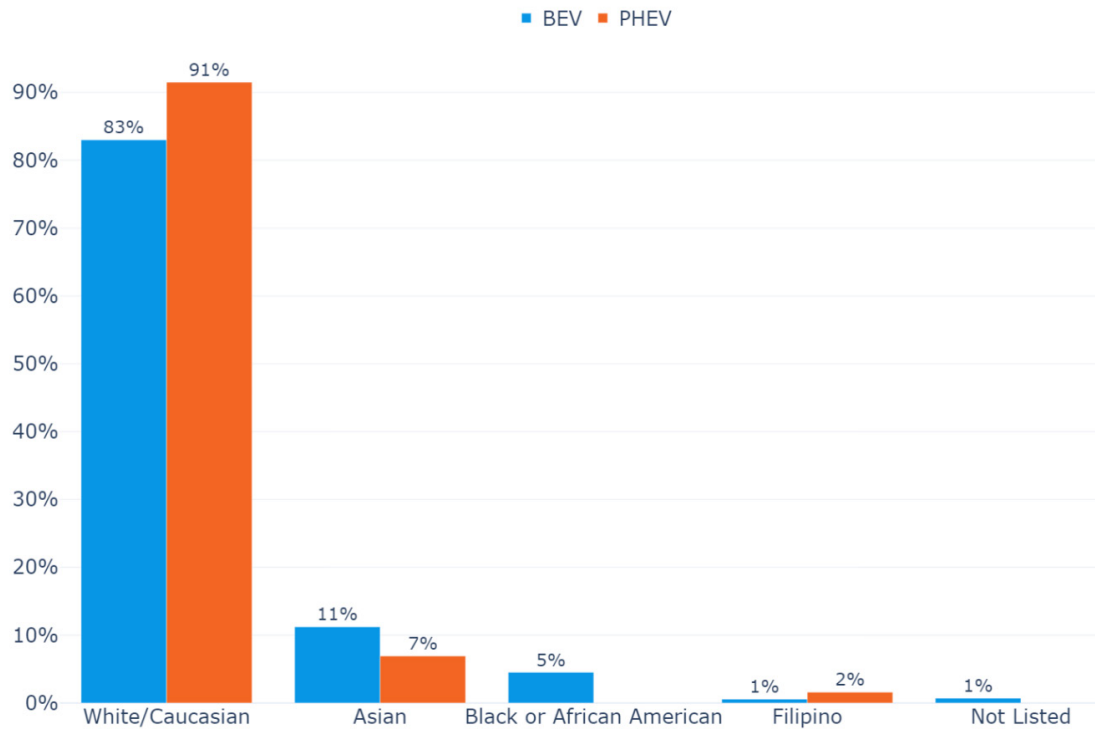
**Dwelling Types of Survey Respondents by Vehicle Type**



Dwelling types of survey respondents by vehicle type (n=258, no significant difference between BEV and PHEV respondents).

As demonstrated in **Figure 14**, most respondents identify as White/Caucasian (83% of respondents with BEVs and 91% of respondents with PHEVs).

**FIGURE 14**  
Races of Survey Respondents by Vehicle Type



Self-identified racial identity of survey respondents by vehicle type (n=230, no significant difference between BEV and PHEV respondents).

## V. Limitations

In general, the survey response rate was quite low, 268 responses or a 23% response rate, which makes finding statistically significant trends in the data more difficult. There are number of methods to improve survey response rates. One would be to add an incentive to the completion of the survey, either in the form of entering a raffle for an incentive or by directly giving an incentive to participants. However, this method would add additional burden to program costs. Another method of improving survey participation would be making it mandatory for receiving the rebate, even without enforcement this stipulation can improve survey participation.

