

CHEAPR Annual Report

Second Year

July 2021–June 2022

February 2023



Center for
Sustainable
Energy®

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I. 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 2025.¹ 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).

Between July 1, 2021, and June 30, 2022, a total of 3,245 CHEAPR-eligible vehicle models were registered in Connecticut, according to the [IHS Markit](#) vehicle registration dataset. During the same period, 1,089 vehicles were purchased and either approved for or were in the process of receiving a CHEAPR rebate. These figures yield an estimated CHEAPR program participation rate of 34%.

¹ 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)

See **Figure 1** for the total number of vehicles rebated among model types between July 1, 2021, and June 30, 2022. Overall, there were more plug-in hybrid vehicle (PHEV) registrations than battery electric vehicle (BEV) registrations (BEV versus 1 PHEV). Rebates exhibited a similar trend (718 PHEV versus 371 BEV). For further information on overall market participation in the CHEAPR program, see Section IV.

Compared to the last year's data (June 2020–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%. Participation rate has decreased by 15% since the year before.

It should be noted that during this period, the impacts of COVID-19 and the microchip shortage have continued to disrupt the global automotive supply chain, which could have impacted participation rate.

FIGURE 1
Total Program Year Rebates by Vehicle Type and Purchase vs. Leased

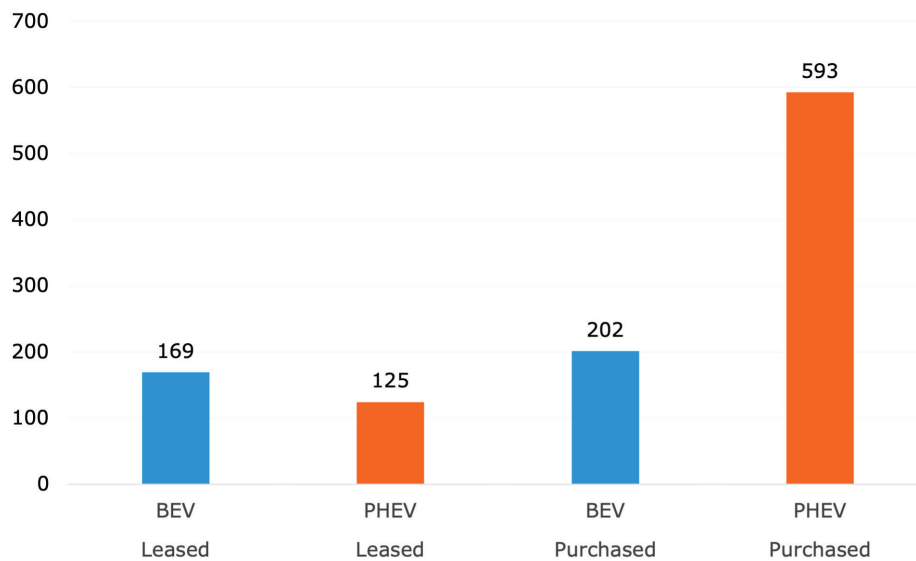


FIGURE 2
Percent of Rebates by Vehicle Model through Program Year Two

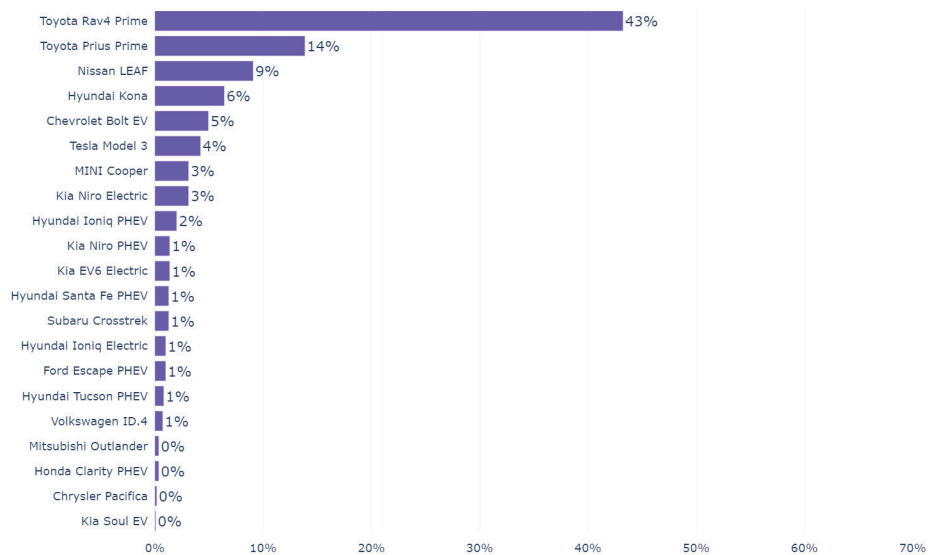


Figure 2 displays the percentage of rebates in the program between July 1, 2021, and June 30, 2022, that went to each vehicle model. The Toyota Rav4 Prime, Toyota Prius Prime and Nissan LEAF were the most rebated vehicle models.

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**.

II. Program Update

In 2020, Connecticut adopted legislation codifying the CHEAPR 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 27, 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 relaunch of CHEAPR program consisted of three different incentives.

The standard rebate is a point-of-sale rebate. This means 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 is deducted from the purchase or lease price of their new EV.

The CHEAPR program relaunch offers a new rebate for eligible income-qualified purchasers or lessees of new EVs called 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 consumers who apply 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.

In 2022, Governor Lamont signed Public Act 22-25 (PA 22-25), The Connecticut Clean Air Act. PA 22-25 makes significant changes to the CHEAPR program including:

- Providing authority to increase the manufacturer’s suggested retail price (MSRP) cap from \$42,000 to \$50,000.
- Adding eligibility for businesses, municipalities, nonprofit organizations and tribal entities, with a cap of 10 rebates per year and 20 total (CHEAPR Fleets).
- Expanding eligibility for low- and moderate-income individuals and directing the DEEP to prioritize granting rebates and/or vouchers to residents of environmental justice communities with a household income of up to 300% of the federal poverty level.
- Authorizing the DEEP to conduct outreach and implement a marketing campaign to promote CHEAPR.
- Requiring the DEEP adopt and implement an electric bike (e-bike) incentive program.

Operational Procedures

Eligible EVs include eligible plug-in hybrid electric vehicles (PHEVs), battery electric vehicles (BEVs) and fuel cell electric vehicles (FCEVs).² 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 that reviews incentive levels on an annual basis and reserves 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.

The CHEAPR website (www.drivecheapr.org) provides program information and access to the application processing platform. The layout consists of the following:

- CHEAPR homepage
- Rebate+ page
- Comprehensive list of new and used eligible vehicles with rebate amounts
- Program statistics page (updated monthly)
- Resources page with links to the program's Implementation Manual
- Instructional videos for dealerships and consumers
- Outreach materials
- Program logos
- List of FAQs
- Contact page
- CHEAPR application portal for dealerships and consumers
- CHEAPR Board page
- Link to the EV Connecticut page
- 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

² <https://portal.ct.gov/-/media/DEEP/air/mobile/CHEAPR/CHEAPRImplementationManualpdf.pdf>

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 of \$42,000 or less and eligible FCEV models, a MSRP of \$60,000 or less. For Program Year Two the base MSRP limit remained the same.

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	Hydrogen 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

*Excluding FCEVs, for which the MSRP cap is \$60,000.

TABLE 2
Vehicle Rebate Levels (June 7, 2021–Current)

	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 three new electric vehicle models to the eligible vehicles list during the second year of the program. They were the Hyundai Tucson PHEV, Ford Escape PHEV and Subaru Solterra. The Tesla Model 3 was ineligible from November 2021 through June 2022. 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](#).

III. Outreach, Education & Marketing

I. Consumer Outreach and Education

Consumer outreach from July 2021–June 2022 was focused on providing program information through collateral available on the CHEAPR website, consumer phone line, email and presentations. 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 351 voicemails in the First Year of the program and 748 emails.

I. Collateral

A revised version of the consumer overview was redesigned to include rebate amounts for both Rebate+ offers. The collateral piece was redesigned to a two-sided, half-page document for easy distribution. The piece covers the standard and Rebate+ New offers on one side and Rebate+ Used offer on the reverse.

II. Presentations

During Program Year Two, the CSE Outreach Team reached out to 21 community-based organizations (CBOs) located in environmental justice communities³ to offer presentations about the CHEAPR program.

On September 29, 2021, CSE staff, in partnership with Sustainable Essex, presented “Everything you need to know about purchasing, owning and operating an Electric Vehicle” with Barry Kresch from EV Club of CT and Robert Valenti from CT Auto Retailers Associations (CARA). On May 5, 2022, CSE staff, in partnership with the Cora J. Belden Library in Rocky Hill, provided a virtual presentation to a total of three attendees. In this presentation we talked about the benefits of EVs and the CHEAPR rebate application process.

