

**REPORT TO THE LEGISLATURE PURSUANT TO 19 V.S.A. § 2905 AND ACT 148 OF 2024,
SECTIONS 20 & 21**

Report on Vermont's Clean Transportation Incentive Programs

January 31, 2025

Submitted to

The Vermont House and Senate Committees on Transportation, House Committee on Energy and Digital Infrastructure, and the Senate Committee on Natural Resources

Submitted by

Vermont Agency of Transportation

Clean Transportation Incentive Programs 2024 Review

VTRANS ENVIRONMENTAL POLICY AND SUSTAINABILITY
JANUARY 31, 2025

Glossary

AEV = All-Electric Vehicle (same as BEV)

AGI = Adjusted Gross Income, used for income limits for the New PEV, RYR and eBike programs

BEV = Battery Electric Vehicle (same as AEV)

CSE = Center for Sustainable Energy, administers New PEV, RYR and eBike programs

DEV = Drive Electric Vermont

eBike = Electric Bicycle Incentive Program

ebike = electric bicycle

EYF = Electrify Your Fleet Incentive Program

HEV = hybrid electric vehicle, does not plug in

LI = lower-income, referring to the AGI limits for the enhanced incentive level

MI = moderate-income, referring to the AGI limits for the standard incentive level

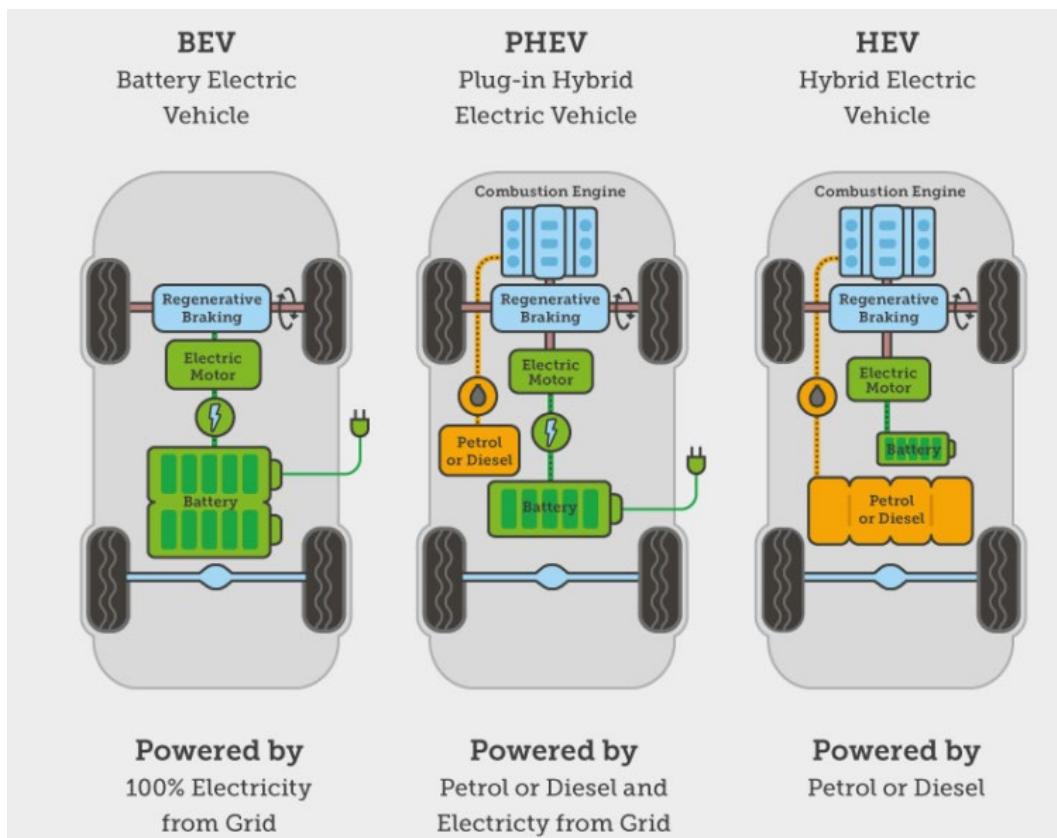
MS = MileageSmart High-Efficiency Used Vehicle Incentive Program

New PEV = Incentive Program for New Plug-in Electric Vehicles

PEV = plug-in electric vehicle, includes both AEV and PHEV

PHEV = plug-in hybrid electric vehicle, typically has a larger battery and longer electric-only range compared to an HEV

RYR = Replace Your Ride Incentive Program



Types of Electric Vehicles. Image source: www.climatecouncil.org.au

Contents

Introduction	1
Effectiveness of the programs	3
State’s marketing and outreach efforts related to the programs	7
Recommendations	10
Programmatic Summaries	12

Introduction

The Vermont Legislature has authorized four statewide vehicle incentive programs to help income-qualified Vermonters reduce their transportation related emissions, plus an incentive for businesses, municipalities, and nonprofit organizations to reduce the climate impacts from fleet vehicles:

Authorized in [2019 Act 59 Section 34](#), codified in 19 V.S.A. Ch. 29 § 2901 via [2023 Act 62 Section 19](#):

- 1) an incentive program for the purchase or lease of a new plug-in electric vehicle (PEV);
- 2) an incentive program for the purchase of a high fuel-efficiency used vehicle called MileageSmart;

Authorized in [2021 Act 55 Section 28](#), codified in 19 V.S.A. Ch. 29 § 2901 via [2023 Act 62 Section 19](#):

- 3) an incentive program that retires 10+ year old internal combustion engine vehicles and provides funds for cleaner transportation alternatives called Replace Your Ride;

Authorized in [2021 Act 55 Section 28](#):

- 4) an incentive program to encourage the electrification of business, nonprofit, and municipal fleets called Electrify Your Fleet.
- 5) an incentive program for the purchase of a new electric bicycle (eBike);

Incentive Program for New Plug-in Electric Vehicles (New PEVs)

This program offers incentives for the purchase or lease of a new plug-in electric vehicle (PEV) for income-qualified individuals, with greater incentives available for those with lower incomes and for those who purchase all-electric vehicles (AEVs) - up to \$5,000. Eligible customers may receive the incentive directly from a participating car dealer in the form of a reduced purchase or lease price, or they may receive a direct cash reimbursement from the state's incentive administrator, Center for Sustainable Energy. Incentives are limited to plug-in electric vehicles (PEVs) with a base MSRP of \$52,500 or less. The statewide incentive may be used in combination with additional PEV incentives offered by the state's electric utilities and federal tax credits for greater savings.

High Fuel-Efficiency Used Vehicle Program (MileageSmart)

The high fuel-efficiency used vehicle program provides financial assistance to income-eligible Vermonters at the point-of-sale to purchase used vehicles with that were rated better than 40 miles per gallon by the EPA when new. MileageSmart can contribute up to 25% of the vehicle purchase price, with a maximum of \$5,000. The purchase price cap is \$40,000.

Replace Your Ride

The Replace Your Ride program encourages owners of older internal combustion engine vehicles to switch to cleaner transportation options by offering an incentive of up to \$5,000 to scrap the 10+ year old high-polluting vehicle. Participants may either apply their voucher towards the purchase or lease of a new or used PEV or those seeking a more flexible option may apply their voucher towards active or shared mobility options including the purchase of a bicycle, electric bicycle, or fully electric motorcycle; and/or shared mobility services that reduce the need for vehicle ownership (such as public transit fares, carsharing or bikesharing). Participants who chose the latter option receive a clean mobility card, which is a pre-paid debit card that can be used at eligible businesses that help reduce or avoid vehicle miles traveled in single occupancy automobiles. Incentives through this program may be applied in combination with others through the MileageSmart, New PEV, and electric bicycle incentive programs.

Electrify Your Fleet Program

Electrify Your Fleet is an electric vehicle incentive program for businesses, municipalities, and nonprofit organizations to reduce the climate impacts from fleet vehicles. The program helps fleet owners fund the replacement of their internal combustion engine (ICE) vehicles with cleaner electric transportation options such as Plug-In Electric Vehicles (PEVs), electric motorcycles, electric bikes, electric ATVs/UTVs or electric snowmobiles. Electrify Your Fleet is a first-come, first-served grant program with awards made in the form of reimbursements of as much as \$2,500 for each internal combustion engine vehicle replaced or avoided with a maximum of 20 incentives allowed per fleet. Nonprofit mobility services organizations (NMSO) incorporated in the State of Vermont for the purpose of providing Vermonters with transportation alternatives to personal vehicle ownership are eligible for up to 5 increased incentives of \$5,000 each towards the purchase of all-electric vehicles with a base MSRP of \$55,000 or less.

Electric Bike Incentive (eBike)

The State of Vermont launched the nation's first statewide incentive program to help Vermonters make daily trips with cleaner transportation that helps reduce greenhouse gas emissions. The State of Vermont electric bicycle (eBike) incentive helps residents purchase eBikes to reduce personal vehicle usage. Eligible Vermonters can apply to receive an incentive of up to \$800 in the form of a prepaid debit card to be used at a participating in-state bicycle retailer.

Effectiveness of the programs

Overall Summary

Since the launch of the first programs in 2020, over twenty-seven million dollars (\$27,020,000) have been appropriated for the State of Vermont Clean Transportation Incentive Programs. The table below shows a history of those appropriations as well as transfers that were made between programs.

Overall Summary of Appropriations and Transfers for Incentive Programs

	2019 Act 59 TBill	2020 Act 121 TBill	2021 Act 55 TBill	2024 Act 184 TBill (Amend. to 2021 TBill)	2022 Act 184 TBill	2023 Act 3 BAA	2023 Act 62 TBill
	SFY 2020	SFY 2021	SFY 2022	SFY 2022	SFY 2023	SFY 2023	SFY 2024
MileageSmart	\$900,000	\$50,000	\$1,250,000		\$3,000,000		
New PEV	\$1,100,000	\$1,050,000	\$3,000,000		\$12,000,000		
Replace Your Ride			\$1,500,000	-\$5,000	\$3,000,000	-\$100,000	-\$550,000
eBike			\$50,000	\$5,000	\$50,000	\$100,000	\$50,000
Electrify Your Fleet							\$500,000
Total	\$2,000,000	\$1,100,000	\$5,800,000	\$ -	\$18,050,000	\$ -	\$ -

Overall Summary of Appropriations and Transfers for Incentive Programs (cont.)

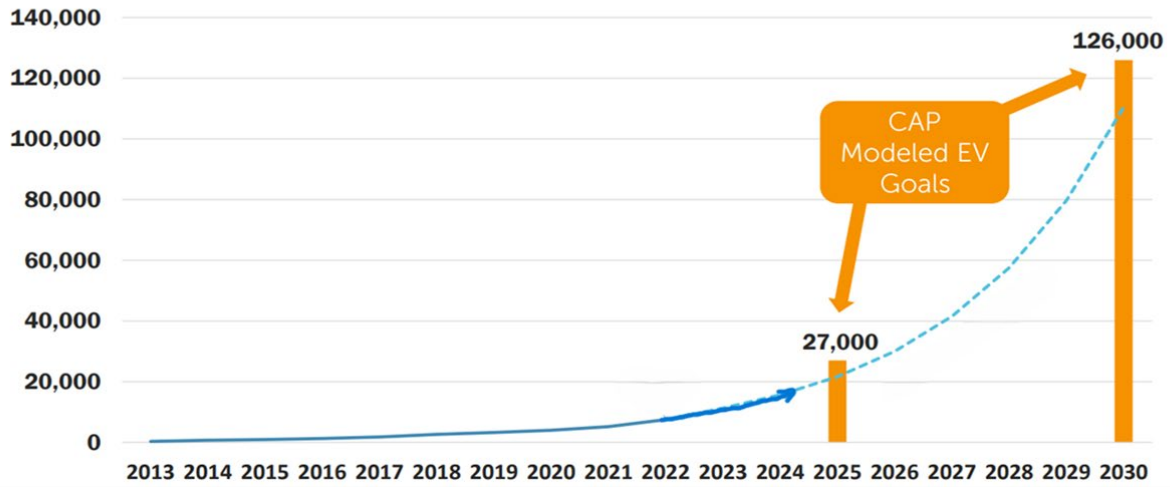
	2024 Act 87 BAA	2024 Act 148 TBill	July 2024 Transfer	Sept 2024 Transfer	Jan 2025 Transfer	Total
	SFY 2024	SFY 2025	SFY 2025	SFY 2025	SFY 2025	
MileageSmart	\$1,000,000		\$400,000		-\$175,000	\$6,425,000
New PEV				-\$210,000	\$175,000	\$17,115,000
Replace Your Ride	-\$1,000,000		-\$400,000	\$210,000		\$2,655,000
eBike		\$70,000				\$325,000
Electrify Your Fleet						\$500,000
Total	\$ -	\$70,000	\$ -	\$ -	\$ -	\$ 27,020,000

The Programs have collectively enabled the purchase or lease of 3,871 all-electric vehicles (AEVs), 1,492 plug-in hybrid electric vehicles (PHEVs), 550 used hybrid electric vehicles (HEVs), 539 electric bicycles (eBikes) and enabled the retirement of 451 internal combustion engine vehicles that were over ten years old.

Vehicle Type Incentivized	New	Used	Total	
AEV	3,406	465	3,871	AEV = All Electric Vehicle PHEV = Plug-in Hybrid Electric Vehicle HEV = Hybrid Electric Vehicle *Most RYR transactions pair with either a New PEV or a MileageSmart incentive to purchase a new or used AEV or PHEV. 23 RYR participants chose the prepaid Mobility Card and 21 bought an eligible replacement vehicle without New PEV/MS
PHEV	1,211	281	1,492	
HEV		550	550	
eBike	539		539	
RYR	266	162	451*	

To relate these incentives to Vermont's overall EV transition: of the approximate 17,800 registered EVs in VT, AOT has incentivized over 5200 vehicles. Thus, about 30% of all registered EVs have received a state incentive. When looking at the numbers since incentives became available, roughly 40% have been incentivized. These programs have contributed significantly towards achieving the targets modeled in support of the Initial Climate Plan's (CAP) recommended actions.