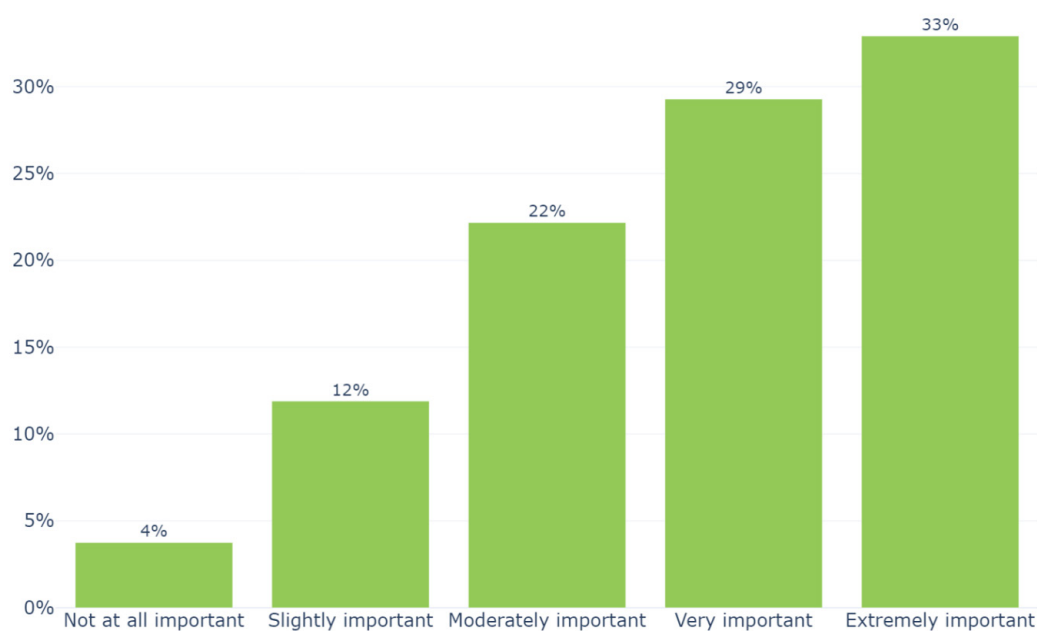
# Impact Findings

The CHEAPR rebate is designed to reduce the price of purchasing or leasing a BEV or PHEV, and the survey asked respondents questions to understand the importance of this price reduction to participants. The following graphs examine various perspectives regarding the rebate.

Survey respondents were asked to rate the importance of the CHEAPR rebate in their decision to acquire an EV. As shown in **Figure 15**, a majority (62%) of survey respondents described the rebate as “very” or “extremely” important to their purchase of an EV. Only 16% of respondents indicated that the rebate was “slightly important” or “not at all important.”