III. Partnerships

In December 2021, CSE partnered with Sustainable CT on their Municipal Certification.⁴ Municipalities can earn credits toward this certification for sponsoring or hosting a ZEV promotional event or education workshop. CSE is listed as being available to support this action by being available to give presentations as part of an event to interested audiences.⁵

³ <https://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Communities>

⁴ <https://sustainablect.org/actions-certifications/certification-overview>

⁵ <https://sustainablect.org/actions-certifications/actions#open/action/42>

II. Dealer Outreach and Education

Dealer outreach and education from July 2021–June 2022 consisted of having dealership-focused materials posted on the CHEAPR website and distribution of a quarterly newsletter.

DEEP posted [the dealership poster](#) to the CHEAPR website. There is also a series of recorded instructional webinars for dealerships on the [CHEAPR Program Resources page](#).

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.

Mass emails were sent in December 2021, April 2022 and June 2022 to a database of 394 dealerships. The December email introduced the FAQ page for dealers. The April email reviewed dealer resources and shared information about the extended rebate amounts. In June, dealers received an announcement regarding the increased MSRP cap and a list of newly eligible vehicles. Both emails received over 50% open rate, well above the industry standard of 21.33%

III. Marketing

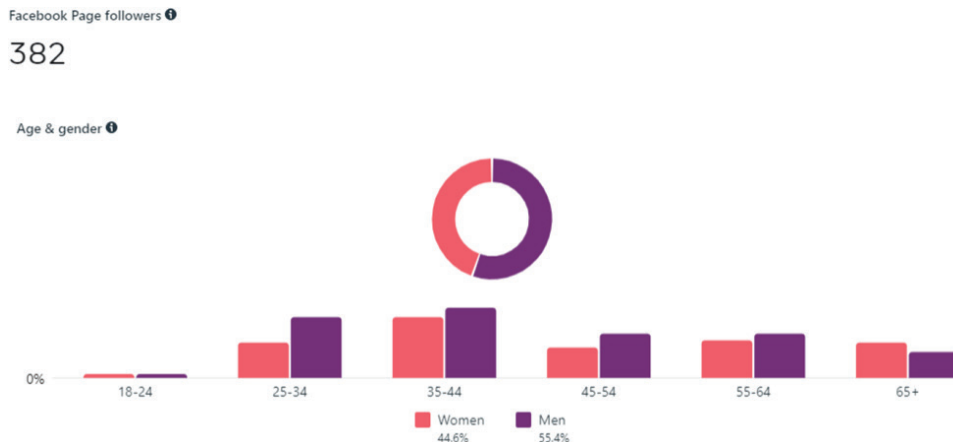
A marketing campaign was created to coincide with the relaunch of the CHEAPR program in June 2021. It consists of weekly social media posts on the CHEAPR Rebate Facebook page and a dealership newsletter.

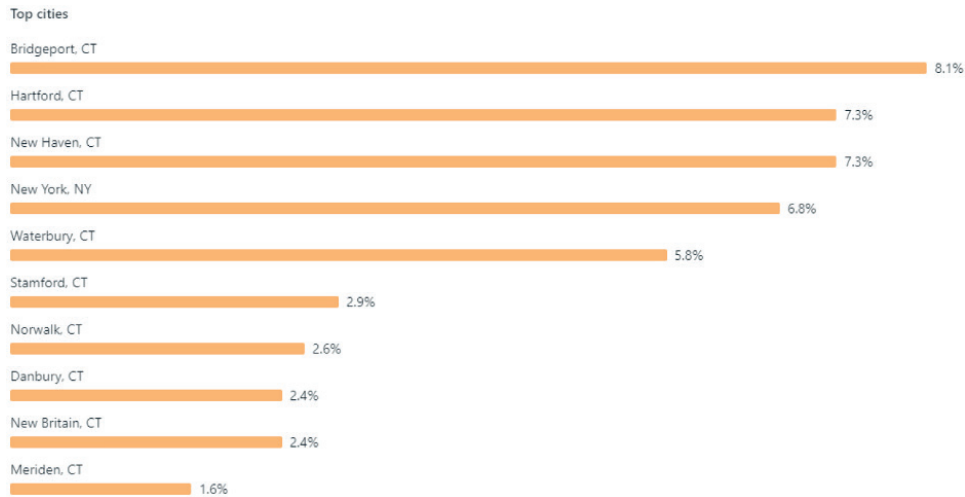
CHEAPR’s Facebook Page (<https://www.facebook.com/DriveCHEAPR>)

Organic social media key metrics:

- Facebook page reach decreased by 54.6% year over year
- 382 page followers (demographic breakdown in **Figure 3**)
- Clicks on links: **8**
- Total Reached: **956 people**

FIGURE 3
Demographic Breakdown of the CHEAPR Facebook Audience





CHEAPR Paid Advertising

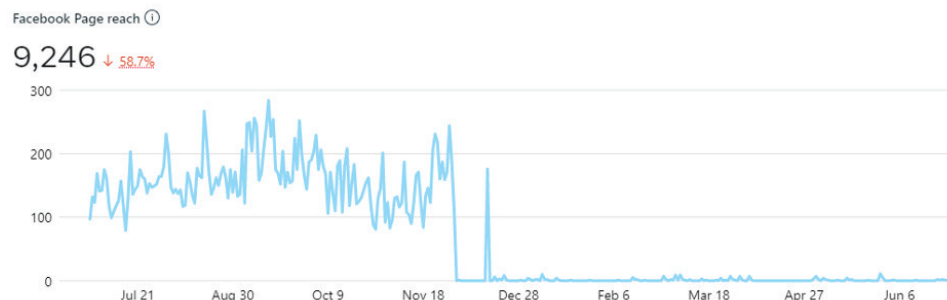
Facebook advertising was ended in December 2021. The metrics in **Table 3** reflect statistics from June 2021 through November 2021.

TABLE 3
Paid Social Media Key Metrics

Reach	Impressions	Amount Spent	Frequency	Results	Link Clicks
9,926	30,033	\$913.93	3.03	114	93
9,926	30,033	\$913.93	3.03	114	93
9,926 People	30,033 People	\$913.93 Total Spent	3.03 Person	114 Page Likes	93 Total

A drastic drop in December, visualized in **Figure 4**, was caused by the discontinuation of advertisements. The rest of the year remained consistent from January 2022 through July 2022.

FIGURE 4
Facebook Page Reach (July 2021–June 2022)



IV. Operations

As a primarily point-of-sale program, operations mainly supports the 127 dealerships enrolled⁶ into the CHEAPR program. Operations guides new dealerships through the online enrollment process and helps enrolled dealerships submit and correct applications, answer general eligibility questions and troubleshoot technical issues. Consumers continue to be supported through responding to questions about eligibility requirements and how to claim Rebate+ New and Used incentives for income-qualified participants. 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 portal gives the dealership the necessary tools to complete the application process easily and quickly. Dealerships are reimbursed for the rebate and paid the dealer incentive in less than 10 days.

⁶ Enrolled Dealerships are dealerships that have submitted an enrollment form.

V. 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 between July 1, 2021, and June 30, 2022. To accomplish this, we compared IHS Markit vehicle registration data⁷ 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.

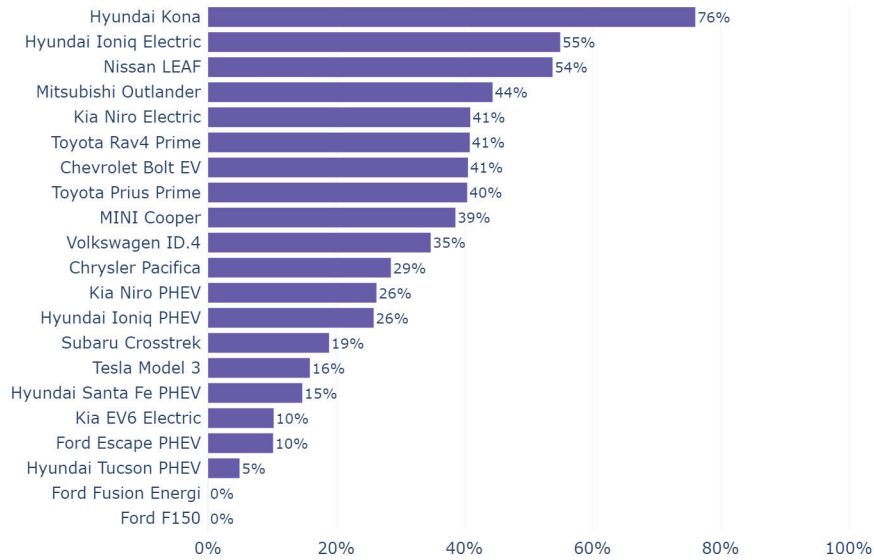
I. Participation by Vehicle Model

Between July 1, 2021, and June 30, 2022, 3,245 eligible vehicle models were registered in Connecticut, according to the IHS dataset. During the same period, 1,089 vehicles were purchased and either approved for or receiving a rebate. These figures yield an estimated CHEAPR program participation rate of 34%. See **Figure 5** for percentage of program participation among model types between July 2021 and June 2022. The top five models with highest participation were Hyundai Kona, Hyundai Ioniq Electric, Nissan LEAF, Mitsubishi Outlander and Kia Niro Electric. The participation rate in the time period indicates the ratio of vehicle rebates to vehicle registrations for the given model in the report time period.