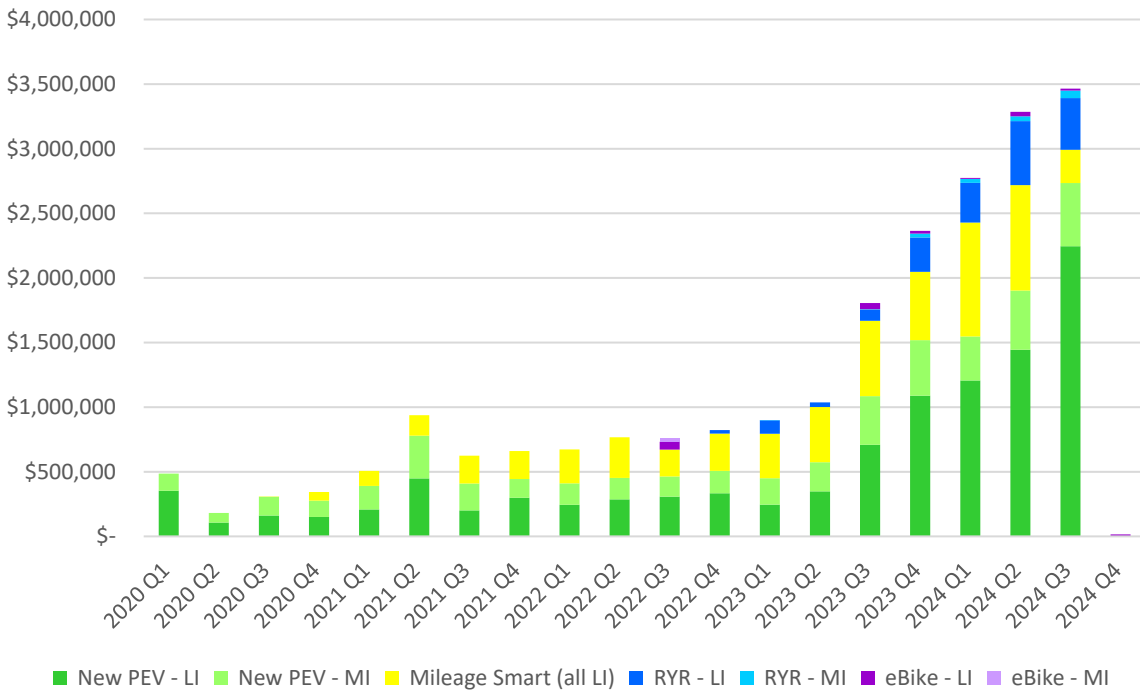
How many vehicles does Vermont need to electrify?



CAP Pathways Report 2.0 models a target of 27,000 EV in VT in 2025 and 126,000 in 2030.

Vermont’s incentives programs are one of a few throughout the country that are based solely on income; providing the greatest benefits to the lowest income Vermonters. Overall, 66% of incentives and 79% of funding supported lower-income Vermonters in meeting their transportation needs with lower-carbon options.

Quarterly Incentives Paid by Program and Income Level



Quarterly Incentives Approved by Program and Income Level
(LI = lower income tier, MI = moderate income tier)

A common trend across all programs is that they have a slow initiation period. Outreach and education of both dealers and eligible Vermonters is of great importance. Also, the ability to implement changes to differing parameters of the programs can result in much greater uptake and programmatic success. Incentive uptake in the New PEV and Replace Your Ride programs picked up after increases to incentive amounts. MileageSmart incentives increased as more Vermonters and dealerships became aware of the program and the supply of eligible vehicles expanded once the New PEV program was implemented. Funding provided for eBikes has been slower to spend down as many applicants have not made a purchase within the required 60-day timeframe and funds return to the program. Most Replace Your Ride (RZR) participants paired the scrapping of their old vehicle with the purchase of a new or used plug-in electric vehicle, and 23 participants selected the prepaid debit card for other low carbon mobility options. While there has been an apparent interest in the Electrify Your Fleet program with 46 organizations initiating applications, only 13 have completed applications and received incentives.

In an effort to better understand the efficacy of its incentive programs AOT is partnering with the University of Vermont on a study. The Environmental Policy and Sustainability team was awarded AOT Research funding in April 2024 to assess the efficacy and cost-effectiveness of the clean transportation incentive programs on greenhouse gas emission reductions using registration and annual inspection odometer data. The research project which began in fall 2024 is ongoing and anticipates conclusions in fall 2025. Early results indicate that incentivized PEVs average similar annual vehicle miles traveled compared to non-incentivized PEVs and ICE vehicles, and the majority of incentivized vehicles remain in the state many years after purchase and lease.

Annual Summary - 2024

Calendar year 2024 was the highest uptake of incentive programs yet. Projections in January 2024 anticipated funding exhaustion in December 2024. However, three programs completely expended available funding. Vermont applied for funding from the Environmental Protection Agency Climate Pollution Reduction Grant, which included proposed funding (~\$40m) for extension of the incentive programs but was not selected for award. Securing that funding would have provided for a seamless transition for continuation of the programs. Without the grant funding and with several other contributing factors, as described below, funds were exhausted earlier than anticipated; and the MileageSmart, New PEV and Replace Your Ride programs closed its application processes in October.

As shown in the chart above and the table below, there was a sharp increase in applications in the New PEV Program towards the end of 2023 and even more so throughout 2024. Even with closing the programs three quarters of the way through 2024, MileageSmart, New PEV and Replace Your Ride outspent the full 2023 calendar year.

2023 and 2024 Incentive Counts and Amounts Paid

	2023		2024		Comparison	
	Incentives Paid	Amount Paid	Incentives Paid	Amount Paid	Incentive Increase	Payment Increase
MileageSmart*	401	\$1,881,828.00	442	\$1,954,364.15	10%	4%
New PEV*	1,080	\$3,628,500.00	1,748	\$6,658,500.00	62%	84%
Replace Your Ride*	123	\$527,500.00	319	\$1,460,000.00	159%	177%
eBike	132	\$69,158.84	148	\$86,753.50	12%	25%
Electrify Your Fleet	0	\$0.00	32	\$81,250.00	N/A	N/A
Total	1,736	\$6,106,986.84	2,689	\$10,240,867.65	55%	68%

*MileageSmart, New PEV and Replace Your Ride closed in October 2024 due to funding exhaustion.

New PEV application volume averaged 154 submitted per month from November 2023 through July 2024. August and September 2024 then set program records with 277 and 295, respectively. This led to an earlier than expected exhaustion of incentive funding, an announcement of program pause on October 7, 2024, and an effective closure of New PEV, Replace Your Ride and MileageSmart on October 8. Dealership-submitted applications continued to be accepted until October 23, 2024, per the 15-day window from date of lease/purchase in Program Guidelines. Consumer-submitted applications continued to be accepted until December 6, 2024, per the 60-day window, with the application portal closing on Monday, December 9, 2024.

To ensure all dealerships and consumers were reimbursed fully, Vermont Agency of Transportation (AOT) exercised the authority provided per Act 148 (2024 Transportation Bill) Sec. 22 and flexed available funding from the MileageSmart program as well as AOT administrative funds. The result totaled \$414,500, which was reallocated to the New PEV incentive pool, accomplishing the goal of ensuring all applicants, consumers, and dealerships were reimbursed.

From January 1, 2024 through program closures effective October 8, 2024:

- 1,748 Vermonters received \$6,658,500 from the New PEV program towards the purchase or lease of a new plug-in electric vehicle. Despite only being open for 77% of the calendar year, 2024 was a 62% increase in incentives issued and an 84% increase in funding issued compared to 2023.
- 319 Vermonters received \$1.46 million through the Replace Your Ride Program to scrap their older low-efficiency vehicle and replace it with either a new or used plug-in electric vehicle or alternative mobility options. Again, even at only 77% of the year, 2024 saw a 159% increase in incentives issued and a 177% increase in funding issued compared to 2023.
- 442 Vermonters received \$1.95 million from the MileageSmart Program for the purchase or lease of AEV, PHEV, and HEV. The MileageSmart increase would have been greater, but the program guidelines were changed in June 2024 to stretch limited funding.

From January 1, 2024 through December 31, 2024:

- 32 incentives and \$81,250 were issued through the Electrify Your Fleet Program. This was the first year of Electrify Your Fleet. The Program has remaining funds and is open to receive applications.
- 148 Vermonters have purchased an electric bicycle with \$86,753 in incentive funding. This is a 12% increase in incentives issued and a 25% increase in funding issued over 2023. The eBike incentive program is still in operation and will continue to operate until all Round 3 funds have been distributed.

Greater detail for each incentive program is provided in subsequent sections of this report.

State's marketing and outreach efforts related to the programs

Drive Electric Vermont (DEV) is the principal organization responsible for most marketing and outreach related to the State of Vermont clean transportation incentive programs. Drive Electric Vermont was launched in 2012 by VEIC as a statewide public-private partnership of policy makers, industry leaders, and Vermonters working together to increase transportation electrification in our state. DEV contracts with the State of Vermont, electric distribution utilities, and the Center for Sustainable Energy to support consumers and business with information on incentive offers, rebates and tax credits.

Marketing and Outreach

VEIC's marketing and outreach efforts focused on supporting the New PEV incentive program and disseminating information on incentive offerings through the DEV website and promotional materials.

The DEV website, www.driveelectricvt.com, hosts detailed information about electric vehicles, incentives, cost of ownership and many resources. The State incentives webpage outlined eligibility, program guidelines and how to apply for all five programs. While the New PEV program was in operation, a PEV comparison tool identified which vehicles were eligible for the State incentive and the Federal tax credit

A new version of the Drive Electric Vermont website was launched in early January 2025. One key update is that all incentives now have their own webpages, which makes it much easier to read and find the relevant information. All five state incentive programs have active pages, but the pages for New PEV, MileageSmart and Replace Your Ride each provide an announcement on the lack of funding.

In 2023, DEV partnered with a local vendor, the Association of Africans Living in Vermont (AALV), to translate the DEV Fact Sheet and Incentives Sheet, which detail the New PEV program, into French, Mandarin, Nepali, and Spanish. These resources remain available in the partner resources on the DEV website, which also has a built-in translation tool available on each page.

Dashboards created by the Center for Sustainable Energy show incentive uptake for the New PEV, Replace Your Ride and eBike incentive programs since July 2022. While this does not reflect the full term of the New PEV program, it does provide an overview of incentive trends over the past 30 months.

In addition to website updates, VEIC engaged dealer and retailer stakeholders, facilitated retailer training sessions on state incentive programs, and continued encouraging dealers to participate in point-of-sale incentive offerings. The Vermont Vehicle and Automotive Distributors Association (VADA) continued to serve as an important partner in communicating with car dealers on changes to incentive program offers and requirements. VTrans and VEIC joined the VADA annual meeting in September 2024 to provide updates on incentive programs to approximately 200 attendees. VEIC also delivered a dealer EV incentive training session to provide updates on incentive programs with 42 registrations. The session was recorded and provided to all participants and additional dealer staff as needed. At the close of the program in October 2024, there were 57 new and used car dealers participating in state incentive programs, up from 45 in 2023.

Drive Electric Vermont created flyers that help consumers and retailers navigate the e-Bike program and the Replace Your Ride prepaid clean transportation debit card option. DEV created a marketing resource in the shape of a bike chainring for retailers to attach to ebikes that used a QR code to direct interested Vermonters to both the State and electric utility incentives.

Drive Electric Vermont also hosted an “Introduction to EVs” webinar on September 19, 2023 which addressed common concerns with EVs and explained the incentive programs.

The Agency of Transportation team has published press releases and social media posts to spread the word about electric vehicles and incentive programs. Electrify Your Fleet testimonials were shared to AOT social media. AOT has also coordinated messaging with the Climate Action Office and sent newsletters.

Stakeholder Engagement

VEIC facilitates quarterly Drive Electric Vermont (DEV) stakeholder meetings where updates regarding state incentive programs are shared. The DEV stakeholder contact list includes approximately 270 individuals, representing more than 130 organizations, most of which are based in Vermont. VEIC also supported 25 in-person and virtual clean-energy-focused events between January and November 2024. These events are frequently organized by local energy committees, and they provide opportunities to promote the State incentives. Drive Electric Vermont coordinates EV Ambassadors who bring their personal electric vehicles to events for Ride and Drives, which are a powerful tool to encourage electric vehicle adoption. For events when VEIC was unable to attend in person, hosts were sent brochures and flyers containing State incentive information for distribution. VEIC also supported a paid partnership with LiveGreenVT which provided opportunities to share insights via their outreach channels.

VEIC has also coordinated meetings with Capstone Community Action, the implementer of the MileageSmart used high-efficiency vehicle incentive program; Green Savings Smart coaches from community action agencies across the state; AOT; and Community Rides Vermont, a service operating an all-electric fleet of vehicles for “Gopher” shared mobility rides in the central part of the state. These meetings provided an opportunity to update outreach staff on program changes and for them to offer feedback on the various programs based on their experience working with lower-income Vermonters.

Retailer Resources

Dealerships and bike shops are important partners in the effort to get the word out about incentive programs. As of October 2024, 57 car dealerships were participating in New PEV and RYR and over 100 used car dealerships had participated in MileageSmart. Currently there are 31 bike shops participating in the eBike incentive program. (There is no point-of-sale option for Electrify Your Fleet.)

Drive Electric Vermont supported dealership participation in the electric vehicle incentive programs by hosting on its webpage the dealership agreement, links to the dealer application portal, and updated program documents including the guidelines and forms. DEV also created a resource to address common incentive mistakes and offered training and education resources. In addition to the quarterly Drive Electric Vermont stakeholder meetings, DEV offered webinars to educate dealerships on important program changes, which were recorded and shared both online and via email. DEV coordinated most messaging to dealerships and the Vermont Vehicle and Automotive Distributors Association (VADA).

Surveys

CSE developed an incentive recipient consumer survey for Vermont New PEV and RYR program participants in the last quarter of 2023. The target audience for the State of Vermont New PEV and RYR consumer survey are individual incentive recipients who received one or more incentives from these State of Vermont programs. Those whose applications were canceled or denied were not invited to take the survey. Recipients of the MileageSmart incentive program who did not participate in Replace Your Ride were also not included. Incentive recipients whose applications were approved between November 1, 2023, and

October 31, 2024 were invited to complete the survey via monthly email campaigns and 2,173 responses were received between November 14, 2023 and December 4, 2024

CSE also developed and distributed a survey to solicit data and feedback on the eBikes Incentive Program. The State of Vermont eBike Incentive Consumer Survey's target audience is individuals who were approved for an incentive voucher and have redeemed it with the purchase of an eBike. Applicants who were approved and later canceled, as they did not redeem their incentive voucher within the allotted time limit, were invited to an abridged survey with questions about the cancellation. Applicants whose applications were denied or were marked incomplete for missing documents and later automatically canceled were not invited to this survey. Survey invitations were sent via automated email and responses were collected between November 14, 2023, and November 25, 2024.