**FIGURE 15**

## Survey Responses Regarding Importance of the CHEAPR Rebate

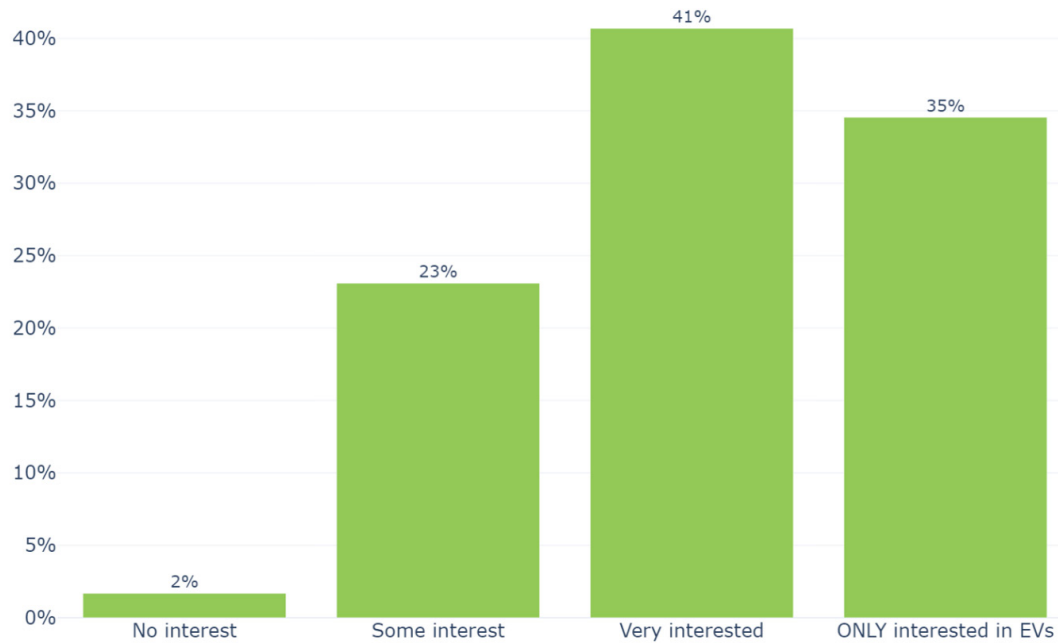


Importance of CHEAPR rebate to survey respondents by vehicle type (n=266).

Survey respondents were asked to describe their initial interest in EVs. Most (76%) indicated that they were “very interested” or “only interested in EVs,” and only 2% of respondents said they had no interest in EVs when they began looking for a new vehicle (see **Figure 16**).

**FIGURE 16**

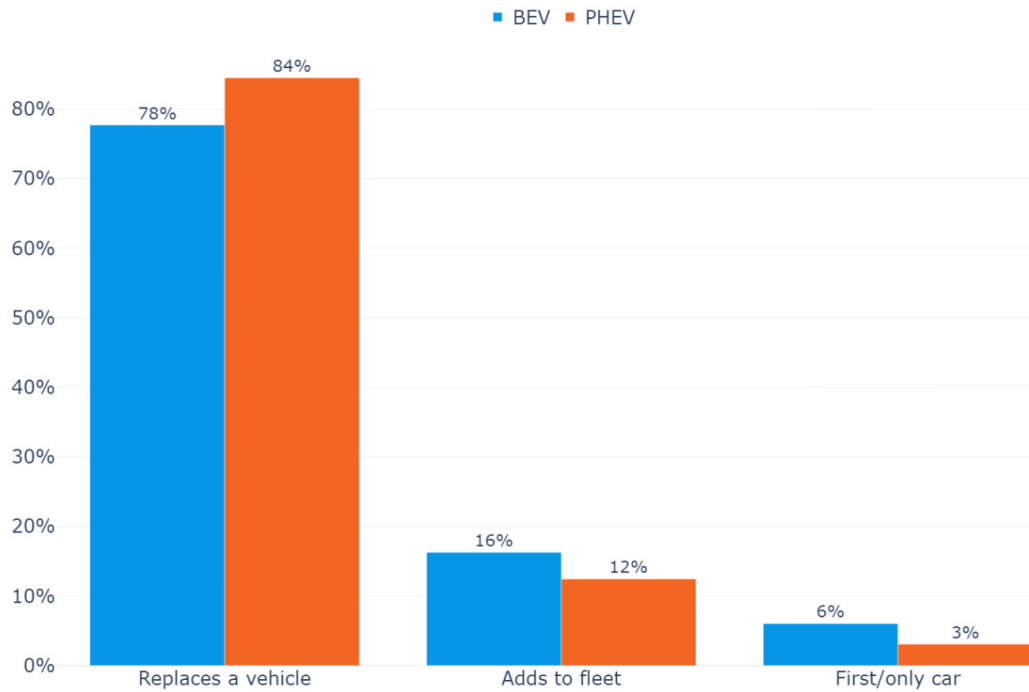
**Survey Responses Regarding Initial Interest in EVs**



Response to the CHEAPR Survey question, “What was your initial interest in EVs when you began shopping for a vehicle?” (n=268)

Survey respondents were asked about the purpose of their rebated vehicle. For BEV drivers and PHEV drivers, 78% and 84%, respectively, responded that the vehicle was purchased or leased to replace a vehicle (see **Figure 17**).