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 could indicate a need for additional outreach, less desired model characteristics or that participants feel the application is too cumbersome or not worth the effort monetarily. Note that all Tesla models were ineligible for at least part of the report period; the Model 3 was briefly eligible, which is why it had such an overall low participation rate during the time period.

⁷ IHS Markit data was filtered to include only eligible models below the MSRP cap of \$42,000.

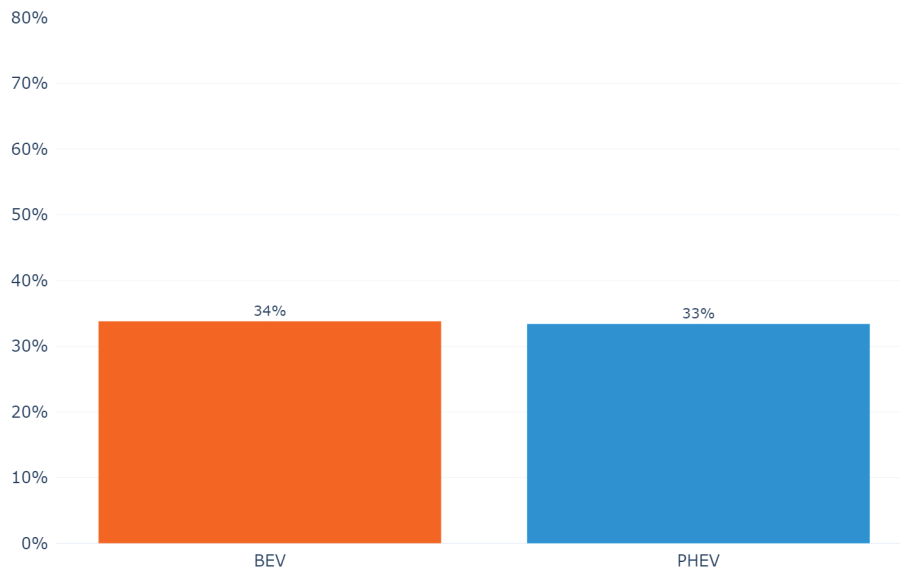
FIGURE 5
Participation Rate by Vehicle Models Eligible for CHEAPR Rebate



II. Participation by Vehicle Type

There were more PHEV registrations (2,148 PHEV versus 1,097 BEV) and rebates (718 PHEV versus 371 BEV). **Figure 6** shows that the CHEAPR program participation rate⁸ was nonetheless roughly equal for BEVs and PHEVs.

FIGURE 6
Participation Rate by Vehicle Type



⁸ Participation rate is defined as the number of rebated vehicles divided by total number of registered vehicles, in a given time period or vehicle class.

III. Participation by Geography

Program participation varied across Connecticut, as depicted in **Figure 7** and **Figure 8**. Among counties, Fairfield County had the lowest participation rate at 34%, while Litchfield County had the highest participation rate at 62%. Among ZIP codes, 06784 and 06785 were tied for lowest participation rate and 06058 had the highest participation rate.

FIGURE 7
Participation Rate by Country

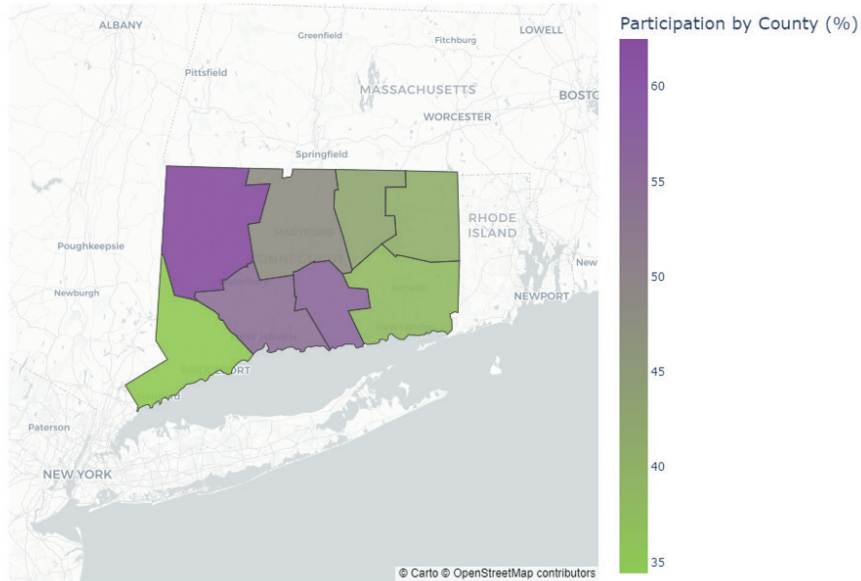
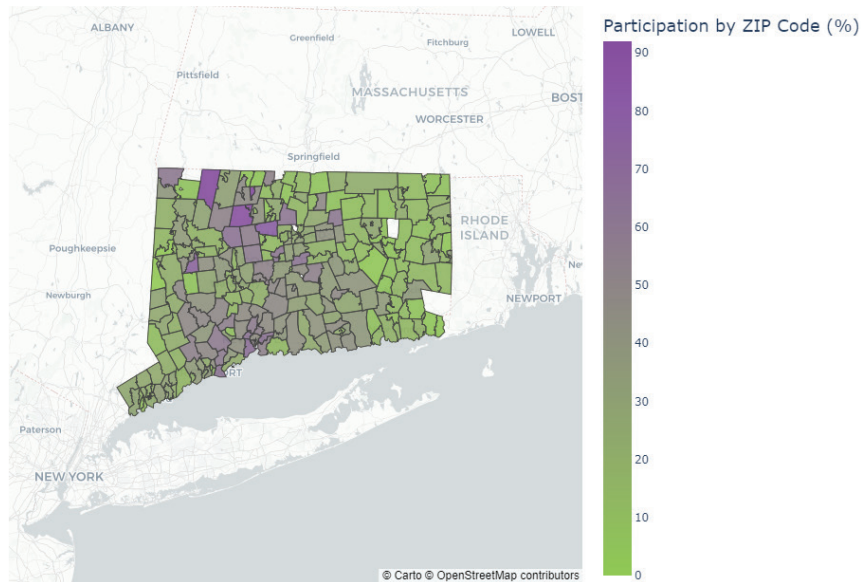


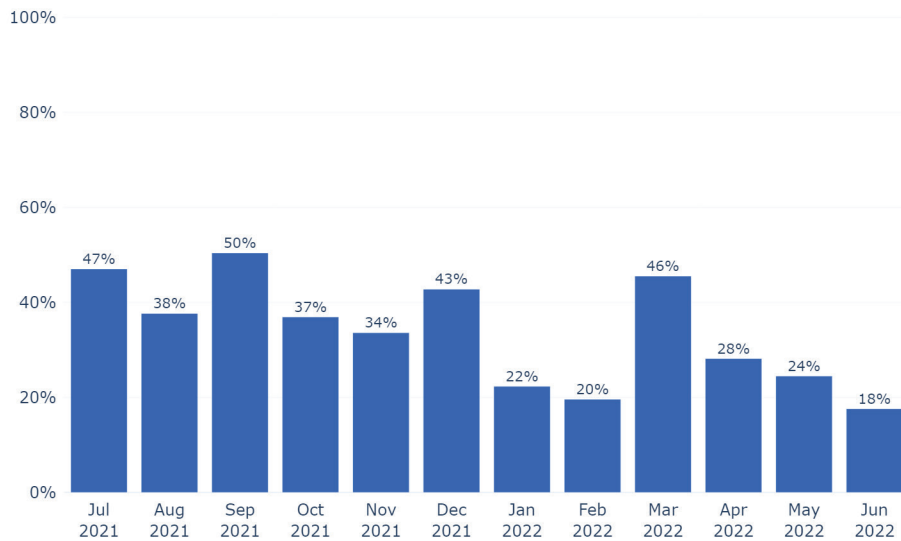
FIGURE 8
Participation Rate by ZIP Code



IV. Participation Over Time

Program participation varied over time as well (see **Figure 9**). 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 rates.

FIGURE 9
Participation Rate by Month



V. Participation Discussion

The previous analysis suggests that participation in the CHEAPR program between July 2021 and June 2022 averaged about 34% among all eligible vehicles when compared to IHS Markit registration data. The nearly equal participation rate among BEVs and PHEVs (34%) suggests that participation rate is constant for electric vehicles in general and that vehicle buyers tend to participate equally regardless of vehicle type. Given that the rebate amount varies between BEV and PHEV (\$2250 vs \$750), this could indicate that the application process is simple and efficient, otherwise, we might expect a lower PHEV participation rate due to the lower rebate amount.