AOT designed a survey for MileageSmart that was circulated to all Vermonters approved for a MileageSmart incentive. From September 11 through October 4, 2024, 512 people responded, of which 286 had purchased a vehicle through MileageSmart, 75 had purchased a vehicle outside of MileageSmart due to inability to meet program requirements, and 151 had not purchased a vehicle since applying.

Electrify Your Fleet recipients are asked to provide incentivized vehicle usage data one year after purchases as well as program feedback.

Recommendations

The dramatic increase in the uptake of the incentive programs in SFY2024 until funds were exhausted in October 2024 reflects the close partnership between the Agency and the Legislature in refining the programs to rapidly increase and optimize their impact. The Agency used the authority granted to it by the Legislature to great effect, increasing utilization at the same time more and more funding was directed to vehicles with the highest greenhouse gas reduction potential (BEVs) for households with the greatest need. The Agency therefore has few recommendations for the programs which have run out of funding, as it is largely a function of their success. Nevertheless, Vermonters and the State are now facing a changing landscape for electric vehicles with the new federal administration, and there will always be the opportunity for improvement. A few of the Agency's recommendations are found below.

Statutory Vehicle Programs (New PEVs, MileageSmart, and Replace Your Ride)

- Target funding to support households with lower incomes only.
- Target funding to support new BEVs only, and used BEVs and PHEVs only.
- Target funding to support transactions with greatest greenhouse gas emissions potential.
- Authorize the Agency to move funding amounts between the three statutory programs more readily to ensure demand can be met in real-time and avoid time-consuming transfers

With scarce resources available for these programs, it is better to narrow their focus to increase environmental and social impact, rather than to create a shallow pool of incentives to many, making them less useful and therefore less critical to the purchase and lease of vehicles. The proposed changes align with what had already been proposed by the Agency in Spring 2024 as a part of the State's application to the EPA for a Climate Pollution Reduction Grant.

Leases for New PEVs

- Right-size incentive amount for leased vehicles
- Right-size minimum lease terms incentivized

Over the past year, leases incentivized have dramatically increased, spiking in August and September 2024 to more than 80% of total transactions. Leases provide great benefits to consumers, dealerships, and the development of a more robust used vehicle market. Consumers can affordably try the technology without committing to a long-term purchase, await newer models with extended vehicle ranges, and avoid the impact of high vehicle depreciation, while also serving to enlarge the used EV market in a short period of time as vehicles become available off-lease for purchase two to three years down the road. However, the high percentage of lease transactions incentivized in the latter months of the New PEV Program suggests that some number of those may have been over-subsidized; that is, that a lower incentive amount would still have resulted in successfully encouraging a transaction that would not otherwise happen, while still making monthly payments affordable for the recipient. In a future iteration of the program, all other conditions being equal, the Agency would likely exercise its authority to offer a lower incentive amount for leasing arrangements and potentially increase minimum lease terms in order to increase the cost-effectiveness of this subset of incentive transactions.

Electrify Your Fleet

- Increase incentive amounts for electric vehicles

- Increase eligibility, MSRP caps for vehicle types (light-duty trucks, tractors)
- Target funding for battery-electric vehicles only

While Electrify Your Fleet benefitted from a range of successes, participation in the pilot has not been as high as anticipated and has actually slowed from the initial launch for a number of potential reasons. Among Vermont households, vehicle trade-ins and purchases are constantly happening throughout the year, while there is a much smaller pool of eligible recipients whose purchasing decisions may be in some cases more constrained, with business, municipality, or organization fleets more likely to be planned on a specific schedule through a capital replacement program, according to fiscal years, and with multiple layers of approval needed. The \$2,500 incentive was also intended to be matched with up to \$7,500 through the Inflation Reduction Act for commercial clean vehicles, but IRS guidance on the use of the direct pay option was slower to be published than expected, the new filing process has been unclear and underutilized by eligible entities unaccustomed to these changes, and there is now greater uncertainty as to whether the IRA tax credits for clean vehicles, let alone the direct pay option, will even continue under the new administration in Washington. A grant agreement with reporting requirements for just \$2,500 off a transaction up to \$60,000 (with additional infrastructure costs) probably caused some entities to shy away from participation.

With an uncertain future for the IRA's Commercial Clean Vehicle Credit, the Agency recommends that the Legislature consider raising both the incentive amount available for battery-electric vehicles, as well as the MSRP caps to include more eligible vehicles, in particular light-duty electric trucks and tractors.

Program Summaries

Incentive Program for New Plug-in Electric Vehicles (New PEV)

Summary

The Incentive Program for New Plug-in Electric Vehicles (PEVs) was launched in 2020. The Program supports transportation electrification by providing either point-of-sale incentives at dealerships or incentive checks directly to residents where they purchase from a non-participating dealership. The program began with administration through a collaboration between the electric distribution utilities and VEIC. The Center for Sustainable Energy (CSE) took over as the program administrator in July 2022.

Incentives are available in different amounts based on resident income level and vehicle type. More funding is available for lower-income Vermonters and residents who purchase or lease an all-electric vehicle (AEV) compared to a plug-in hybrid vehicle (PHEV). Incentive recipients complete an attestation form where they attest to their income eligibility, no prior New PEV incentive, and agree to terms and conditions.

Consumer and Vehicle Eligibility

Consumer Eligibility	Vehicle Eligibility
<ul style="list-style-type: none"> • Vermont resident age 18 or older • Not claimed as a dependent on tax filings • Vermont Driver's License • Attest to income eligibility (see below) • One per individual (updated from one every 12 months 4/1/2024) • Attest to personal use of vehicle, not intended for resale 	<ul style="list-style-type: none"> • New all-electric vehicle (AEV) or plug-in hybrid electric vehicle (PHEV) • PHEV with at least 30 miles of electric range (increased from 20 miles April 1, 2024) • Maximum base MSRP cap of \$52,500 (increased from \$50,000 Nov 1, 2023) • Incentive applied at point of sale at participating dealerships or to individuals who submit an application within 60 days of purchase

Incentive Amount and Income Eligibility

Incentive Amount and Income Eligibility					
Tax Filing Status	Income Tier	Adjusted Gross Income (AGI) Limits Before 7/1/23	Adjusted Gross Income (AGI) Limits Effective 7/1/23	State Incentive Amount	
				PHEV	AEV
Individual filing as single	Lower Income	≤\$50k	≤\$60k	\$3,000	\$5,000*
	Moderate Income	\$50k to \$100k	\$60k to \$100k	\$1,500	\$2,500
Individual filing as head of household	Lower Income	≤\$50k	≤\$75k	\$3,000	\$5,000*
	Moderate Income	\$50k to \$100k	\$75k to \$125k	\$1,500	\$2,500
Individual filing as qualifying widower / surviving spouse	Lower Income	≤\$75k	≤\$90,000	\$3,000	\$5,000*
	Moderate Income	\$75k to \$125k	\$90k to \$150k	\$1,500	\$2,500
Married couple filing jointly	Lower Income	≤\$75k	≤\$90,000	\$3,000	\$5,000*
	Moderate Income	\$75k to \$125k	\$90k to \$150k	\$1,500	\$2,500
Married couple filing separately	Lower Income	≤\$50k	≤\$60k	\$3,000	\$5,000*
	Moderate Income	\$50k to \$100k	\$60k to \$100k	\$1,500	\$2,500

Lower Income participants receive 'Enhanced' incentives and Moderate-Income participants receive 'Standard' incentives.

* The Lower Income All-Electric Vehicle Incentive increased from \$4,000 to \$5,000 effective 7/1/23. Other incentive amounts stayed the same.

2024 Program Modifications

The New PEV Program continued to see increasing application rates throughout 2024; a trend that started after income guideline modifications and low-income all-electric vehicle incentive amount increases went into effect in July 2023.

Two additional program updates were implemented in 2024:

April 1, 2024 – The maximum number of incentives allowed for an individual changed from one every 12 months, to one over the life of the program. Also, the minimum electric range for an eligible new plug-in hybrid electric vehicle increased from 20 to 30 miles.

July 15, 2024 – To provide support to Vermonters impacted by flooding, an additional \$1,000 incentive (totaling a maximum \$6,000 incentive total) was offered to income-eligible applicants replacing flood-damaged vehicles. The same was offered in August 2023 for flooding that occurred in July 2023.

By the Numbers

Calendar year 2024 started off with a slight dip in incentive applications but quickly rebounded to the ‘usuals’ cadence. The lower application numbers in July 2024 may be attributable to the floods. August rebounded and the program then saw a significant and unexpected surge in applications in September. Two months’ worth of incentives were approved in September and a month’s worth of incentives were approved in the first week of October, exhausting program funding faster than anticipated and resulting in closer of the Program in early October. The charts below show incentive *Applications Received* and *Applications Approved* through CSE administration.

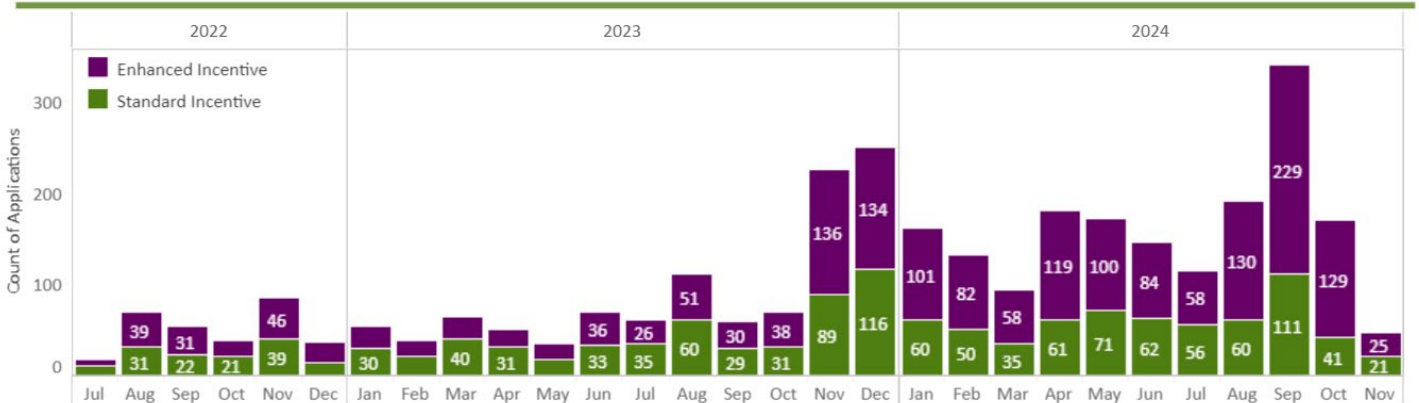
Applications by Application Received Date & Incentive Type

By Application Received Date

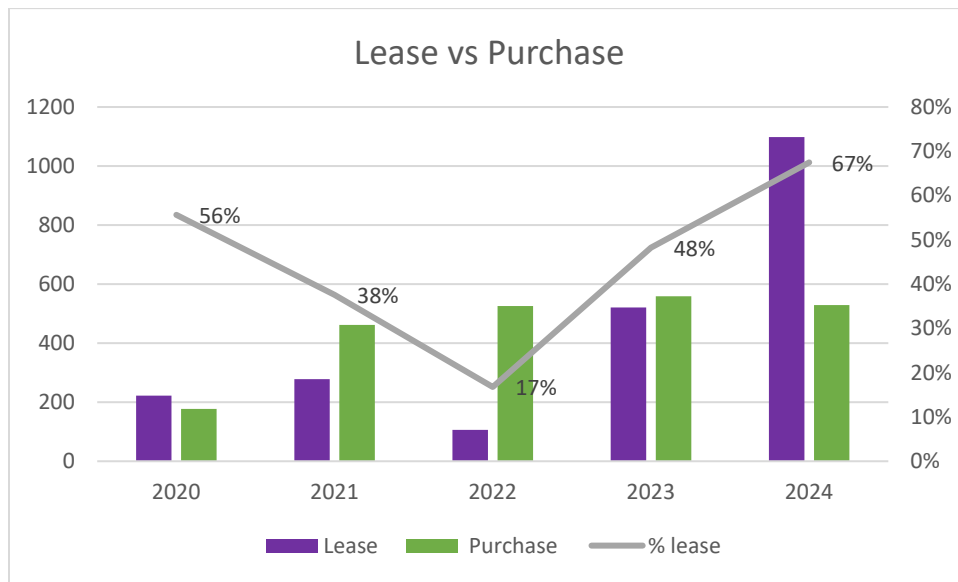


Applications by Application Approved Date & Incentive Type

By Application Approved Date



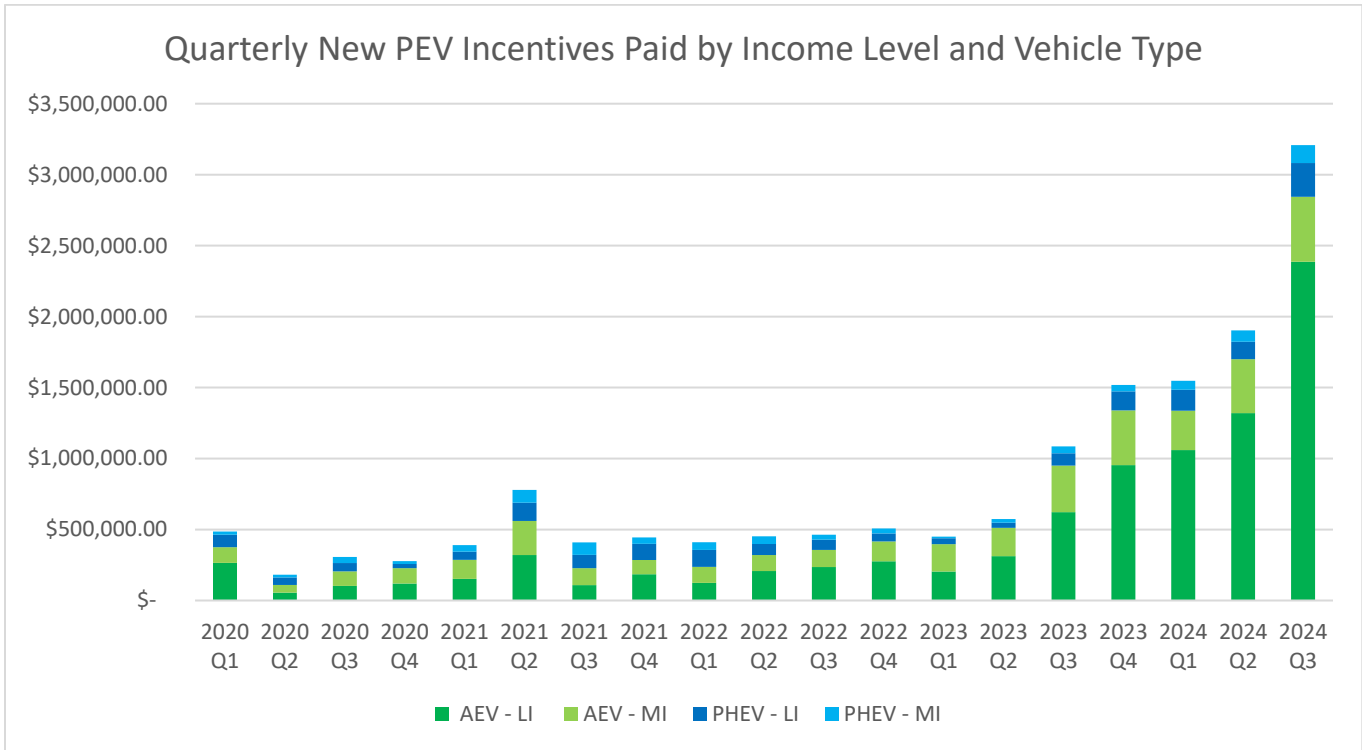
A major contributing factor to the rapid uptake was that dealers began advertising record low lease rates with potential stacked incentives.