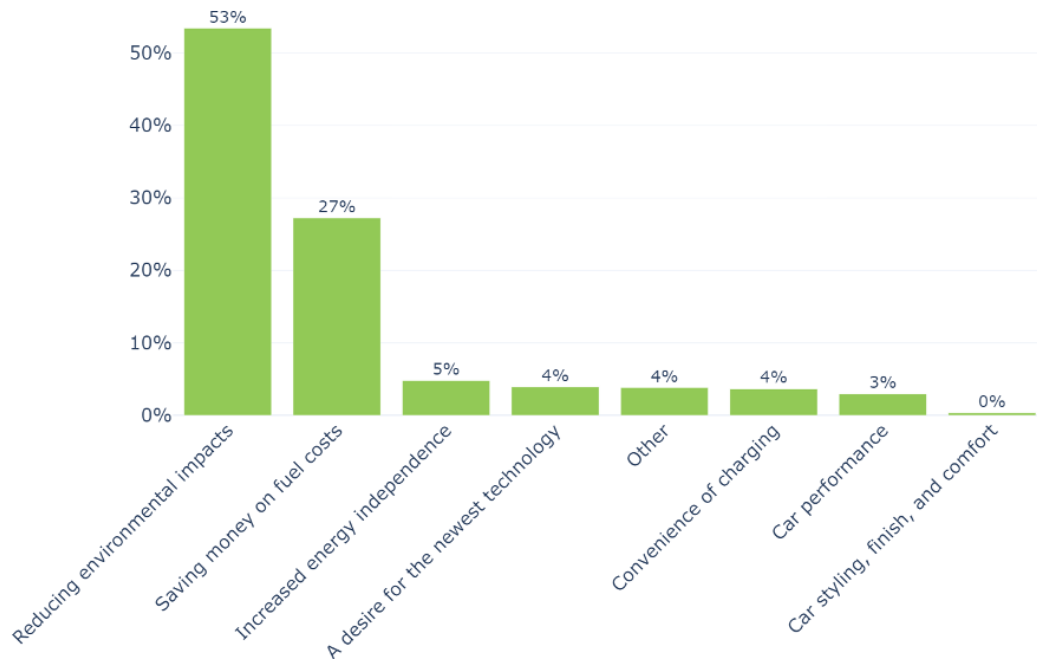
**FIGURE 17**  
Survey Responses Regarding Initial Interest in EVs



Responses to the CHEAPR Survey question, "Is your rebated vehicle a replacement for another vehicle in the household, an additional vehicle or your first or only car?" (n=268, no significant difference between BEV and PHEV respondents)

Survey respondents were asked what their motivations were for acquiring a BEV or PHEV. Most (53%) indicated that they were primarily interested in reducing environmental impacts. The second most popular reason was saving money on fuel costs (27%). All other reasons, including desire for new technology, charging, energy independence, comfort, and performance, were less common reasons (see **Figure 18**).