One limitation of this analysis, mentioned above, is that registration and vehicle purchase date do not 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.

VI. 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.⁹ 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 1,085¹⁰ representative rebated vehicles purchased or leased in the report period, 190 applicants completed the survey, yielding a 18% 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 1, 2021, and July 6, 2022¹¹ (the last date in the report period with a participant response).

III. Demographic Findings

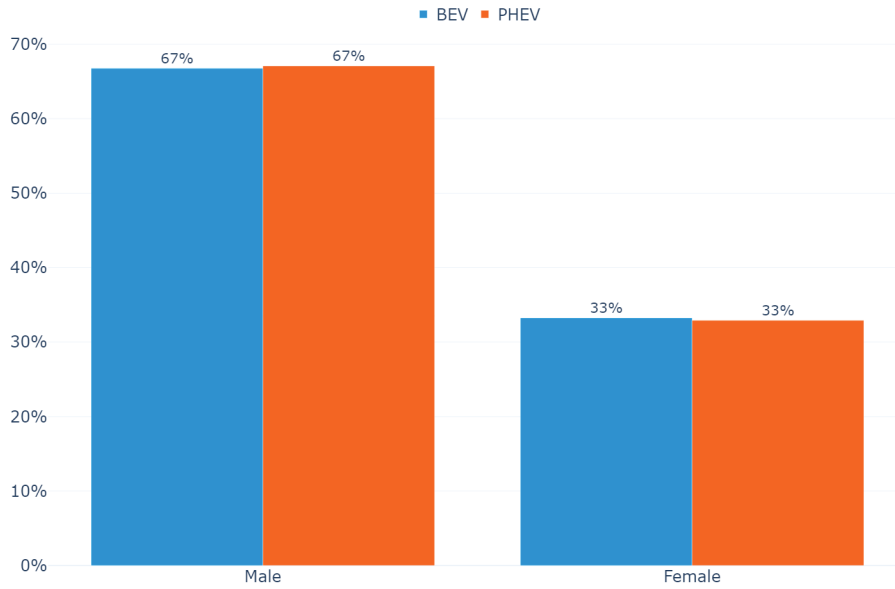
As demonstrated in **Figure 10**, CHEAPR survey respondents tend to be male. Overall, 67% of respondents identified as male and 33% identified as female, with similar representation between both BEVs and PHEVs.

⁹ Applicants are invited to participate in online surveys when their applications are approved and again when their rebate payments have been authorized. To reduce duplicates, only the first response per applicant is analyzed.

¹⁰ Four participants were removed from the full 1,089 participants because their vehicles were not represented in the survey, this is required for statistically weighting the data.

¹¹ Responses past the report period (June 30, 2022) were still purchased within the time period, and simply reflect a slight delay in completing the survey.

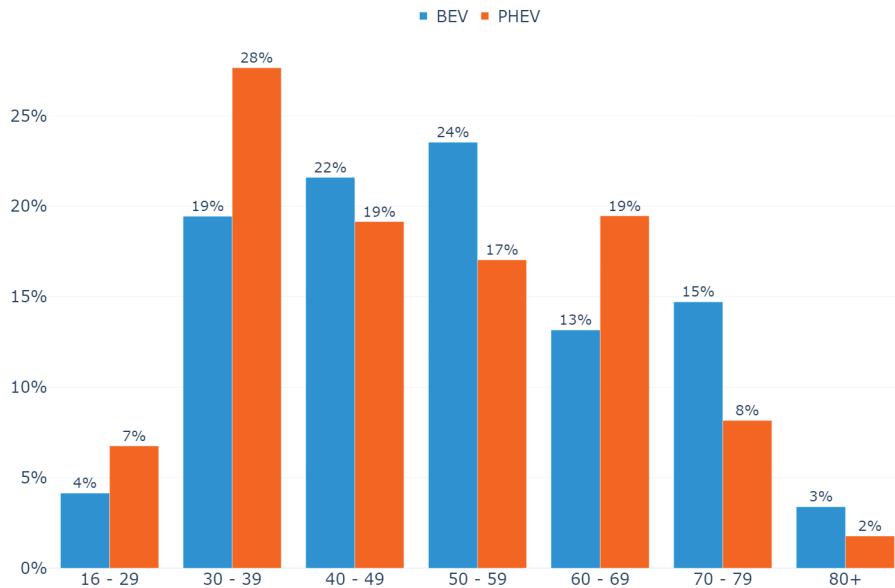
FIGURE 10
Gender of Survey Respondents by Vehicle Type



n = 175

In an inversion of last year’s results, PHEV respondents tended to be younger (see **Figure 11**). For example, 23% of respondents with BEVs were between 16 and 39, whereas 35% of PHEV respondents were within that age range. Conversely, 18% of respondents with BEVs were older than 70 compared to 10% of PHEV respondents.

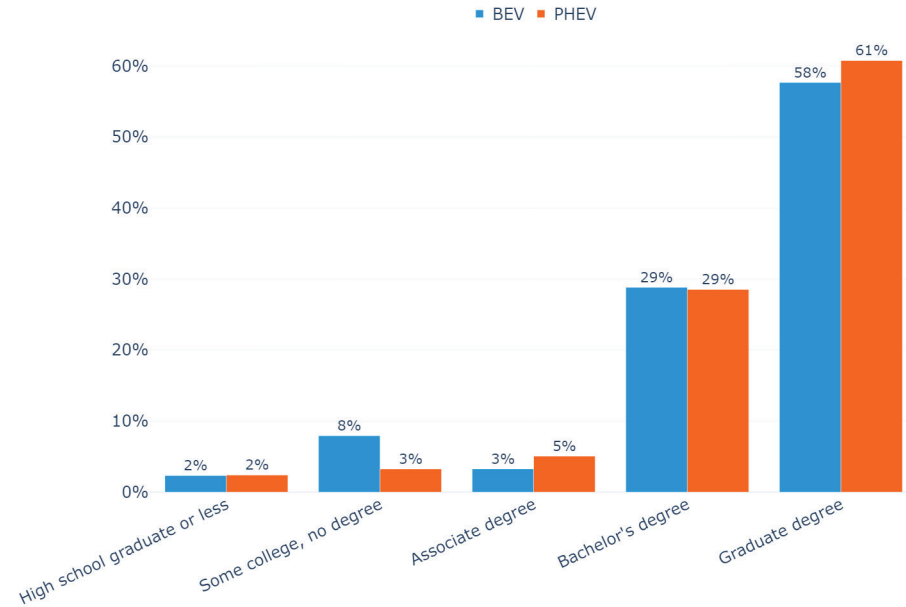
FIGURE 11
Age Ranges of CHEAPR Survey Respondents by Vehicle Type



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 7$, $p = 0.3149$, $n = 177$).

As demonstrated in **Figure 12**, survey respondents tend to be college graduates and those with graduate degrees. For example, 29% and 58% of respondents purchasing BEVs have bachelor's degrees and graduate degrees, respectively. Similarly, 29% and 61% of respondents with PHEVs have bachelor's degrees and graduate degrees, respectively.

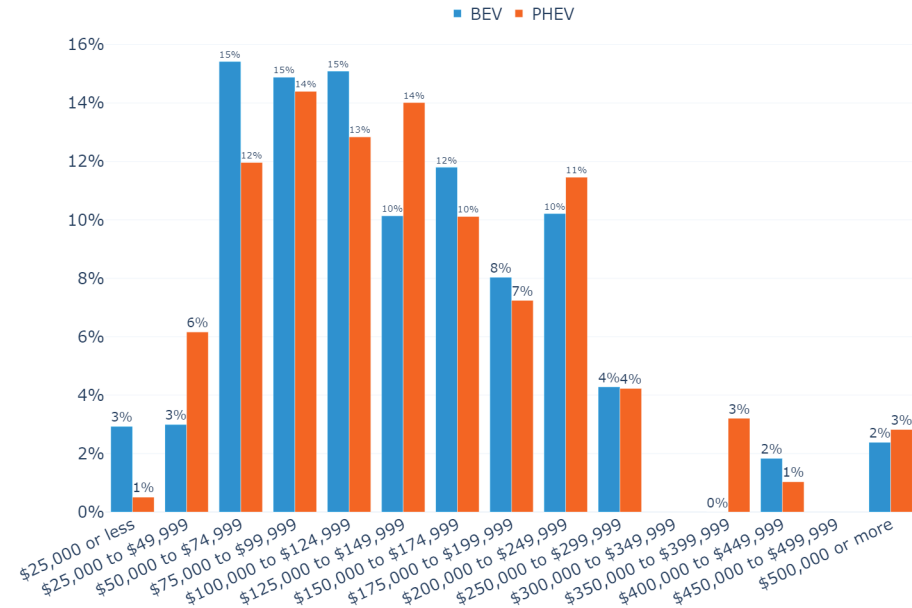
FIGURE 12
Education Levels of CHEAPR Survey Respondents by Vehicle Type



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 2$, $p = 0.71555$, $n = 180$).