The table below shows the calendar year incentive count and annual incentive amount paid from the start of the program until the end.

Year	All-Electric Vehicles (AEV)			Plug-in Hybrid Electric Vehicles (PHEV)			Total			
	LI	MI	Total	LI	MI	Total	All LI	All MI	Count	Incentives Paid
2020	119	150	269	64	69	133	183	219	402	\$ 1,250,500
2021	191	238	429	131	180	311	322	418	740	\$ 2,023,000
2022	211	194	405	109	119	228	320	313	633	\$ 1,834,500
2023	451	442	893	100	87	187	551	529	1,080	\$ 3,628,500
2024	953	446	1,399	170	179	349	1,123	625	1,748	\$ 6,658,500
Total	1,925	1,470	3,395	574	634	1,208	2,499	2,104	4,603	\$ 15,395,000

Even though the incentives were available for only 77% of 2024, there was a 51% increase in the number of incentives issued and a 70% increase in the amount of funding distributed. In 2024, 79% of funding went to lower income Vermonters, compared to 66% in 2023.



The chart showing quarterly incentive amounts paid clearly illustrates the accelerating uptake of incentives in the wake of the 2023 adjustments to income eligibility and the increased lower-income all-electric vehicle incentive. AOT staff believe the substantial increase in Q3 2024 is due to many dealerships offering generous AEV lease terms for incentive-eligible Vermonters.

MileageSmart High Efficiency Used Vehicle Incentive Program

Summary

The MileageSmart high fuel-efficiency used vehicle program was authorized in the 2019 Transportation Bill and provided the first incentive in September 2020. The program supports greenhouse gas emission reductions and cost savings for low-income Vermonters by providing financial assistance to income-eligible Vermonters at the point-of-sale to purchase used vehicles that were rated better than 40 miles per gallon by the EPA when new. MileageSmart can contribute up to 25% of the vehicle purchase price, with a maximum of \$5,000. The price cap of vehicles is \$40,000 for used vehicles. Capstone Community Action has been the sole administrator of the MileageSmart program.

Consumer and Vehicle Eligibility

Consumer Eligibility	Vehicle Eligibility
<ul style="list-style-type: none"> • Vermont resident age 18 or older • Not claimed as a dependent on tax filings • Vermont Driver’s License • Up to 80% State Median Income (SMI) • One per individual • Maintain vehicle ownership for minimum of 12 months 	<ul style="list-style-type: none"> • Pre-owned (used) all-electric vehicle (AEV), plug-in hybrid electric vehicle (PHEV) or conventional hybrid electric vehicle (HEV) • Over 40 MPGe as rated by EPA when new • Purchase price capped at \$40,000 (as of 1/1/2024) • Incentive applied at point of sale at participating dealerships, not available retroactively

Incentive Amount and Income Eligibilities

Incentive Category	Before June 1, 2024		After June 1, 2024	
	SNAP Recipient (starting January 1, 2024)	Up to 80% SMI (not receiving SNAP)	SNAP Recipient	Up to 80% SMI (not receiving SNAP)
All-electric vehicle (AEV)	Automatic \$5000	Up to \$5000, up to 25% of purchase price	Automatic \$5000	Up to \$2500, up to 25% of purchase price
Plug-in hybrid electric vehicle (PHEV)	Automatic \$5000	Up to \$5000, up to 25% of purchase price	Automatic \$5000	Up to \$2500, up to 25% of purchase price
Conventional hybrid electric vehicle (HEV)	Automatic \$5000	Up to \$5000, up to 25% of purchase price	Automatic \$2500	Not eligible

2024 Program Modifications

On January 1, 2024, MileageSmart implemented a purchase price cap of \$40,000 (previously there was no price cap).

MileageSmart was rapidly spending down available funds in Spring 2024. Legislators maintained the program by transferring one million dollars from the Replace Your Ride program in the 2024 Budget Adjustment Act (BAA). Per Act 148 Sec 22 (2024 Transportation Bill), an additional \$400,000 was transferred from Replace Your Ride to MileageSmart in July 2024.

To deepen affordability for Vermont’s most vulnerable households and in an effort to stretch the program funding through the end of 2024 (when funds from the EPA CPRG were anticipated to become accessible), the program was modified to include a tiered system that provided SNAP (3SquaresVT) greater incentives. Non-SNAP recipients (those earning below 80% of state median income) were eligible for up to \$2,500, up to 25% of the purchase price for a used all-electric vehicle or used plug-in hybrid vehicle, but were no longer eligible for funding for used hybrid vehicles. SNAP recipients were still eligible for the full \$5,000 towards a used all-electric vehicle or used plug-in hybrid vehicle, but now could only receive \$2,500 (instead of \$5000, up to 25%) for the purchase of a used hybrid vehicle.

On October 7, when State staff were informed of the rapid uptake in the New PEV program, MileageSmart had a program funding balance of \$355,906.48. Given that the program at that point was experiencing fewer applicants (a success in achieving intended outcomes via above modifications) as well as the authority provided to AOT in Act 148 Sec 22 to transfer funds between incentive programs, half of the remaining balance from MileageSmart was transferred to New PEV. With a balance of \$175,000 to cover remaining obligations and admin close-out, AOT made the difficult decision to close the MileageSmart program.

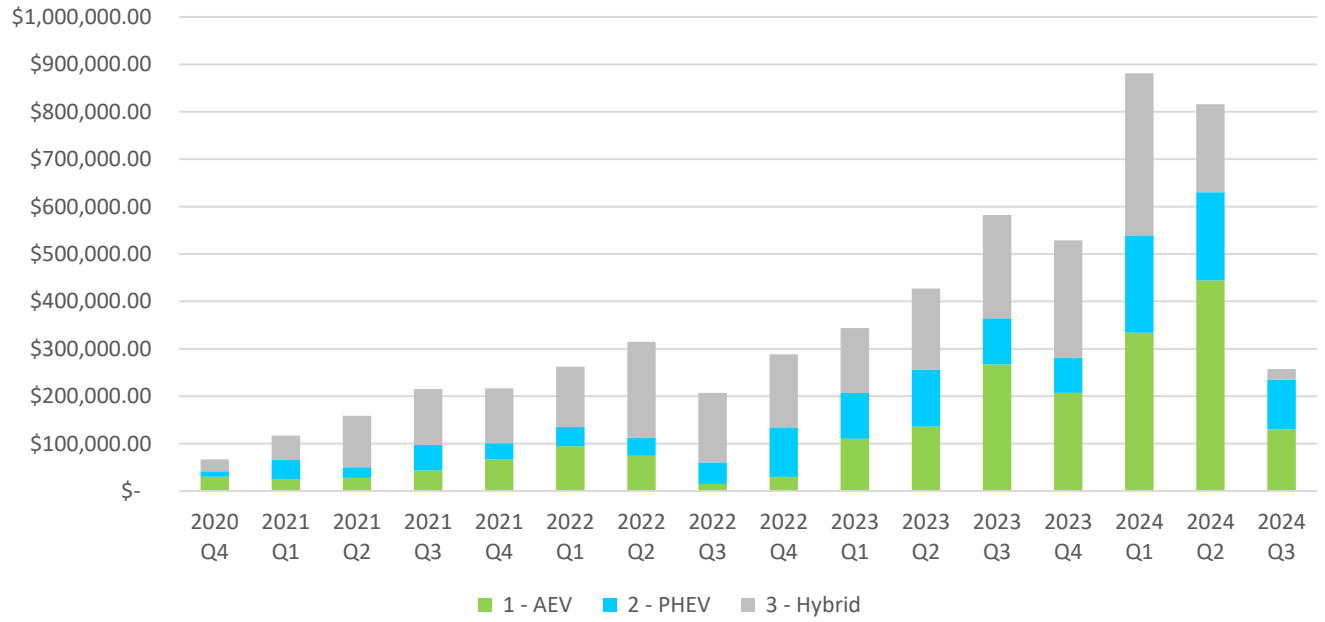
By the Numbers

The table below shows the calendar year incentive count and annual incentive amount paid from the start of the program until the end. In 2024, 64 of the incentives were provided to SNAP recipients. Of those, 26 were AEV, 18 were PHEV, 15 were Hybrid with a \$5000 incentive and 5 were Hybrid with a \$2500 incentive.

Year	MileageSmart Count			Count	Amount
	AEV	PHEV	Hybrid	Total	Total
2020	7	3	8	18	\$69,367.50
2021	38	32	101	171	\$707,309.68
2022	45	50	150	245	\$1,072,430.25
2023	149	82	170	401	\$1,881,828.00
2024	209	112	121	442	\$1,954,364.15
Total	448	279	550	1,277	\$5,685,299.58

The MileageSmart program started slowly and steadily increased incentive payments as more Vermonters became aware of the program and more dealerships began stocking eligible used vehicles. Program changes effective 1/1/24 deepened affordability for SNAP recipients and capped used vehicle purchase prices at \$40,000. Program changes effective 6/1/24 reduced the incentive amounts for hybrid electric vehicles and non-SNAP recipients (earning up to 80% SMI), which led to much lower incentive spending in Q3 2024.

Incentive Amount Paid by Vehicle Type



Replace Your Ride Incentive Program (RYR)

Summary

The Replace Your Ride incentive program was authorized in the 2021 Transportation Bill and provided the first incentives in October 2022. The Replace Your Ride program encourages owners of older internal combustion engine vehicles to switch to cleaner transportation options by offering an incentive of up to \$5,000 to scrap the 10+ year old high-polluting vehicle.

The program offers two options on how to use the incentive. Participants may apply their voucher towards the purchase or lease of a new or used PEV or those seeking a more flexible option may apply their voucher towards active or shared mobility options including the purchase of a bicycle, electric bicycle, or fully electric motorcycle; and/or shared mobility services that reduce the need for vehicle ownership (such as public transit fares, carsharing or bikesharing). Participants who chose the latter option receive a clean mobility card, which is a pre-paid debit card that can be used at eligible businesses that help reduce or avoid vehicle miles traveled in single occupancy automobiles. Incentives through this program may be applied in combination with others through the MileageSmart, New PEV, and electric bicycle incentive programs.

Consumer and Vehicle Eligibility

Consumer Eligibility	Scrapped Vehicle Eligibility	Replacement Options
<ul style="list-style-type: none"> Vermont resident age 18 or older Not claimed as a dependent on tax filings Vermont Driver's License Attest to income eligibility (see below) One per individual 	<ul style="list-style-type: none"> Internal combustion engine vehicle at least 10 years old Must start and drive Inspected within the last 18 months (updated 7/1/2024 from inspection in prior year) Titled and registered in VT for at least 2 years, to owner for at least 12 months 	<ul style="list-style-type: none"> New or used AEV or PHEV, per New PEV or MileageSmart guidelines Prepaid Mobility Debit Card to be used at participating retailers (bike shops, transit)

Incentive Amount and Income Eligibilities

Tax Filing Status	Income Tier	Adjusted Gross Income (AGI) Limits Before 7/1/23	Adjusted Gross Income (AGI) Limits Effective 7/1/23	State Incentive Amount	
				Before 7/1/23	As of 7/1/23
Individual filing as single	Lower Income	≤\$50k	≤\$60k	\$3,000	\$5,000
	Moderate Income	\$50k to \$100k	\$60k to \$100k	-	\$2,500
Individual filing as head of household	Lower Income	≤\$50k	≤\$75k	\$3,000	\$5,000
	Moderate Income	\$50k to \$100k	\$75k to \$125k	-	\$2,500
Individual filing as qualifying widower / surviving spouse	Lower Income	≤\$75k	≤\$90,000	\$3,000	\$5,000
	Moderate Income	\$75k to \$125k	\$90k to \$150k	-	\$2,500
Married couple filing jointly	Lower Income	≤\$75k	≤\$90,000	\$3,000	\$5,000
	Moderate Income	\$75k to \$125k	\$90k to \$150k	-	\$2,500
Married couple filing separately	Lower Income	≤\$50k	≤\$60k	\$3,000	\$5,000
	Moderate Income	\$50k to \$100k	\$60k to \$100k	-	\$2,500

2024 Program Modifications

The 2024 Transportation Bill (Act 148) Section 17 modified 19 V.S.A. § 2904(d)(2)(B)(i)(VI) to clarify annual inspection requirements. The original language changed from “passed inspection *within the prior year*” to “*within 18 months*”. This program change went into effect in July 2024.

After the July 2023 floods, the state granted waivers to certain RYR statutory requirements such as vehicle operability in order to help Vermonters with flood-damaged vehicles replace them with eligible plug-in electric vehicles. Based on this precedent, 2024 Act 148 Section 18 added 19 V.S.A. § 2904a to grant flexibility in the Replace Your Ride program when motor vehicles registered in Vermont are damaged or totaled as a result of a Governor-declared a state of emergency. July 2024 again brought devastating flooding to many parts of the state and the program implemented the emergency flexibility provision per statute.

Two flood damaged vehicles were replaced via RYR + New PEV and three flood damaged vehicles were replaced via RYR + Used (with MileageSmart).