**FIGURE 18**  
Survey Response Regarding Motivation for Acquiring a BEV or PHEV

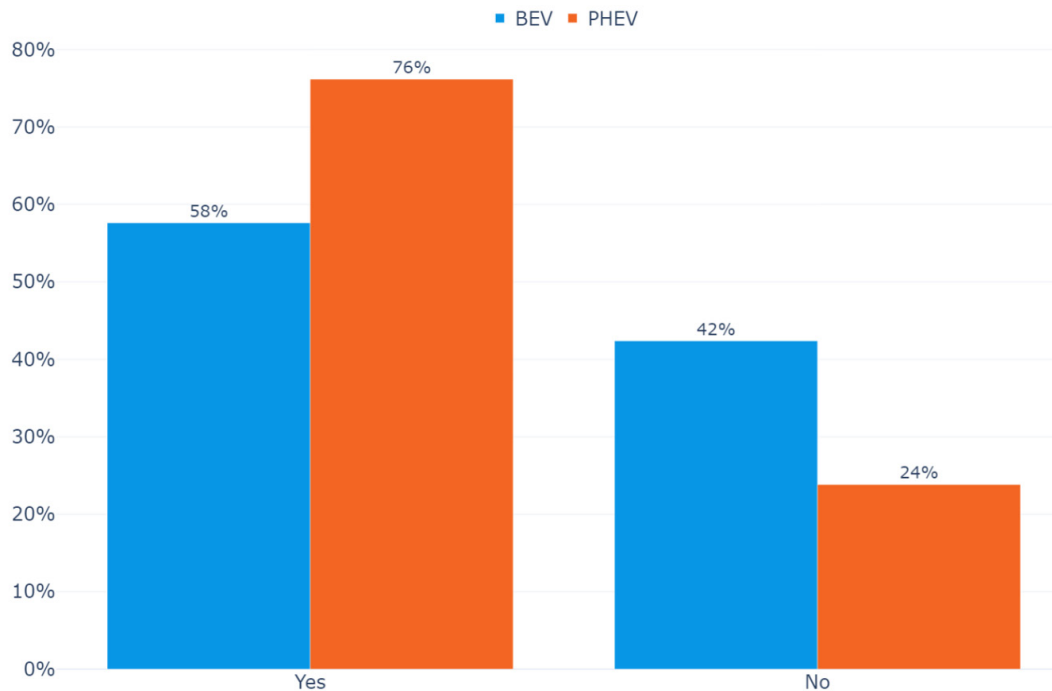


Responses to the CHEAPR Survey question, "Which of these factors was the most important reason for why you decided to acquire a BEV or PHEV?" (n=268, no significant difference between BEV and PHEV respondents)

Survey respondents were asked if they would have purchased or leased their rebated vehicle even without the rebate. Two-thirds indicated that they would have purchased or leased even if the rebate were not available. The remaining third indicated they would not have purchased or leased without the rebate (see **Figure 19**).

**FIGURE 19**

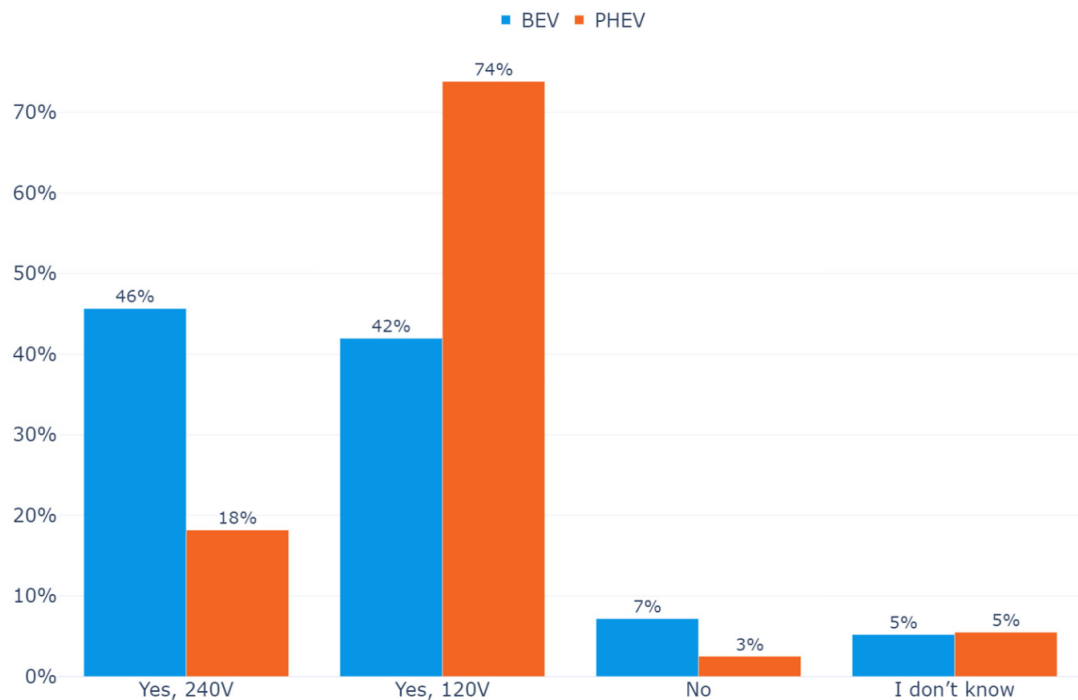
**Respondents Indicating if They Would Have Acquired a BEV or PHEV Without the Rebate**



Responses to the question, "Would you have purchased or leased your electric vehicle without the CHEAPR rebate?"  
Responses from PHEV and BEV consumers are significantly different (chi-squared test:  $\chi^2=9$ ,  $p<0.003$ ,  $n=268$ ).