See **Figure 13** for the range of survey participants' household incomes. The bulk of participants' household incomes range between \$50,000 to \$250,000. In last year's report, the most abundant household income range at 17% was \$100,000 to \$124,999, whereas for this year's report the most common income range was \$75,000 to \$100,000 at 15% of respondents. This could indicate success in encouraging EV adoption among lower income households. This is further supported by the increase in the number of BEV respondents indicating that they had an income between \$50,000 and \$75,000; this was the single most common income bin for BEV respondents.

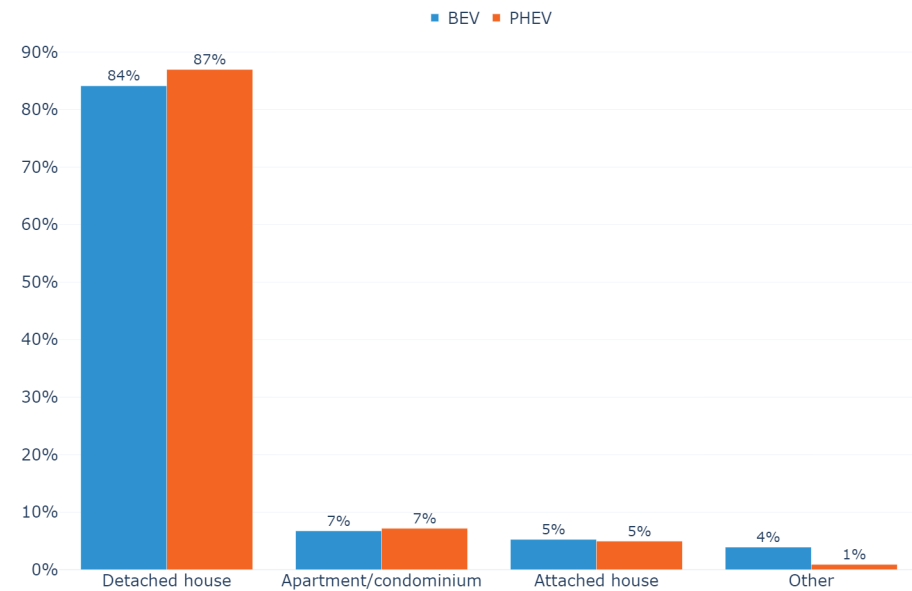
FIGURE 13
Annual Household Incomes of CHEAPR Survey Respondents



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 2$, $p = 0.71555$, $n = 180$).

As demonstrated in **Figure 14**, most respondents live in detached houses (84% of respondents with BEVs and 87% of respondents with PHEVs) as opposed to apartments/condominiums, attached houses or other dwelling types.

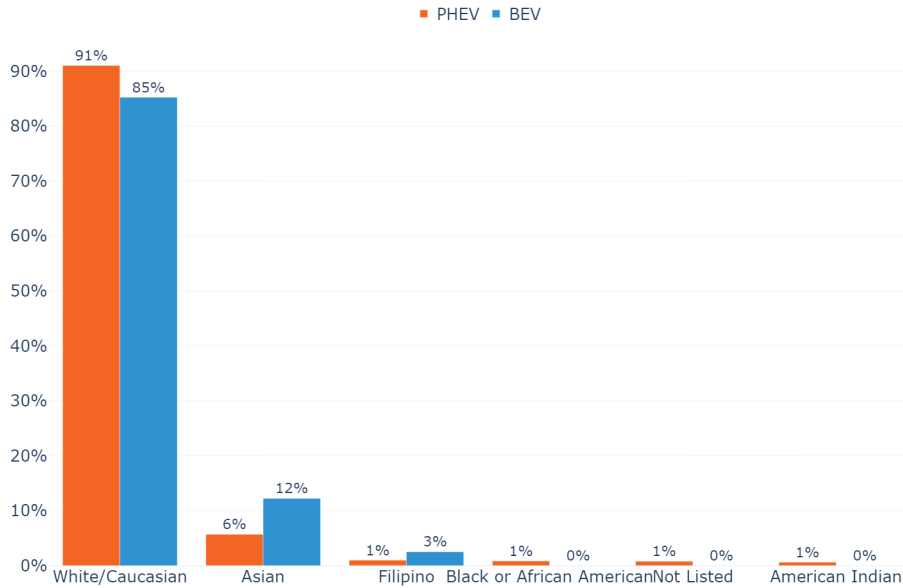
FIGURE 14
Dwelling Types of Survey Respondents by Vehicle Type



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 2$, $p = 0.59629$, $n = 181$).

As demonstrated in **Figure 15**, most respondents identify as White/Caucasian (85% of respondents with BEVs and 91% of respondents with PHEVs).

FIGURE 15
Races of Survey Respondents by Vehicle Type



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 4$, $p = 0.57746$, $n = 164$).

IV. Considerations

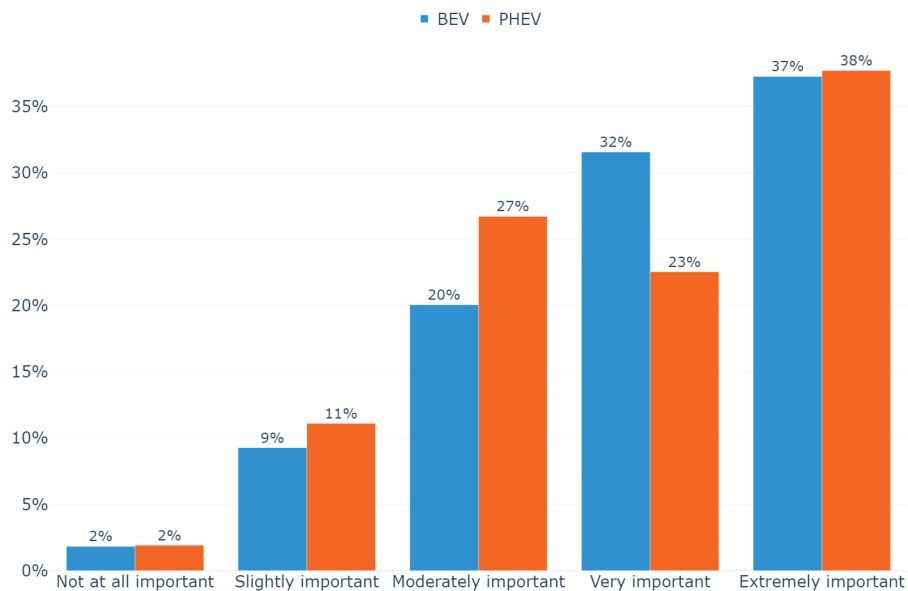
While the survey response rate of 18% (190 responses) is typical compared to other EV incentive programs administered by CSE, the relatively small survey respondent population makes finding significant differences between BEV and PHEV respondents difficult. CSE will work with DEEP to identify and implement solutions to boost response rates of the survey going forward.

VII. 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 16**, a majority of survey respondents described the rebate as “very” or “extremely” important to their purchase of an EV (61% of PHEV respondents and 69% of BEV respondents). Few respondents indicated that the rebate was “slightly important” or “not at all important.”

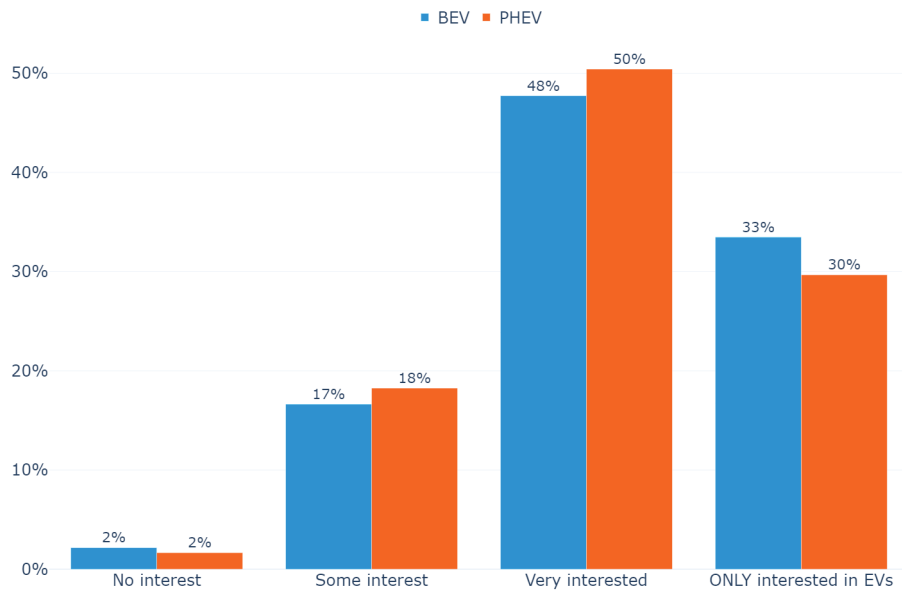
FIGURE 16
Survey Responses Regarding Importance of the CHEAPR Rebate



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 3$, $p = 0.54069$, $n = 185$).