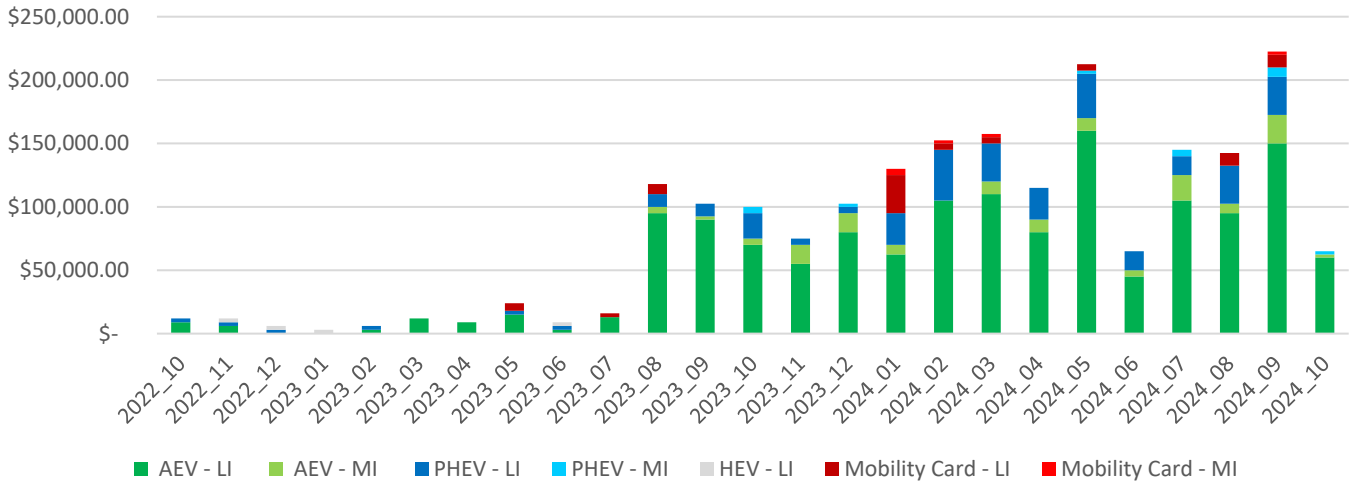
By the Numbers

The table below shows the calendar year incentive count and annual incentive amount paid from the start of the program in October 2022 until the closure in October 2024. Incentive usage picked up dramatically after the NEW PEV program incentive amounts and income guidelines changed effective July 2023. Dealerships were a key partner in promoting and explaining the program to Vermonters with eligible vehicles to scrap.

Year	Mobility Card	RYR + New PEV	RYR + Used PEV	Total Count	Total Amount
2022	-	5	4	9	\$ 27,000.00
2023	5	31	87	123	\$ 527,500.00
2024	18	126	175	319	\$ 1,460,000.00
Total	23	162	266	451	\$ 2,014,500.00

The majority of RYR incentive funds were used in conjunction with the purchase or lease of a new or used all-electric vehicle, followed by the purchase or lease of a new or used plug-in hybrid electric vehicle. Twenty-three RYR recipients chose the prepaid mobility card to use at participating businesses that support low-carbon mobility.

Monthly Incentive Amounts by Use and Income Level



Over the lifetime of the program, 85% of incentives and 91% of incentive funding went to lower income Vermonters.

	AEV					PHEV					HEV	Mobility Card			Grand Total
	New		Used		Total	New		Used		Total	Used	LI	MI	Total	
	LI	MI	LI	MI		LI	MI	LI	MI						
2022	4		1		5	0		2		2	2	0		0	9
2023	63	13	24	0	100	9	2	5	0	16	2	5	0	5	123
2024	117	32	86	9	244	19	7	30	1	57	0	13	5	18	319
Total	184	45	111	9	349	28	9	37	1	75	4	18	5	23	451

Incentive funds issued for the 18 mobility card applications in 2024 totaled \$77,500. As of December 16, 2024, \$49,562.86 had been redeemed across 10 participating retailers.

Retailer	Amount Redeemed	Percentage of Total Redeemed	City
Bennington Bike Hub	\$5,000	10%	Bennington
Burrows Sports	\$5,000	10%	Brattleboro
CarShare VT	\$1,001.01	2%	Burlington
Great Outdoors	\$918.16	2%	Morrisville
Green Mountain Bikes	\$2,268	5%	Rochester
North Star BMX	\$5,290.51	11%	Burlington
Old Spokes Home	\$3,102.94	6%	Burlington
Onion River Outdoor	\$2,500	5%	Montpelier
Ski Rack	\$6,982.83	14%	Burlington
West Hill Shop	\$10,000	20%	Putney
Total Redeemed	\$49,563.45	-	-

Electrify Your Fleet Incentive Program (EYF)

Summary

Electrify Your Fleet was authorized in the 2023 Transportation Bill and launched in November 2023. It is an electric vehicle incentive program for businesses, municipalities, and nonprofit organizations to reduce the climate impacts from fleet vehicles. The program helps fleet owners fund the replacement of their internal combustion engine (ICE) vehicles with cleaner electric transportation options such as Plug-In Electric Vehicles (PEVs), electric motorcycles, electric bikes, electric ATVs/UTVs or electric snowmobiles. Electrify Your Fleet is a first-come, first-served grant program with awards made in the form of reimbursements of as much as \$2,500 for each internal combustion engine vehicle replaced or avoided with a maximum of 20 incentives allowed per fleet. Nonprofit mobility services organizations (NMSO) incorporated in the State of Vermont for the purpose of providing Vermonters with transportation alternatives to personal vehicle ownership are eligible for up to 5 increased incentives of \$5,000 each towards the purchase of all-electric vehicles with a base MSRP of \$55,000 or less.

Consumer and Vehicle Eligibility

Eligible Recipients	Eligible Vehicles (Standard EYF incentive)
<ul style="list-style-type: none"> • Nonprofit mobility services organizations (NMSO) incorporated in the State of Vermont for the purpose of providing Vermonters with transportation alternatives to personal vehicle ownership <ul style="list-style-type: none"> ○ Up to 5 increased EYF incentives of \$5,000 to purchase an AEV (MSRP \$55k or less) ○ Up to 15 standard EYF incentives of \$2,500 • All Vermont municipalities and municipal organizations and all non-profit institutions and for-profit business entities registered in Vermont <ul style="list-style-type: none"> ○ Up to 20 standard Electrify Your Fleet incentives 	<ul style="list-style-type: none"> • Battery All-Electric Vehicles (BEV/AEV) with a base Manufacturer’s Suggested Retail Price (MSRP) of \$60,000.00 or less; • Plug-in Hybrid Electric Vehicles (PHEV) with an electric range of 20 miles or greater per complete charge as rated by the Environmental Protection Agency when the vehicle was new and a base MSRP of \$60,000.00 or less; • Electric bicycles and electric cargo bicycles with a base MSRP of \$10,000.00 or less with a minimum one-year warranty • Adaptive electric cycles with any base MSRP; • Electric motorcycles with a base MSRP of \$30,000.00 or less; • Electric snowmobiles with a base MSRP of \$20,000.00 or less; and • Electric all-terrain vehicles (ATVs), as defined in 23 V.S.A. § 3501 and including electric utility terrain vehicles (UTVs), with a base MSRP of \$50,000.00 or less

2024 Program Modifications

Based on applicant requests, AOT proposed two program changes that were adopted by the legislature in 2024. First, the MSRP cap for eBikes increased to \$10,000. Second, ATVs and UTVs were added as eligible vehicle types.

Despite outreach through AOT social media, the Drive Electric website and stakeholder meetings, and newsletters and emails from the Environmental Policy and Sustainability team, application numbers have remained low, with 44 applications started but only 13 applications completed. Often applicants start the process without a solid electrification plan and need time to determine which vehicles will be replaced and

what the replacements will be. Some applicants planned optimistically for electric vehicle purchases, so funding was reserved in their grant agreement which may not be redeemed by the time their grant agreements expire. To prevent the issue of funding being reserved instead of used, we plan to implement a change to the program guidelines that requires the EYF funding to be redeemed within three months of the grant execution date. Despite some challenges, applicants express appreciation for the program and staff support provided.

Testimonials

Burlington Electric Department purchased two 2024 Ford F-150 Lightnings to replace a 2013 and a 2014 F-150. They say:

“BED’s Distribution department team says the vehicle has performed just as well as our old gas-powered pickups getting around the city. Hauling materials has not been an issue. The primary challenges are crowded charging facilities at BED’s shop/garage and the inability to take the vehicles out of town on mutual aid. We have not yet had to use the truck for an extended time within the city (e.g., during storm restoration or a large outage), but with the 200-mile full charge range we do not anticipate an issue when the time comes.

BED’s Generation department team says the successes are: it is nice, quiet operation, and works well for light duty items around the facility and the other assets. The shortcomings are that heavier duty items like pulling a trailer or any load coming close to the half-ton capacity really drains the battery and has limited range/use.” BED is filing for the commercial clean vehicle tax credit for \$7500 per vehicle but has not received it yet. They do not recommend any changes to the EYF program.

Vermont All Terrain Vehicle Sportsman’s Association, Inc (VASA) says “Thank you for reaching out but the compensation is still too small for us and our current budget. Thank you again for the opportunity to try to electrify one of our UTVs, but currently we cannot participate as of the latest amount offered.”

CarShare VT says “This vehicle works perfectly and provided a way to grow our fleet (expanding or impact) at a low cost. The car is co-located with a 40 amp Clipper Creek charger that has proven to be reliable. Our ability to further electrify our fleet is mainly limited by our ability to expand our fleetwide charging capacity. Our unique issue is that we are not the property owner at any of our vehicle locations, and therefore all EVSE projects require extensive scoping and coordination with host partners. We have been doing some of this planning work with help from a grant from CCRPC, and we anticipate receiving an AOT MTI award to implement new charging stations. If this effort is successful, we expect to be able to accommodate many more EVs in our fleet. I’m not sure I can offer any critiques (to the EYF program). You folks have been very helpful and we hope to draw down our remaining funds this year. In the coming months we may reach out about an extension to our grant agreement.”

By the Numbers

The program was launched in November 2023 and has had a relatively quiet first year. Of the 44 organizations that have started applications, only 13 have completed the application process. Nine organizations withdrew their applications for a variety of reasons, some of which related to incentive eligibility and some to the organization’s need for additional financial resources or more fleet electrification planning.

Notably, only one municipality (City of South Burlington) has completed the application process, and it took about a year to fill in the final details. The University of Vermont has already applied the maximum of 20 incentives towards their fleet electrification efforts and inquired about the possibility of raising the maximum allowable. Two non-profit mobility service organizations planned optimistically for vehicle acquisitions but to date have only purchased one each through Electrify Your Fleet. Four police departments started the online application process but have not progressed to completion.

Applicant Type	Application Status			
	Awarded	Incomplete	Withdrawn	Total
Farm		3		3
Hospital		1		1
Large Business		1		1
Municipality	1		2	3
Nonprofit	2	4	2	8
Nonprofit mobility service org (NMSO)	2	1		3
Police Department		3	1	4
Senior Living Community	1			1
Ski Resort	1	1		2
Small Business	4	7	4	15
University	1			1
Utility	1	1		2
Total	13	22	9	44

Incentive Type	Number Authorized	EYF \$ Authorized	Number Redeemed	EYF \$ Redeemed
NMSO AEV	9	\$45,000	2	\$10,000
AEV	28	\$70,000	19	\$47,500
PHEV	5	\$12,500	5	\$12,500
eBike	2	\$1,250	2	\$1,250
eATV/eUTV	3	\$7,500	3	\$7,500
eSnowmobile	1	\$2,500	1	\$2,500
Total	48	\$138,750	32	\$81,250

Incentive Program for Electric Bicycles (eBike)

Summary

The State of Vermont launched the nation’s first statewide incentive program to help Vermonters make daily trips with cleaner transportation that helps reduce greenhouse gas emissions. The program was authorized in the 2021 Transportation Bill and launched in July 2022. The State of Vermont electric bicycle (eBike) incentive helps residents purchase eBikes to reduce personal vehicle usage. In the first round of funding, incentives were issued as reimbursements to pre-approved applicants and bike stores. In an effort to simplify the process and provide for more direct and upfront benefit, in rounds 2 and 3 of eBike funding, income-eligible Vermonters may receive an incentive of up to \$800 in the form of a prepaid debit card to be used at a participating in-state bicycle retailer. Due to state funding cycles, the eBike program runs on the state fiscal year, starting in July and continuing until the exhaustion of funding.

Consumer and Vehicle Eligibility

Consumer Eligibility	eBike Eligibility
<ul style="list-style-type: none"> • Vermont resident age 18 or older • Not claimed as a dependent on tax filings • Vermont Driver’s License • Attest to income eligibility (see below) • One per individual • Agree to not use eBike solely for recreation 	<ul style="list-style-type: none"> • Must be new and not intended for resale • Must meet UL 2849 and/or EN 15194 standards, or have at least a 1-year warranty on electric components • Standard eBikes MSRP cap: \$4,000 • Cargo eBike MSRP cap: \$5,000, must be designed for transporting loads • Adaptive eBike – no MSRP cap

Incentive Amount and Income Eligibilities

Tax Filing Status	Round 1 Income	Round 1 Incentive Amount	Round 2 Income	Round 2 and 3 Incentive Amount
Lower Income (LI)				
Individual filing as single	≤\$50k	Up to \$400, up to 50% of purchase price	≤\$60k	Standard eBike: \$400 Cargo eBike: \$800 Adaptive eBike: \$800
Individual filing as head of household	≤\$50k		≤\$75k	
Individual filing as qualifying widower / surviving spouse	≤\$75k		≤\$90,000	
Married couple filing jointly	≤\$75k		≤\$90,000	
Married couple filing separately	≤\$50k		≤\$60k	
Moderate Income (MI)				
Individual filing as single	\$50k to \$100k	Up to \$250, up to 25% of purchase price	\$60k to \$100k	Not eligible
Individual filing as head of household	\$50k to \$100k		\$75k to \$125k	
Individual filing as qualifying widower / surviving spouse	\$75k to \$125k		\$90k to \$150k	
Married couple filing jointly	\$75k to \$125k		\$90k to \$150k	
Married couple filing separately	\$50k to \$100k		\$60k to \$100k	

2024 Program Modifications

The eBike Program is in its third round of funding. During Round 2, a total of 442 applications were approved, but 232 (52%) of applicants did not purchase an eBike within the allotted time (90 days). Those vouchers were canceled, and the funds were made available to other applicants. This process can cause the balance of funds to fluctuate and even appear far lower than what will become available. To expedite purchases and reduce the lag in returning unspent funds to the program, the voucher redemption window was shortened from 90 days in Round 2 to 60 days in Round 3. It was also brought to our attention that the allowance of prepaid debit cards made it difficult for retailers to verify the eligibility of purchases. Thus, another change to the program included disablement of the online purchasing option on the prepaid debit cards.