Survey respondents were asked if they would charge at home and if so at what voltage. Most indicated that they would charge at home. PHEV drivers preferred 120 V chargers and BEV drivers preferred 240 V chargers (see **Figure 20**).

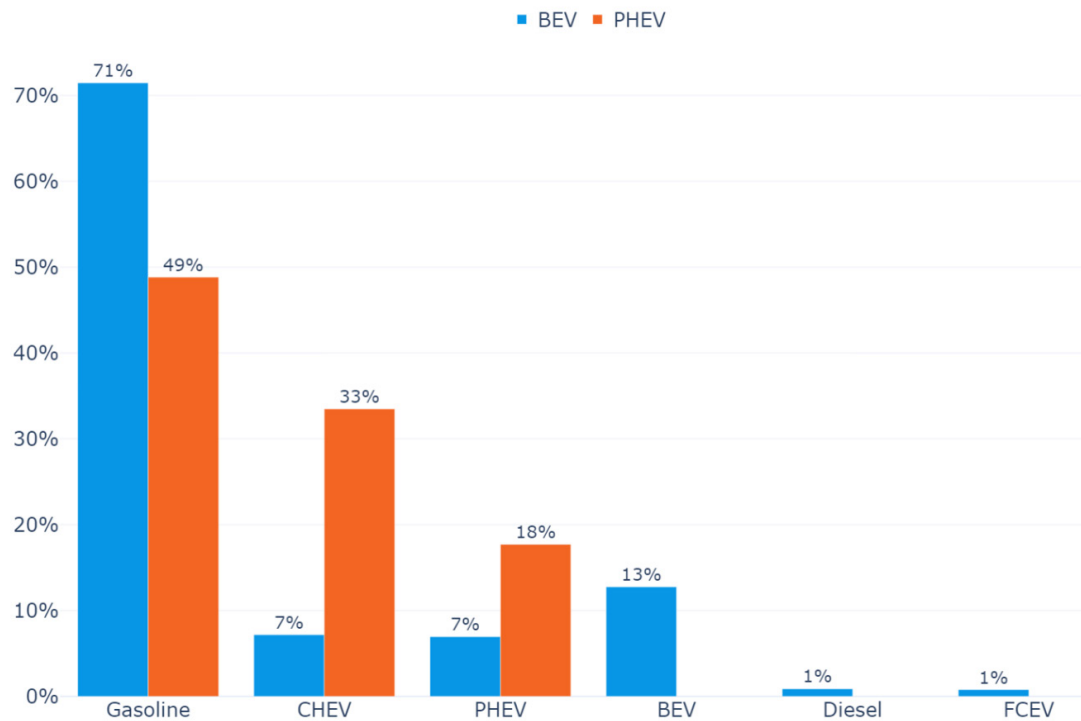
**FIGURE 20**  
Respondents Indicating Charging at Home



Respondents answering the question, “Will you charge at home? At what voltage?” Responses from PHEV and BEV consumers are significantly different (chi-squared test:  $\chi^2=29$ ,  $p<0.00001$ ,  $n=261$ ).

Survey respondents were asked what fuel type their previous vehicles used.<sup>5</sup> Most respondents used gasoline vehicles (71% of BEV drivers and 49% of PHEV drivers); however, a large amount of PHEV drivers also drove conventional hybrids (33%) (see **Figure 21**). Roughly 7% percent of BEV drivers indicated that they had previously owned a PHEV, which could indicate increasing comfort with electric vehicle technology.