Survey respondents were asked to describe their initial interest in EVs. Most (80% PHEVs and 81% BEVs) indicated that they were “very interested” or “only interested in EVs.” Only 2% of both PHEV and BEV drivers said they had no interest in EVs when they began looking for a new vehicle (see **Figure 17**).

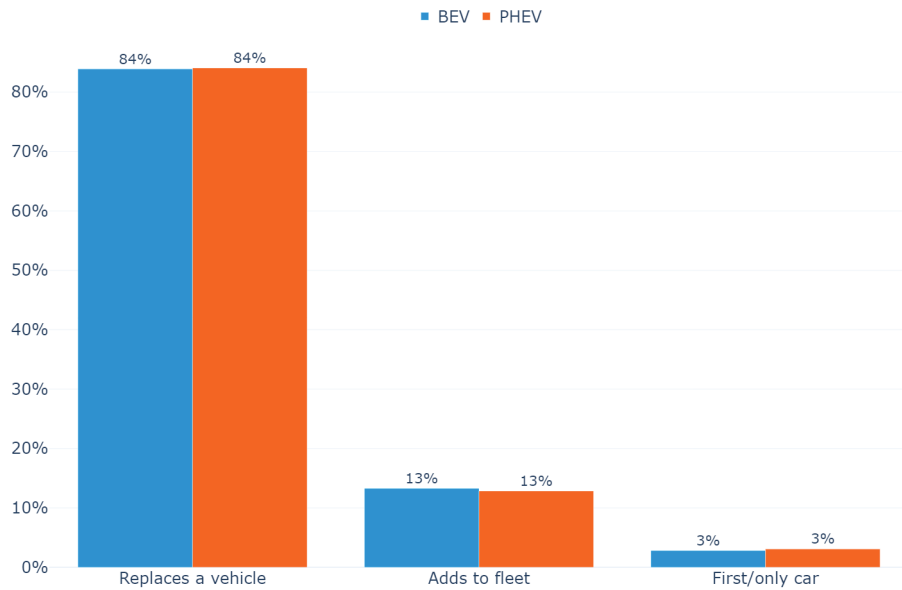
FIGURE 17
Survey Responses Regarding Initial Interest in EVs



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 0$, $p = 0.9533$, $n = 186$).

Survey respondents were asked about the purpose of their rebated vehicle. For both BEV drivers and PHEV drivers, 84% responded that the vehicle was purchased or leased to replace a vehicle (see **Figure 18**).

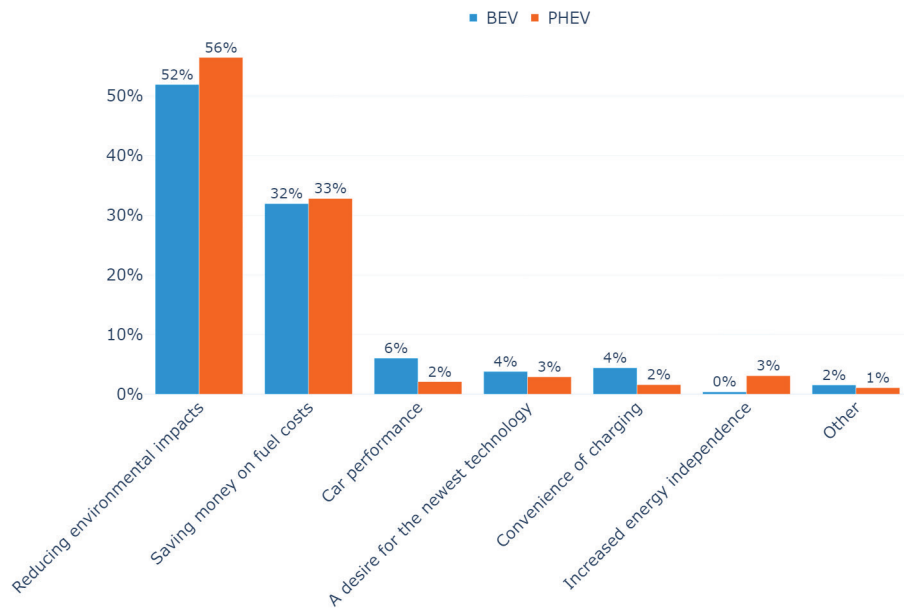
FIGURE 18
Survey Responses Regarding Purpose of CHEAPR Rebated Vehicle



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 0$, $p = 0.9905$, $n = 186$).

Survey respondents were asked what their motivations were for acquiring a BEV or PHEV. Most (56% PHEVs and 52% BEVs) indicated that they were primarily interested in reducing environmental impacts. The second-most popular reason was saving money on fuel costs (33% PHEVs and 32% BEVs). All other reasons, including desire for new technology, charging, energy independence, comfort and performance, were less common reasons (see **Figure 19**).

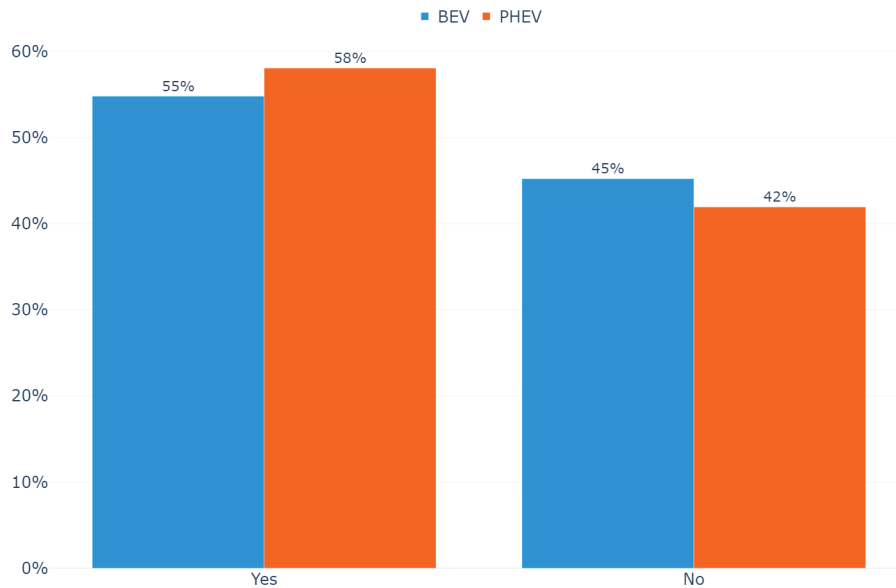
FIGURE 19
Survey Response Regarding Motivation for Acquiring a BEV or PHEV



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 5$, $p = 0.56845$, $n = 186$).

Survey respondents were asked if they would have purchased or leased their rebated vehicle even without the rebate. 55% of PHEV driver respondents indicated that they would have purchased or leased even if the rebate were not available. The remaining 45% indicated they would not have purchased or leased without the rebate (see **Figure 20**). Similarly, 58% of BEV driver respondents indicated they would have purchased or leased even if the rebate was not available, and the remaining 42% would not have purchased or leased without the rebate.

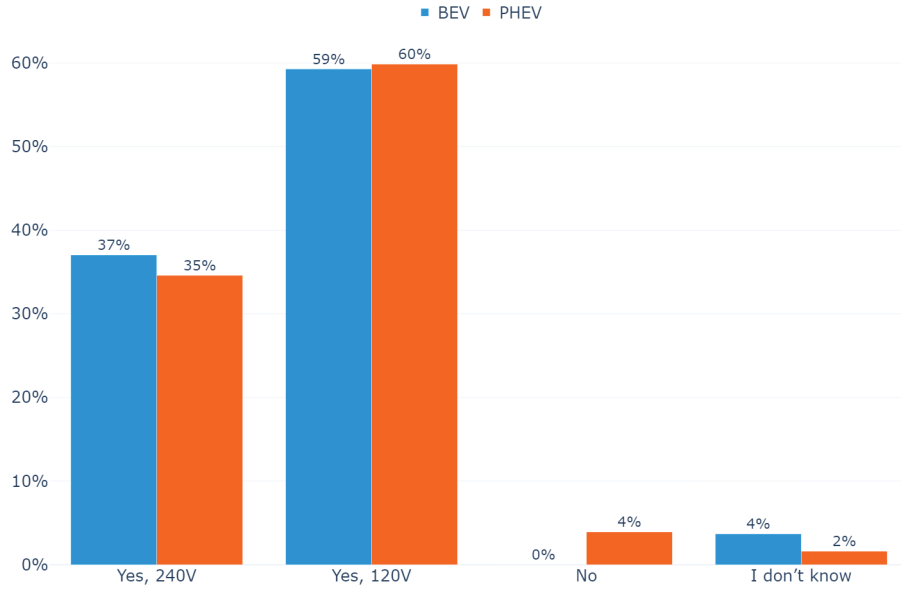
FIGURE 20
Survey Response Regarding Motivation for Acquiring a BEV or PHEV



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 0$, $p = 0.92835$, $n = 186$).