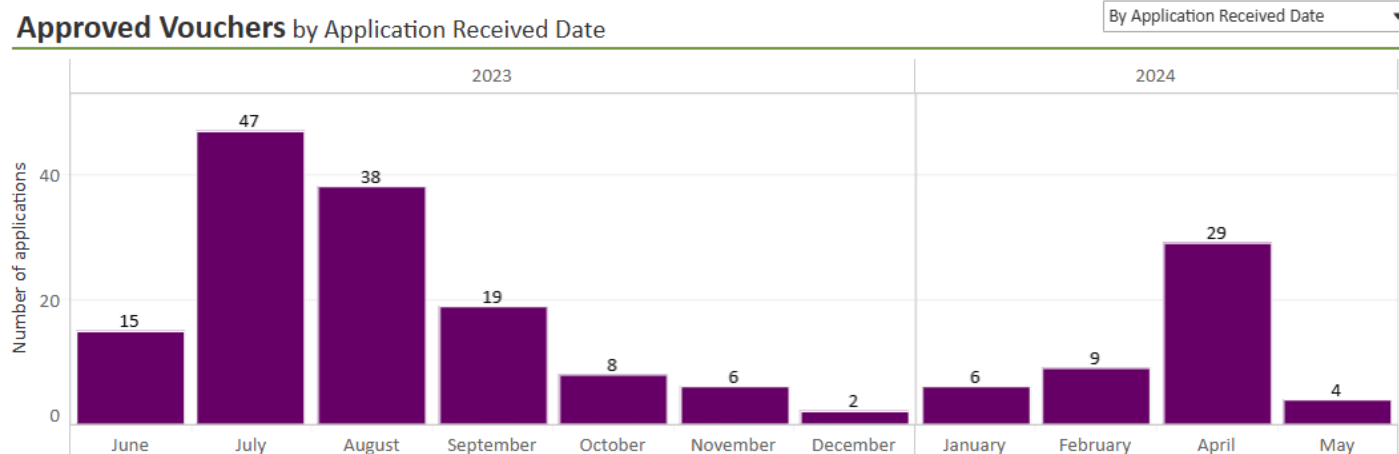
By the Numbers

So far in Round 3 of the program (July 31, 2024 through January 27, 2025), a total of 176 applications have been received. Of those, 71 (88%) have redeemed their vouchers and 10 have not yet purchased but are still within the 60-day window, 42 vouchers expired due to no purchase within the 60-day time frame, and 7 recipients cancelled their voucher.

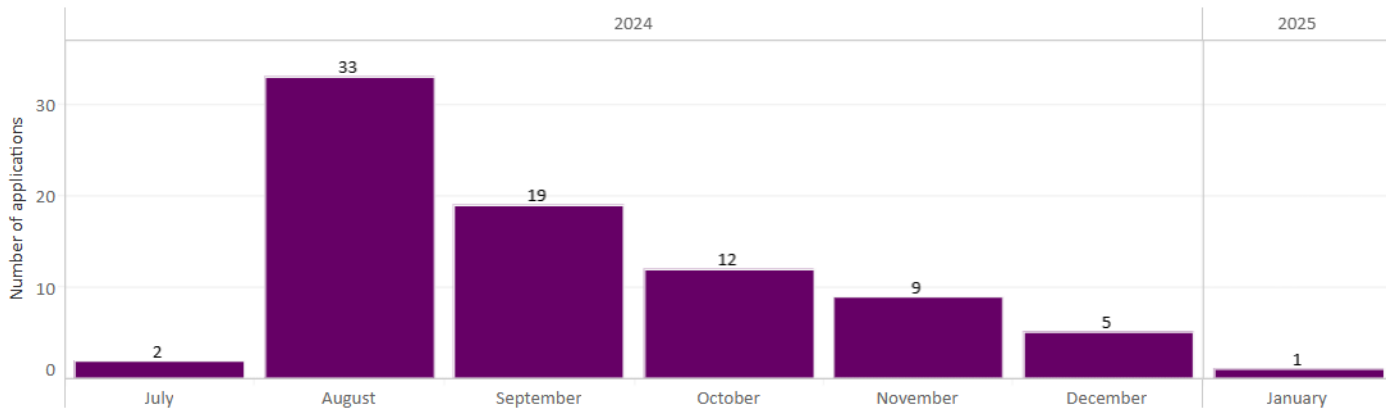
	Adaptive Count	Adaptive \$	Cargo Count	Cargo \$	Standard Count	Standard \$
Round 1	1	\$ 250.00	6	\$ 2,100.00	272	\$ 89,668.00
Round 2	7	\$ 5,200.00	50	\$ 39,600.00	153	\$ 67,235.93
Round 3	3	\$ 2,400.00	39	\$ 31,200.00	29	\$ 11,600.00

The charts below show the timing of application submissions for approved vouchers in Round 2 and Round 3. There is typically a surge in applications after the release of new funding (July/August), which then tapers off as most of the funding is reserved. More funding becomes available when vouchers are not redeemed timely. Application numbers remain low throughout the winter and have increased in the spring.

Round 2 Redeemed Vouchers by Application Date



Approved Vouchers by Application Received Date

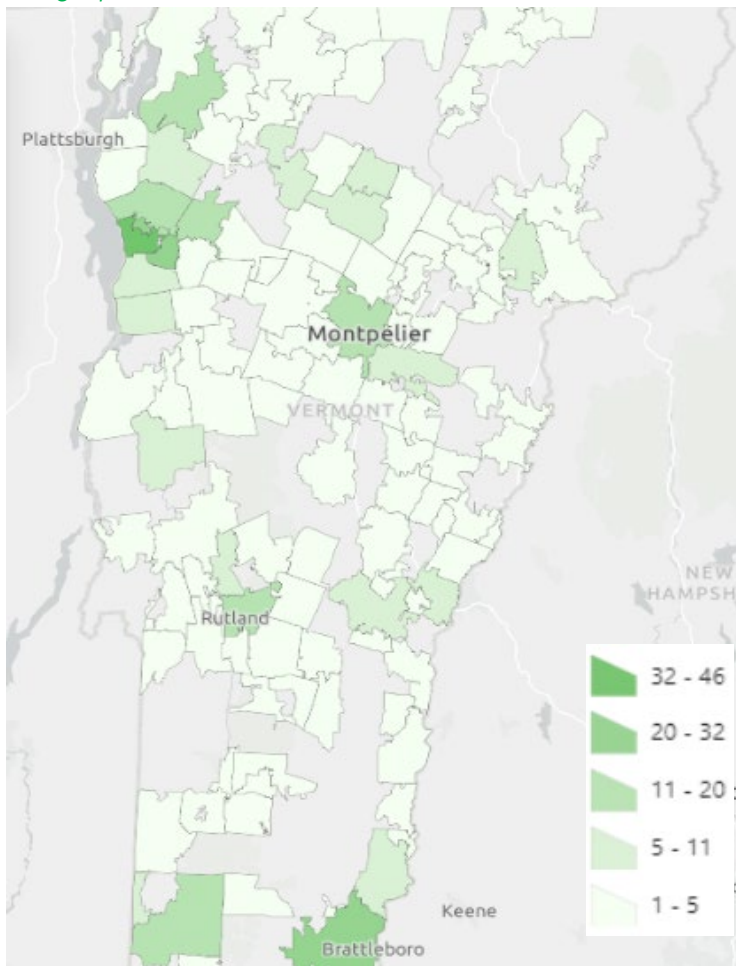


Section 21 of Act 148 (2024 Tbill) details specific reporting requirements for the eBike program:

(1) the demographics of who received an incentive under the eBike Incentive Program;

Demographics are not included in the application process. All recipients attest to meeting the income eligibility for the program. Forty-seven eBike purchasers who received incentives in round 2 and round 3 answered a survey and provided some demographic data. The demographics of the survey respondents may not be representative of the program.

Geographic Location



The map to the left shows the residential zip code for eBike incentive recipients who have redeemed a voucher to purchase an eBike. The darker green indicates a higher number of eBike redemptions in a given zip code, such as 05401 in Burlington with 46 eBike redemptions. Areas of the map in light gray represent no eBike redemptions by residents in that zip code.

The geographic distribution of incentives may correlate to bicycle infrastructure or proximity to participating electric bicycle retailers. Of the 270 approved-to-cancelled applicants through October 31, 2024, 48 answered a survey to provide reasons why they did not redeem the incentive voucher. Twenty indicated a preference for online shopping and 9 indicated there were no participating retailers in their area.

(2) a breakdown of where vouchers were redeemed;

The table below shows where eBike incentives have been redeemed.

Retailer	Round 1 Count	Round 2 Count	Round 3 Count	Adaptive eBike	Cargo eBike	Standard eBike	Total Incentive Count	Total Incentive Amount
Bennington Bike Hub		20	11		7	24	31	\$15,200.00
Betty's Bike Shop		4	7	1	4	6	11	\$7,200.00
Bicycle Express	1	3	2			6	6	\$3,200.00
Bootlegger Bikes	11	40	7		12	46	58	\$27,786.39
Brattleboro Bicycle Shop	6	12	4	1	4	17	22	\$10,800.00
Burrows Specialized Sports	1	7			3	5	8	\$4,400.00
Earl's Cyclery & Fitness	2		1			3	3	\$1,050.00
East Corinth General Store		2	3	1	2	2	5	\$3,200.00
First Stop Ski and Bike Shop		4	1			5	5	\$2,400.00
Frog Hollow Bikes		3				3	3	\$1,200.00
Great Outdoors		2				2	2	\$800.00
Green Mountain Bikes	7	3	2		2	10	12	\$4,850.00
North Star Sports	22	37	14	1	14	58	73	\$33,403.79
Old Spokes Home	1	3			2	2	4	\$2,400.00
Onion River Outdoors	6		1		1	6	7	\$2,600.00
Power Play Sports		2				2	2	\$1,600.00
RAD Innovations LLC	1	3	2	5		1	6	\$4,250.00
Rutland City Bikes LLC	10	3	2	2	1	12	15	\$6,450.00
Slope Style Ski and Ride			4		3	1	4	\$2,800.00
The Gear House	2	1				3	3	\$900.00
The Great Outdoors	2	4	1		1	6	7	\$3,450.00
The Jay Cloud Cyclery	9	3				12	12	\$4,800.00
The Skirack, Inc.	6	37	3		25	21	46	\$27,874.94
Vermont Bicycle Shop	2		1			3	3	\$1,050.00
Vermont Bike & Brew	6	3				9	9	\$3,000.00
West Hill Shop	1	9			3	7	10	\$5,050.00
Winooski Wheels			4		4	0	4	\$3,200.00
Other*	169	4	1	2		172	174	\$58,486.22
Amazon*	14	1		1		14	15	\$5,329.00
Total	279	210	71	14	88	458	560	\$248,730.34

**Some exceptions in Round 2 and Round 3 have enabled ebike voucher recipients to redeem the funds at non-participating retailers when there are extenuating circumstances.*

(3) A breakdown by manufacturer and type, of electric bicycles, electric cargo bicycles, and adaptive electric cycles incentivized;

A detailed breakdown, by manufacturer and type, of electric bicycles, electric cargo bicycles, and adaptive electric cycles incentivized is included in Appendix A.

(4) a detailed summary of information provided in the self-certification forms and a description of the Agency's post-voucher sampling audits and audit findings, together with any recommendations to improve program design and cost-effectively direct funding to recipients who need it most;

Applicants to the eBike incentive Program sign a [Consumer Attestation Form](#). The referenced current Terms and Conditions are summarized in the same form and include the Adjusted Gross Income limits based on filing status, as well as other requirements based on program guidelines. Applicants are made aware that they may be audited. Thirteen eBike incentive recipients, representing 11 households, were selected for audit in 2024. Initial audit letters were mailed in September 2024. A second letter will be sent to non-responding incentive recipients under audit.

Income Eligibility: Six of the thirteen have responded and all have been found to be income-eligible.

Vermont Resident: All eBike applicants provide proof of residency. For most applicants this is a driver's license, but if they do not have a driver's license then a recent utility bill in the applicant's name is acceptable.

Not Received a prior eBike Incentive under the Vermont eBike Incentive Program: The eBike has been under the same administrator all three rounds so there is one database of names, addresses and driver's licenses and no applicant has received more than one incentive.

eBike eligibilities: The audit revealed that some cargo eBike incentive amounts were paid out to recipients that purchased a standard eBike. This was due to a lack of retailer knowledge and further education has been provided.

Recommendations to consider based on audit findings such that the program could be improved to cost-effectively direct funding to recipients who need it most:

- restrict eligibility to recipients of programs such as 3SquaresVT or other income-based programs
- increase incentive amounts to deepen affordability for those who need the most assistance
- provide more detailed resources for those considering application and include confirmation through attestation that those resources have been accessed

(5) a detailed summary of information collected through participant surveys.

A summary of the eBike survey results is attached in Appendix B.

Appendix A: Redeemed eBikes by eBike Type, Manufacturer and Model

Retailers often require follow-up reminders to submit receipts, with approximately 80% of submissions needing additional outreach. Common issues include incorrect information, missing serial numbers on receipts, and reliance on email submissions, which frequently result in delays and manual follow-up. As a result, some details are not yet submitted.

In some cases, retailers told consumers that they could apply the cargo eBike incentive to standard eBikes with racks or to bike supplies. There were six cases where incentive recipients used a cargo eBike incentive to purchase an eBike that did not meet the cargo eBike criteria. In some cases the bikes had small racks, but were not clearly designed to transport loads, as is required. Subsequent retailer training has addressed this issue. Standard eBikes purchased with a Cargo eBike incentive are classified as Standard eBikes in the table below. All ebikes explicitly designed for transporting loads are classified as cargo ebikes below, even if they were purchased with a standard incentive.

Standard practice in the program has been to let Adaptive eBike applicants identify for themselves which ebikes provide the necessary accommodations. All bikes purchased with an Adaptive eBike incentive are classified as adaptive ebikes in the table below, as well as eBikes explicitly designed for accessibility, even if they were purchased with a standard incentive.

All other ebikes are classified as standard ebikes, which have been further described as one of the following sub-types based on their frame geometry, suspension and wheel width, as well as the manufacturer's description.