**FIGURE 21**  
Respondents Indicating Previous Vehicle Fuel Type

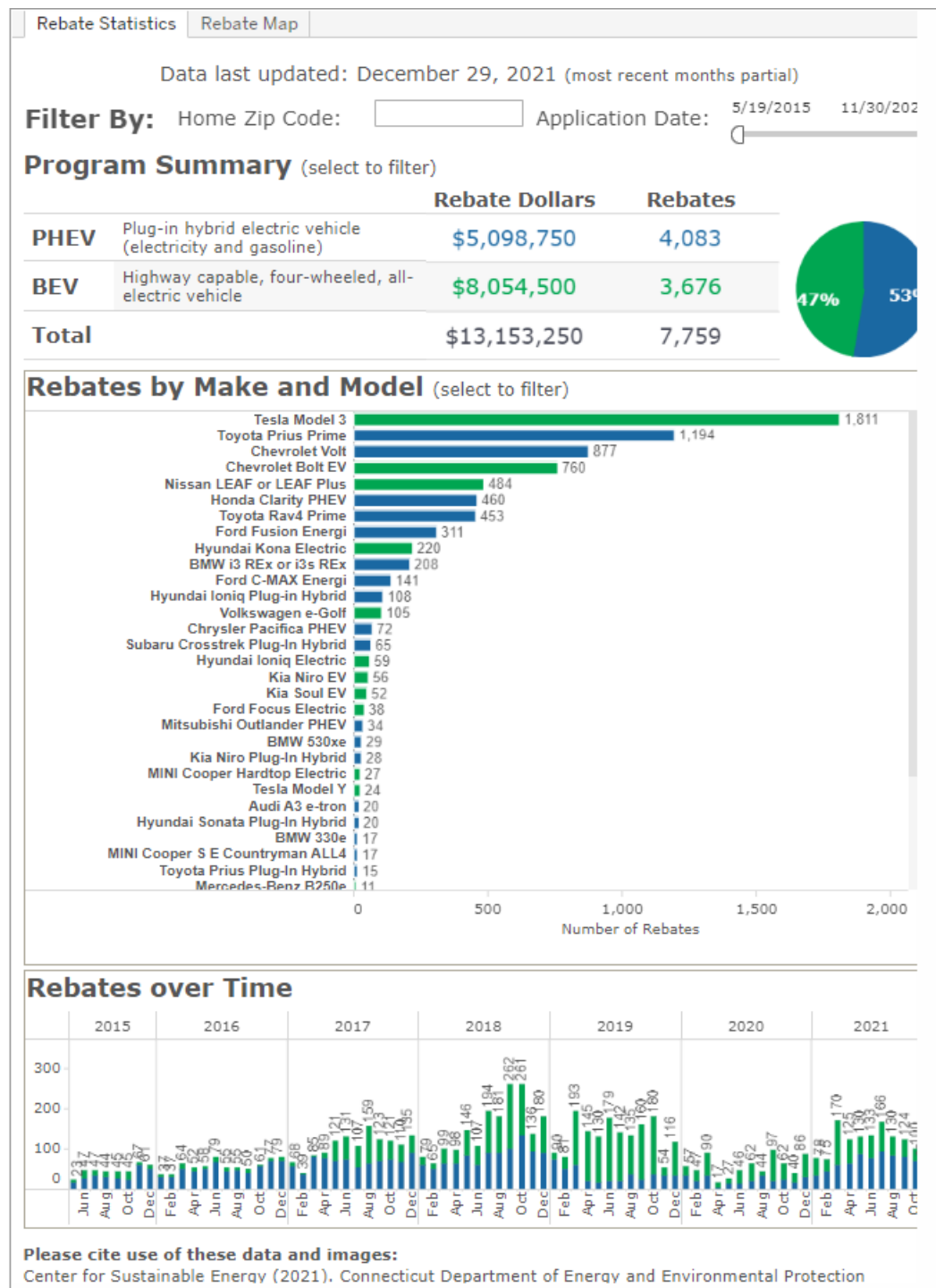


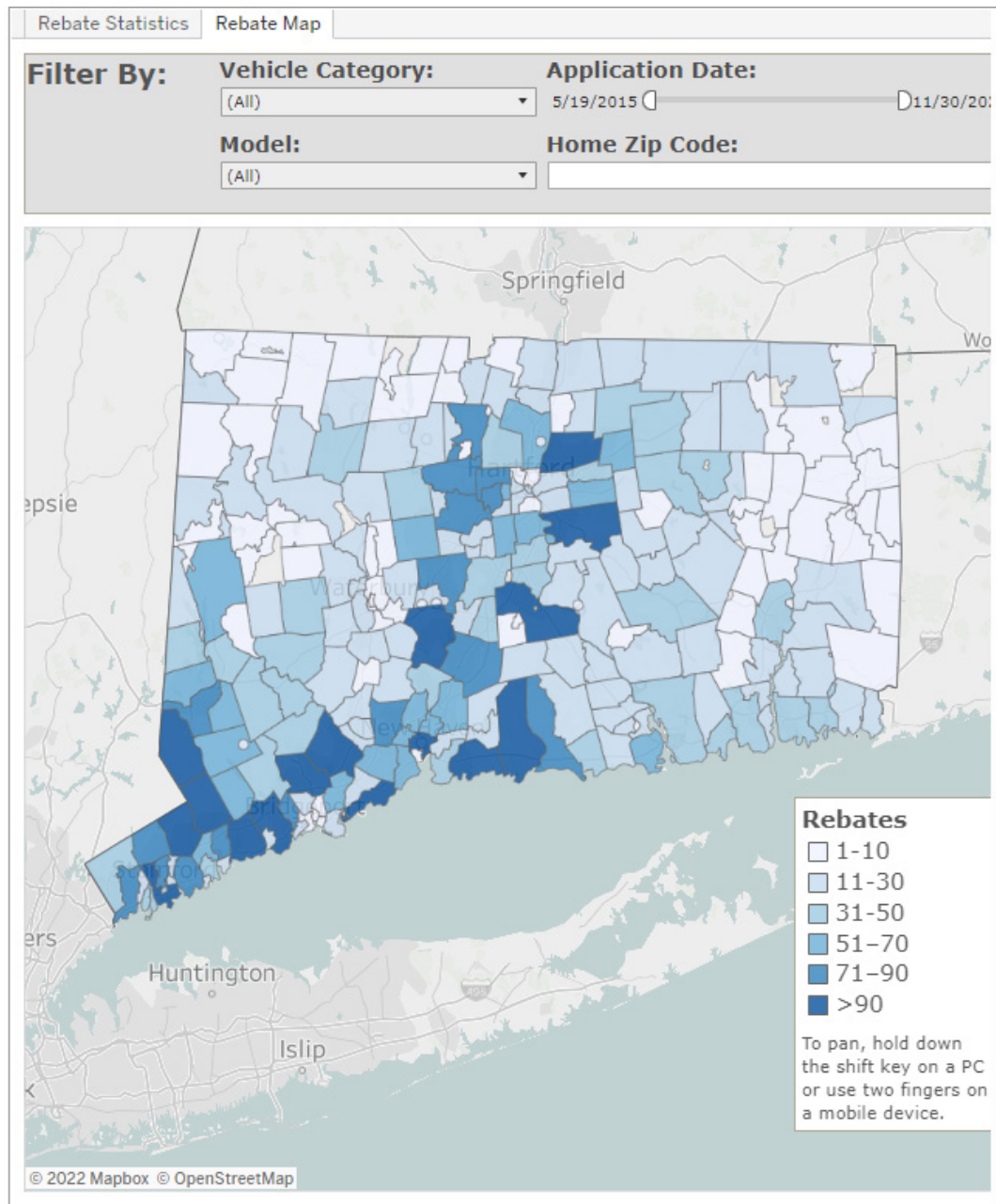
Respondents indicating what fuel types their previous vehicles used. Responses from PHEV and BEV consumers are significantly different (chi-squared test:  $\chi^2=43$ ,  $p<0.00001$ ,  $n=268$ ).

<sup>5</sup> Fuel type abbreviations are: Conventional Hybrid EV (CHEV), Fuel-Cell Electric Vehicles (FCEVs), Compressed Natural Gas (CNG).

## APPENDIX 1.

# CHEAPR Program Website Interactive Data Tools







Center for  
Sustainable  
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