Survey respondents were asked if they would charge at home and, if so, at what voltage. Most (95%) indicated that they would charge at home. In contrast to last year with PHEV drivers preferring 120-V chargers and BEV drivers preferring 240-V chargers, in this year's survey BEV and PHEV drivers were almost equally likely to have 120-V or 240-V chargers (see **Figure 21**).

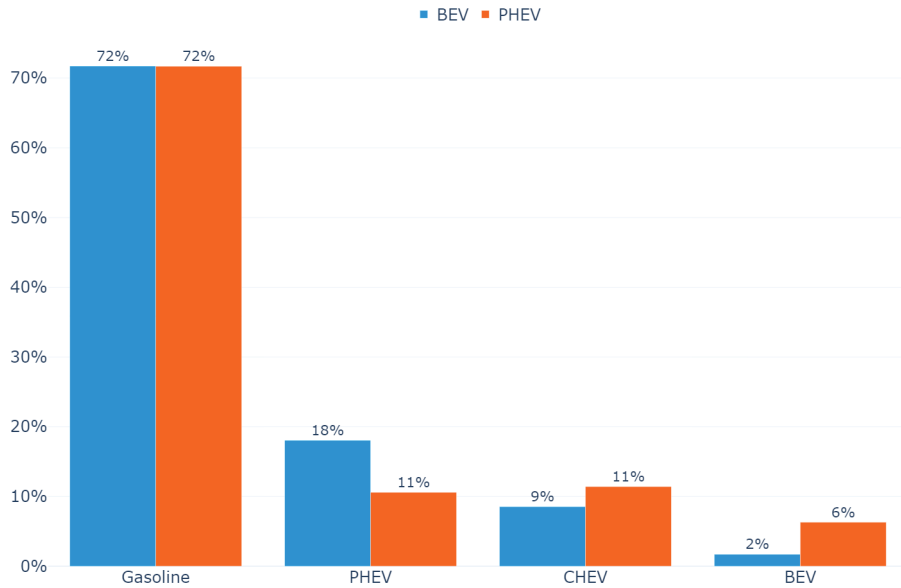
FIGURE 21
Respondents Indicating Charging at Home by Charger Voltage



Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 3$, $p = 0.33615$, $n = 185$).

Survey respondents were asked what fuel type their previous vehicles used. Most respondents used gasoline vehicles (72% of BEV drivers and PHEV drivers); however, a moderate amount of PHEV drivers previously drove conventional hybrids (11%) and a slightly lower amount of BEVs previously drove conventional hybrids (9%) (see **Figure 22**). 18% percent of BEV drivers indicated that they had previously owned a PHEV, which could indicate increasing comfort with electric vehicle technology.

FIGURE 22
Respondents Indicating Previous Vehicle Fuel Type

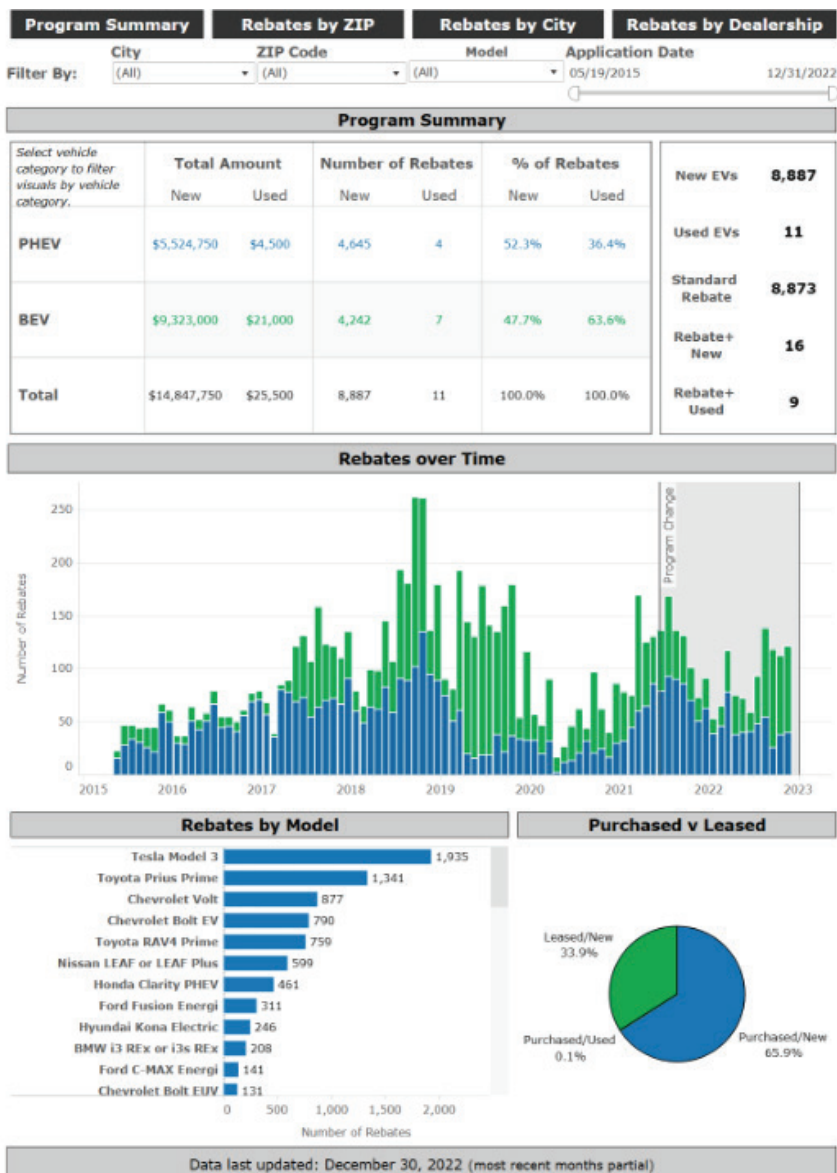


Responses from PHEV and BEV consumers are not significantly different (chi-squared test: $\chi^2 = 3$, $p = 0.33735$, $n = 156$).