- Comfort ebike – allows for upright posture and a smooth ride, many frames similar to beach cruisers
- eMTB = electric mountain bike, designed for fast riding on rough trails, often with full (front and rear) suspension and disc brakes
- Fat tire ebike – tires wider than 3" allow for better traction on ice and snow and can provide a smoother ride, but are often heavy due to the increased wheel and frame size
- Foldable ebike – can fold into a smaller shape for easier stowing, ideal for multimodal trips
- Gravel ebikes combine road bike style handlebars with slightly wider tires to handle gravel – allows for faster riding on gently uneven surfaces, ideal for rail trails and commutes with some off-road
- Hybrid ebikes are great all-around bikes for both city and off-road riding. They generally have wider tires similar to an eMTB and more upright posture similar to the comfort ebikes
- Road ebikes feature narrow tires (best on paved surfaces) and handlebars with "drops" that put the rider in a more aerodynamic position for faster or longer rides

eBikes by Type, Manufacturer and Model	Round 1	Round 2	Round 3	Total
Adaptive eBike	1	12	3	16
Aventon		1	1	2
Abound			1	1
Level		1		1
AZUB		1		1
TI-Fly X		1		1
Hase Bikes	1	2		2
Kettwiesel	1	1		1
Trigo Nexus		1		1
Himiway		1		1
D7		1		1
I Zip		1		1
Brio		1		1
Lectric		2		2
XP		1		1
XP Trike		1		1
N/A - Not yet submitted			2	2
N/A - Not yet submitted			2	2
Oseri		1		1
OS-EB02		1		1
Tern		2		2
NBD P8i		2		2
Van Raam		1		1
Opair		1		1
Cargo eBike	6	53	35	94
Aventon		18	15	33
Abound		18	15	33
Benno		3		3
Boost E		1		1
eJoy		2		2
Blix	1		1	2
Packa Genie	1		1	2
Extracycle			1	1
RFA			1	1
Fiido			1	1
T1			1	1
Himiway		1	2	3
D5		1	2	3
Lectric			1	1
XPedition			1	1
N/A - Not yet submitted			5	5
N/A - Not yet submitted			5	5
Rad Power	4		3	7
RadRunner			1	1
RadWagon	4		2	6
Ride1Up			1	1
Portola			1	1
Specialized		25	4	29

Globe Haul		25	4	29
Surly		3	1	4
Big Easy		2		2
Skid Loader		1	1	2
Tern		1		1
Quick Haul		1		1
Yuba	1	2		3
Boda Boda		1		1
Kombi		1		1
SUPERCARGO CL	1			1
Cargo eTrike		1		1
I Zip		1		1
Tristar		1		1
Comfort eBike	35	21	3	59
Aventon	6	13	2	21
Pace 350		1		1
Pace 500	6	12	2	20
Blix	2			2
Aveny Skyline	1			1
Sol Eclipse	1			1
Cannondale	2	2		4
Treadwell Neo	2	2		4
Charge	3	1		4
Comfort	3	1		4
Electric Bike Technologies		1		1
City Electric Bike		1		1
Gazelle	2	1		3
Ultimate	2	1		3
geleisen	1			1
City Cruiser	1			1
Heybike	2			2
Cityscape	2			2
iZip	1			1
Vibe 2.0	1			1
KHS	3			3
MOVO	3			3
Kona		2	1	3
Coco		2	1	3
Ride1Up	3			3
Prodigy	3			3
Schwinn	1			1
Mendocino	1			1
SWFT	6			6
Fleet	6			6
Trek	1	1		2
FX+	1	1		2
VIVI	1			1
City Cruiser	1			1
Zooz Bikes	1			1
Ultra Urban 750	1			1

eMTB	22	8	2	32
Accolmile	1			1
Cola Bear	1			1
Aventon		2		2
Ramblas		2		2
Bulls		1		1
Copperhead EVO		1		1
Eahora	1			1
AM100	1			1
Giant	4	1		5
Stance E+	1			1
Talon E+	3	1		4
Haibike	1	1		2
HardNine 5	1			1
HardSeven 5		1		1
Himiway			1	1
D7			1	1
Hurley	3			3
Diablo	1			1
Tailside	1			1
Wahine	1			1
Hyper Bike Co	1			1
29in Hyper E-Ride	1			1
Kona	2			2
Remote	2			2
KTM	1			1
Macina Kapoho 2971	1			1
Liv	1			1
Tempt E+	1			1
Magnum	1			1
Peak T5	1			1
Orbea	1			1
Rise	1			1
Rambo			1	1
Rebel 2.0			1	1
Specialized	1			1
Turbo Levo	1			1
Trek		2		2
Powerfly		2		2
Yamaha	2	1		3
YDX-Moro		1		1
YDX-Torc	2			2
YT Decoy	1			1
Decoy 29 Core 4	1			1
Zhejiang Eshion Electric Technology Co	1			1
E Mountain	1			1
Fat Tire eBike	62	11	2	75
Aventon	4	8	1	13
Aventure	4	8	1	13
Bee Cool Bikes	3			3

Bee Adventurer	2			2
Pathfinder	1			1
Biktrix	1			1
Juggernaut Classic 9	1			1
Cyrusher	1			1
XF650	1			1
Electra		1		1
Ponto Go!		1		1
G-FORCE	1			1
ZM	1			1
Heybike	2			2
Explore	2			2
Himiway	3			3
Long Range Cruiser	2			2
Zebra	1			1
HJM Bike	1			1
Toury	1			1
Magnum	4	1		5
Nomad	3			3
Pathfinder	1			1
Scout		1		1
Rad Power	31		1	32
RadRover	14		1	15
RadRunner	17			17
Rambo	3			3
Roamer	1			1
Savage	2			2
ReAspire	2			2
Knight	2			2
SWFT	4	1		5
Zip	4	1		5
Zugo	2			2
Rhino	2			2
Foldable eBike	24	3	5	32
Aventon	3	3	1	7
Sinch	3	3	1	7
Eahora	1			1
Azarias	1			1
engwe	2			2
Engine Pro	2			2
Heybike	1			1
Mars	1			1
Lectric	9		3	12
XP	8			8
XP Lite 2.0			3	3
XPremium	1			1
NARRAK	1			1
S126 Step Over 500W	1			1
Rad Power	5			5
RadExpand	5			5

Tern			1	1
Verktron Q9			1	1
Voyager	2			2
Radius Pro	2			2
Gravel eBike	5			5
Cannondale	1			1
Topstone Neo	1			1
Niner	1			1
RLT E9 RDO	1			1
Orbea	2			2
Gain	2			2
Specialized	1			1
Turbo Creo	1			1
Hybrid eBike	115	97	14	226
Aventon	6	36	3	45
Level	6	36	3	45
Batch	1			1
E-Commuter	1			1
Benno		1		1
eScout		1		1
Bulls		3		3
Iconic Evo 1		3		3
Cannondale		6	3	9
Adventure Neo Allroad		5	1	6
Tesoro Neo		1	2	3
Charge	1			1
XC	1			1
Cube	1			1
Touring 500	1			1
Diamondback	8	1		9
Union	8	1		9
Dost	1			1
Kope Chain	1			1
Electra		1		1
Loft Go! 7D		1		1
Fifield	1			1
Bonfire	1			1
Gazelle	19	18	4	41
Arroyo	4	2		6
Medeo	15	16	3	34
Ultimate C380			1	1
GEN3	3			3
The Stride	3			3
Giant	1			1
Explore E+	1			1
Glacier		1		1
Level		1		1
Gotrax	4			4
Alpha	4			4
Haibike	1	1		2

Trekking	1	1		2
Heybike	1			1
Race Plus	1			1
Juiced Bikes	2			2
CrossCurrent X	2			2
Kona	4	1		5
Dew-E	3			3
El Kahuna	1	1		2
Liv	3			3
Amiti E+	1			1
Rove E+	2			2
Magnum	8			8
Cosmopolitan	2			2
Navigator	6			6
Miclon	2			2
Macmission 100	2			2
Priority	1			1
Current	1			1
Qlife		2		2
Cityone		2		2
Rad Power	4			4
RadCity	4			4
Ride1Up	5			5
700 Series	4			4
LMT'D	1			1
Schwinn	1			1
Coston	1			1
Serfas	8			8
eDash	8			8
Specialized	16	19		35
Turbo Como	6	2		8
Turbo Tero	2	1		3
Turbo Vado	8	16		24
Surface604	1			1
Quad	1			1
Trek	4	6	4	14
Allant+	2	1	1	4
Dual Sport+ 2	1	1		2
Verve+	1	4	3	8
Velotric	4			4
Discover 1	4			4
Vincfer	1			1
VX-4	1			1
VIVI	3			3
Shimano	3			3
Yamaha		1		1
Crosscore RC		1		1
Road eBike	9	3	3	15
Aventon	2	1	2	5
Soltera	2	1	2	5

Kona			1	1
Rove HD			1	1
Rad Power	6			6
RadMission	6			6
RadWagon		1		1
RadMission		1		1
Ride1Up	1			1
Roadster V2	1			1
Trek		1		1
Domane+		1		1
Standard eBike		1	4	5
N/A - Not yet submitted		1	4	5
N/A - Not yet submitted		1	4	5
Grand Total	279	210	71	560

Appendix B: Summary from eBike Survey (CSE provided)

eBike Consumer Survey

Survey Details

The State of Vermont eBike Incentive Consumer Survey's target audience is individuals who were approved for an incentive voucher and have redeemed it with the purchase of an eBike. Applicants who were approved and later canceled, as they did not redeem their incentive voucher within the allotted timeframe, were invited to an abridged survey with questions about card redemption. Applicants whose applications were denied or were marked incomplete for missing documents and later automatically canceled were not invited to this survey. This analysis reviews the survey results of approved program participants in Year 3 of the program (relaunched July 31, 2024) through October 31, 2024.

Of the 270 total approved-to-canceled applicants, 48 responded to the survey. The top three reasons for cancellations included applicants claiming that the eBikes available were out of their budgeted price range (n=16) or that they couldn't decide on an eBike (n=15) and that they preferred to shop through online retailers (n=15). Notably, 12 applicants claimed there was not enough time to search or purchase a bike (Figure 46).



Figure 1 Reasons for Not Redeeming the eBike Incentive Voucher

The objectives of the survey are to:

- Measure incentive recipient satisfaction with multiple aspects of the State of Vermont eBike Incentive Program to inform program improvements.
- Determine the impact of the State of Vermont eBike Incentive Program on recipients' decisions to adopt an eBike.
- Understand the motivating factors that were important in their decision to adopt an eBike.
- Measure the change (or planned change) in recipients' behaviors as a result of acquiring an eBike.
- Understand the demographics of incentive recipients.

The survey was sent to all 219 incentive recipients who were approved and redeemed their voucher to purchase an eBike as part of Year 3 of the program. Survey invitations were sent via email campaigns built into Alchemer, and responses to the Vermont eBike Incentive Consumer Survey were collected between November 14, 2023, and November 25, 2024. The consumer survey received a 37% response rate. The eBike program design remained the same as it did in Year 2. In Year 2 of the eBike program, the rebate amounts were adjusted based on eBike type. Cargo and adaptive eBikes received an \$800 voucher, while standard eBikes received a \$400 voucher. Standard vouchers were the most popular and had the highest number of responses on the survey (**Table 49**).

Rebate Type	Approved Applicants	Survey Responses	Response Rate
Adaptive eBike (\$800 voucher)	11	2	18%
Cargo eBike (\$800 voucher)	87	24	28%
Standard eBike (\$400 voucher)	121	56	46%
Grand Total	219	82	37%

Table 1 eBike Response Rate by Rebate Type

Methods

CSE prepared the data for the analysis of the key insights by removing partial responses and validating responses. Similar to the New PEV and RYR Consumer Survey, response validity was determined using a quarantine feature in Alchemer. The quarantine process flagged eight responses, and the manual review found no consistent pattern of straight-lining or evidence of speeders providing false responses. No responses were removed.

CSE applied post-stratification weights for participation in the eBike program, as not all participants responded to the survey. The strata used for weighting were eBike Type and County. Eight records were excluded from the program population during the weighting process because no corresponding survey response was received to represent one or more strata used to weight.¹

Values reported were created using weighted data unless otherwise specified and excluded those who did not respond to a question or selected “Prefer not to answer” to certain required questions. In the following key findings section, CSE explored differences in responses to reasons for purchasing an eBike by age range, county of residence, gender, and income range.

Key Findings and Insights

CSE explored differences in responses for segments of interest in the Vermont eBike incentive program based on key demographics. The following question was evaluated, but because there was not enough data within certain demographics to validly compare results, no deeper analysis was conducted: “How did you hear about the availability of the Vermont eBike Incentive Program?”

69% of the survey respondents in Year 3 claimed they would not have purchased their eBike if the voucher was available (**Figure 47**). Of those respondents, 78% claimed they would not have purchased an eBike at

¹ Eight participants reside in Orleans or Grand Isle counties and no survey responses were received from these participants. Therefore, they were not represented in the survey and removed for the purposes of weighting.

all (Table 50), averaging 50% of the respondents in the survey that would not have purchased an eBike at all without the voucher (Rebate Essential applicants).

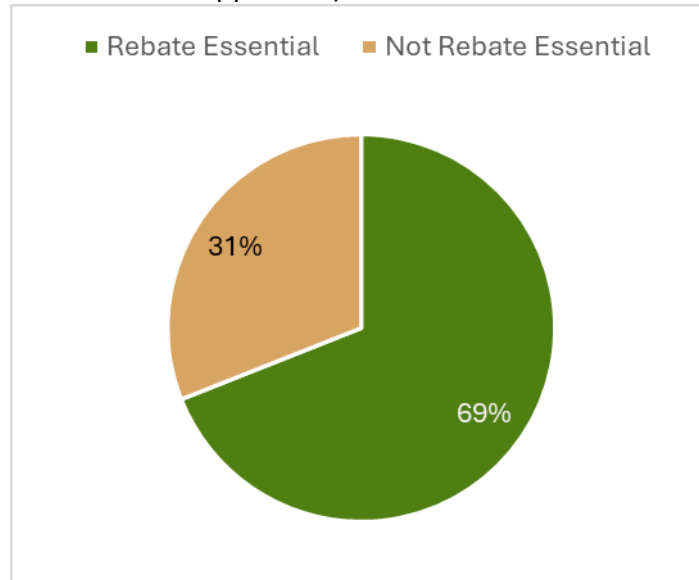


Figure 2 Rebate Essentiality

Counterfactual Behavior	Weighted Responses	Percent of Weighted Responses
Not purchased an eBike at all	45	78%
Purchased a less expensive eBike	10	17%
Delayed eBike Purchase	2	3%

Table 2 Alternative eBike Voucher Decisions

Rebate Essential respondents were more often “Very Satisfied” with the eBike website (54%) than non-Rebate Essential respondents (Figure 47) though both groups were “Very Satisfied” most often with all aspects of the program. These respondents were most often not satisfied with the application process (13%) and rebate wait time (8%), with three of the respondents later expressing frustration in card activation and missing out on bike sales.