Appendix 1

CHEAPR Program Statistics

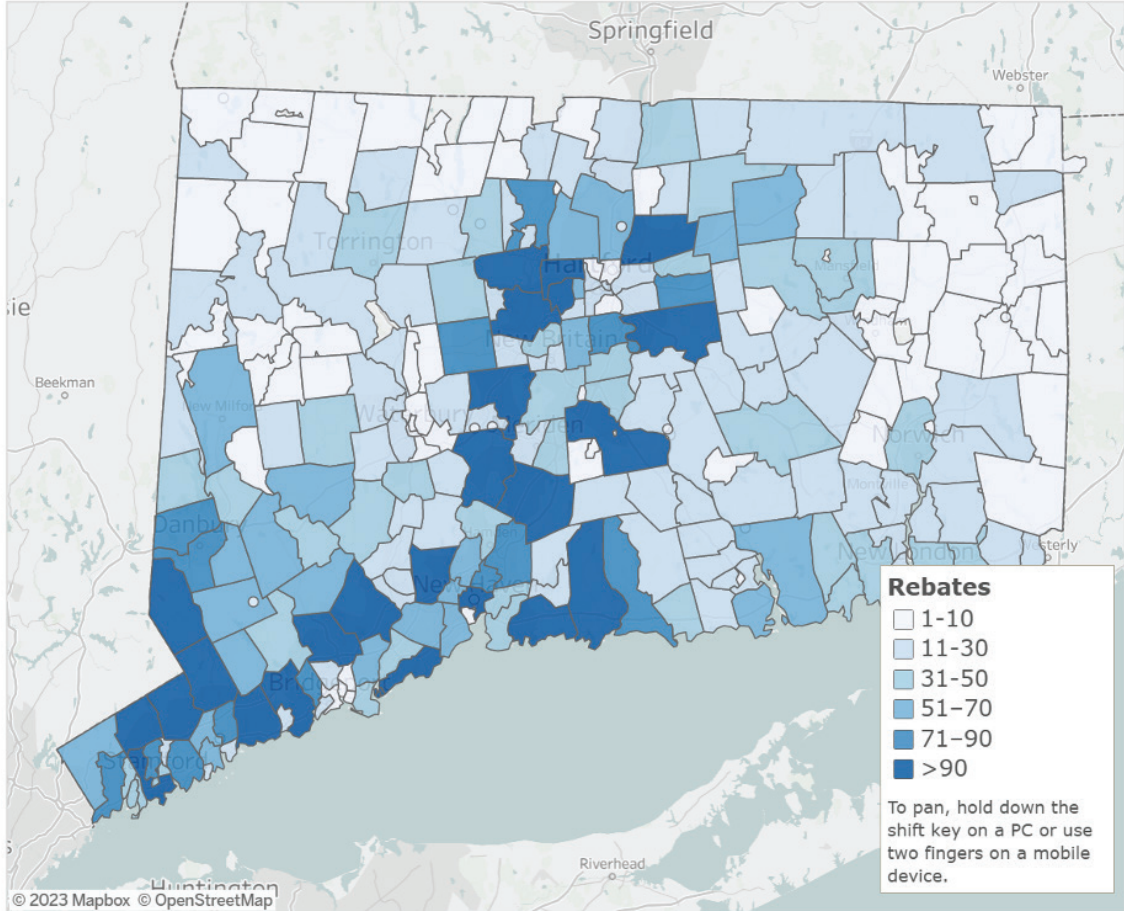
CHEAPR Program Statistics Overview



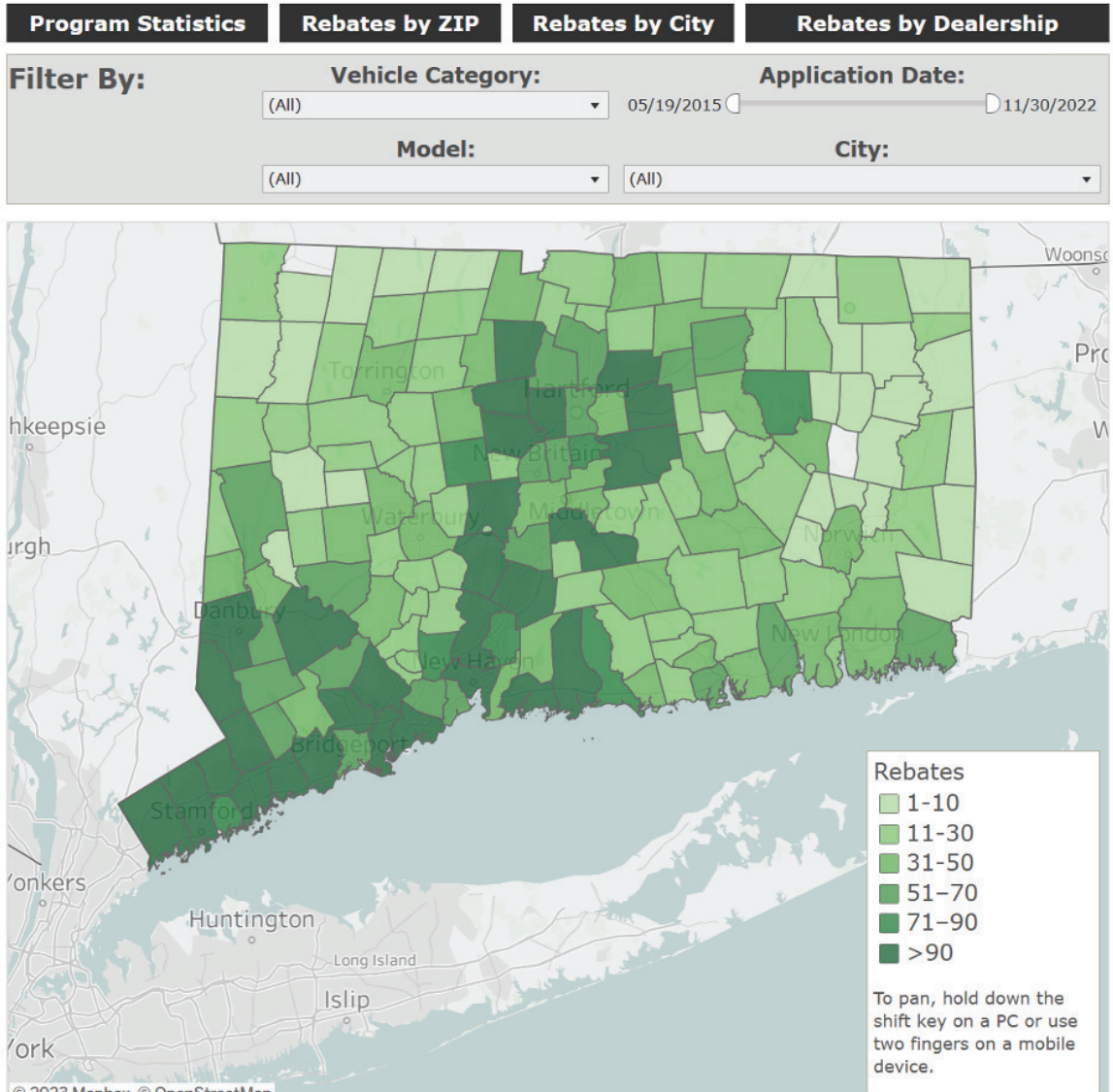
Please cite use of these data and images:
 Center for Sustainable Energy (2022). Connecticut Department of Energy and Environmental Protection Connecticut Hydrogen and Electric Automobile Purchase Rebate, Rebate Statistics. Data last updated December 30, 2022. Retrieved [insert date retrieved] from: <http://ct.gov/deep/cwp/view.asp?a=2684&q=565018>

CHEAPR Rebates by ZIP Code

Program Statistics	Rebates by ZIP	Rebates by City	Rebates by Dealership
Filter By:			
Vehicle Category:		Application Date:	
(All) ▾		05/19/2015 <input type="text"/> 11/30/2022 <input type="text"/>	
Model:		Zip Code:	
(All) ▾		(All) ▾	



CHEAPR Rebates by City

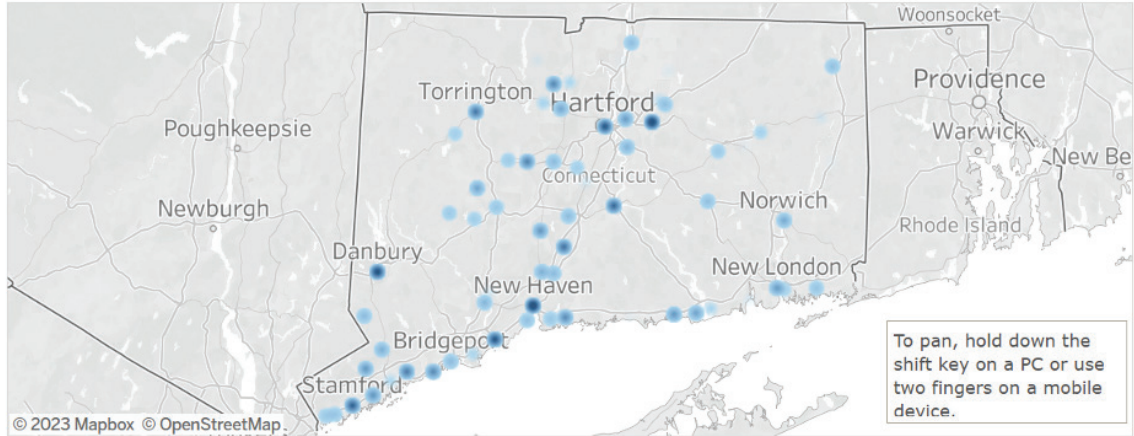


CHEAPR Rebates by Dealership

Program Statistics
Rebates by ZIP
Rebates by City
Rebates by Dealership

Filter By:
 Dealership City: (All)
 Dealership name: (All)
 Model: (All)
 Vehicle Category: (All)

Application Date: 05/19/2015 to 11/30/2022



Top 20 Rebated Dealerships		
A1 Toyota	A1 Toyota	352
Lynch Toyota	Lynch Toyota	290
Middletown Toyota	Middletown Toyota	188
Hoffman Toyota	Hoffman Toyota	151
Karl Chevrolet	Karl Chevrolet	148
Westbrook Toyota	Westbrook Toyota	138
Richard Chevrolet	Richard Chevrolet	135
Honda of Westport	Honda of Westport	128
Crowley Nissan	Crowley Nissan	118
Ingersoll Auto of Danbury	Ingersoll Auto of Danbury	108
Torrington Toyota	Torrington Toyota	102
O'Neill's Chevrolet Buick	O'Neill's Chevrolet Buick	98
Toyota of Stamford	Toyota of Stamford	98
Maritime Motors of Fairfield	Maritime Motors of Fairfield	95
Stevens Ford of Milford	Stevens Ford of Milford	93
Brandfon Hyundai	Brandfon Hyundai	92
H & L Chevrolet	H & L Chevrolet	89
Harte Nissan	Harte Nissan	89
New Country Toyota of Wes..	New Country Toyota of Westp..	89
Stamford Ford Lincoln	Stamford Ford Lincoln	88

OEM Direct Sales

OEM : Original Equipment Manufacturer

Tesla's dealership address is centralized as Palo Alto, CA; therefore, it is not included in the map above nor in the "Top 10 Rebated Dealerships" list on the left. However, Tesla dealerships account for:

1,959 Rebates



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