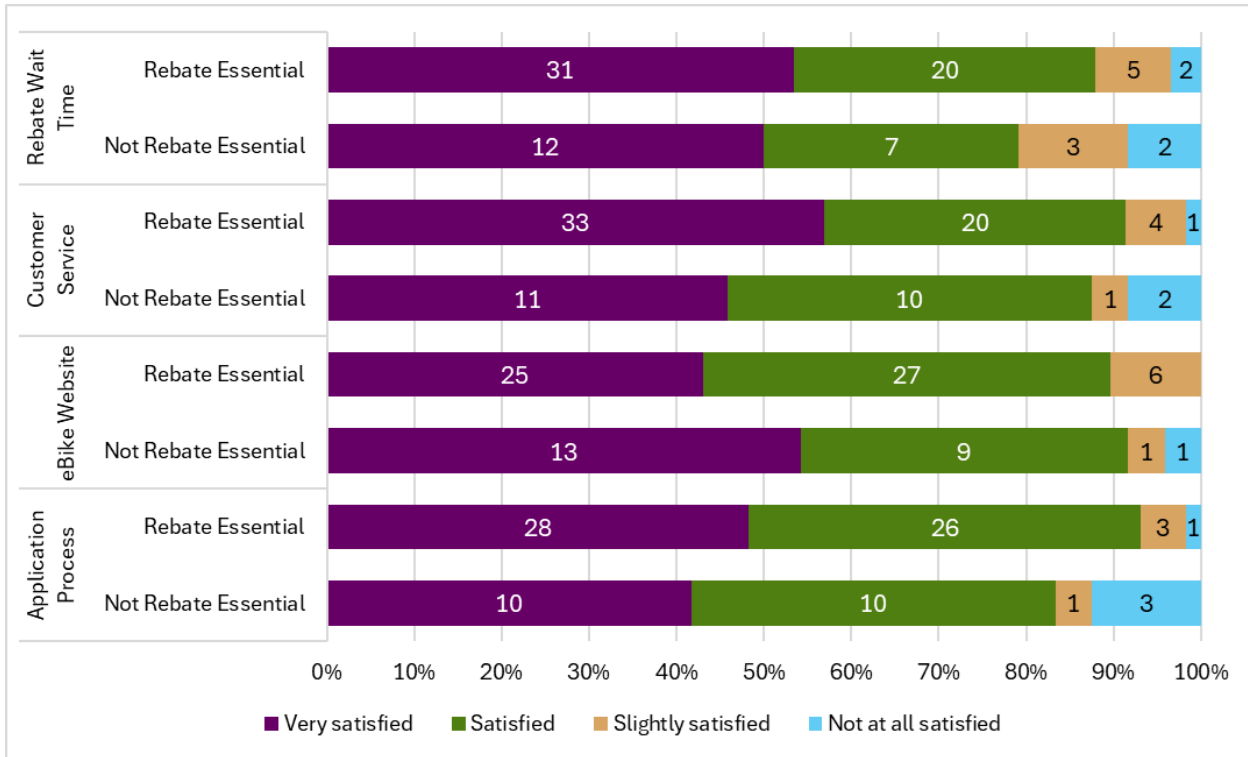


Figure 3 Program Satisfaction by Rebate Essentiality

Survey respondents were asked to select their top three reasons for purchasing an eBike. Most respondents indicated that they purchased their eBikes to reduce or replace vehicle use, exercise, or increase their quality of life (Table 51).

Purchasing Decision	Weighted Responses	Percent of Weighted Responses
Reducing or replacing vehicle use	50	61%
Exercise	38	46%
Quality of life improvements	32	39%
Reducing environmental impacts	27	33%
Ease of riding efforts	24	29%
Saving money	21	26%
Recreation	15	18%
Medical need for eBike	15	18%
Convenience of transportation	13	16%
Other reason	5	6%

Table 3 eBike Purchasing Decisions

Respondents of ages 60-69 purchased an eBike to reduce driving miles (n=15) most often (Figure 49), followed by purchasing an eBike for exercise (n=14) or to improve their quality of life (n=10). Ages 60-69 survey respondents were leading all age groups in purchasing decisions (Figure 50 and Figure 51). The age group 60-69 participated in the survey most often (Table 52).

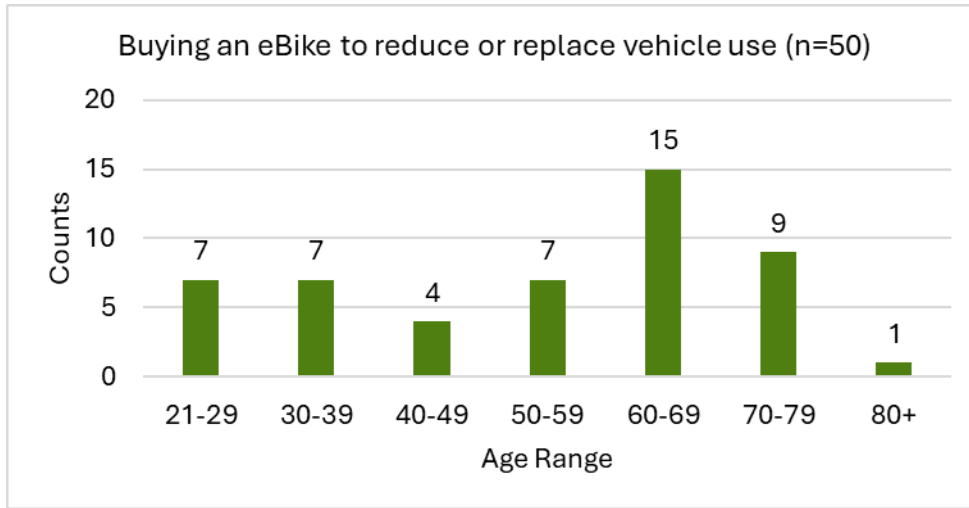


Figure 4 Reduce or Replace Vehicle Use by Age Range

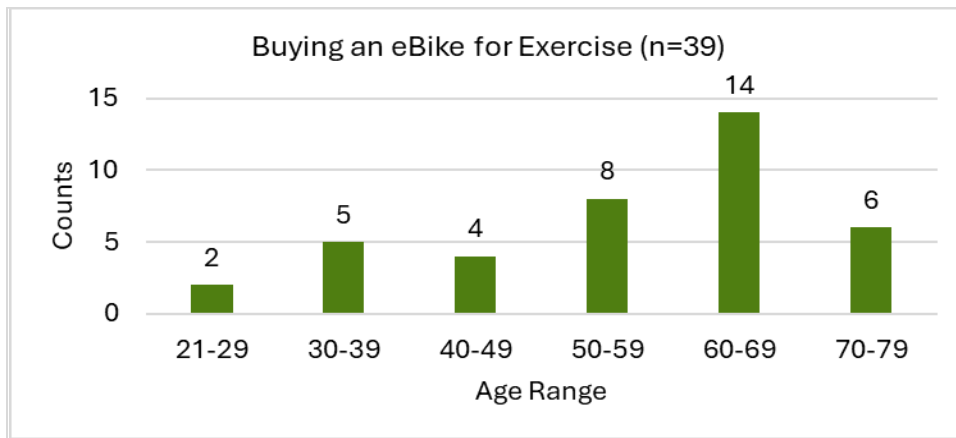


Figure 5 Exercise Use by Age Range

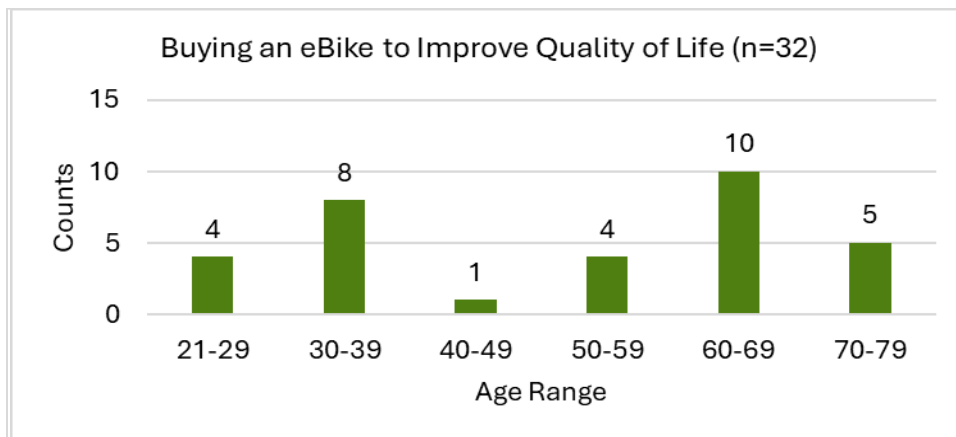


Figure 6 Reduce Environmental Impact by Age Range

Purchasing Decision	Count of Purchase Decision chosen by Age Group							
	21-29	30-39	40-49	50-59	60-69	70-79	80+	Total
Reducing or replacing vehicle use	7	7	4	7	15	9	1	50
Exercise	2	5	4	8	14	6	0	39
Quality of life improvements	4	8	1	4	10	5	0	32

Reducing environmental impacts	2	7	1	2	11	5	1	29
Ease of riding efforts	1	2	6	3	7	3	0	22
Saving money	3	2	3	2	8	2	0	20
Recreation	0	3	2	2	5	3	1	16
Medical need for eBike	0	1	1	2	9	0	0	13
Convenience of transportation	3	4	0	0	3	2	0	12
Other reason	0	0	1	1	2	0	0	4

Table 4 All Purchase Decisions by Age Range

Applicants who use their eBike to reduce or replace vehicle driving (n=18) and to exercise (n=9) most often live in Chittenden County, while those who want to improve their quality of life most often live in Windham County (n=10). The tables below show the breakdown of the top three reasons for purchasing an eBike by county.

County	Purchase decision to reduce or replace vehicle use	Total Percentage
Chittenden	18	35%
Windham	11	22%
Bennington	6	12%
Franklin	5	10%
Washington	4	8%
Windsor	2	4%
Caledonia	2	4%
Orange	1	2%
Addison	1	2%
Rutland	1	2%
Total	51	100%

Table 5 Reduce or Replace Vehicle Use by County

County	Purchase decision to exercise	Total Percentage
Chittenden	9	23%
Franklin	8	21%
Bennington	6	15%
Windham	4	10%
Washington	3	8%
Windsor	2	5%
Addison	2	5%
Rutland	2	5%
Lamoille	1	3%
Orange	1	3%
Caledonia	1	3%
Total	39	100%

Table 6 Exercise Use by County

County	Purchase decision to improve quality of life	Total Percentage
Windham	10	30%
Chittenden	9	27%
Franklin	5	15%
Bennington	4	12%
Addison	2	6%
Windsor	1	3%
Rutland	1	3%
Washington	1	3%
Total	33	100%

Table 7 Reduce Environmental Impact by County

29 male respondents said they were using their eBike to reduce or replace driving (**Figure 52**), while an almost equal number of male and female respondents used their eBike to exercise (**Figure 53**) or bought their eBike to reduce their environmental impact (**Figure 54**).

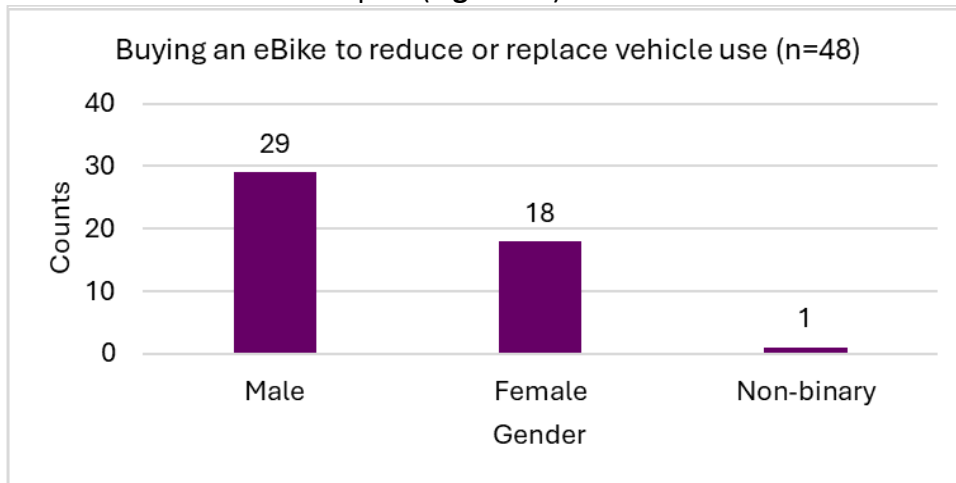


Figure 7 Reduce or Replace Vehicle Use by Gender

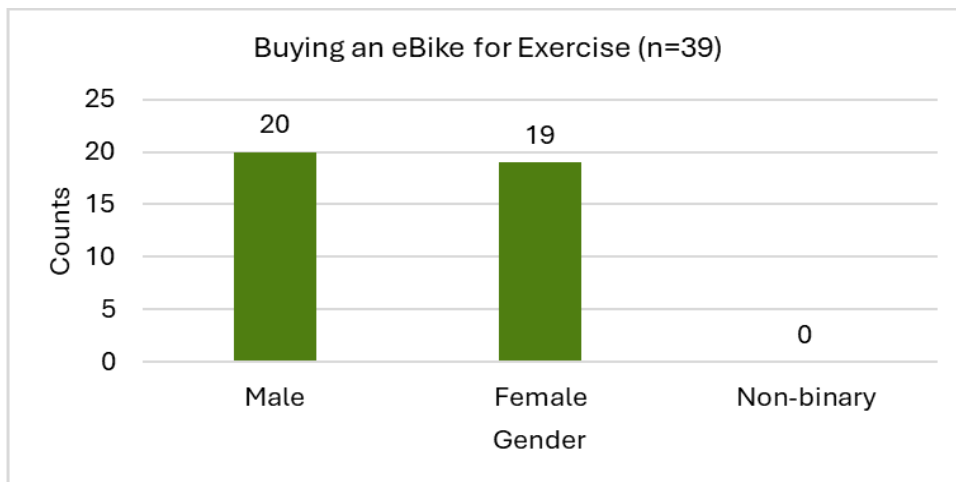


Figure 8 Exercise Use by Gender

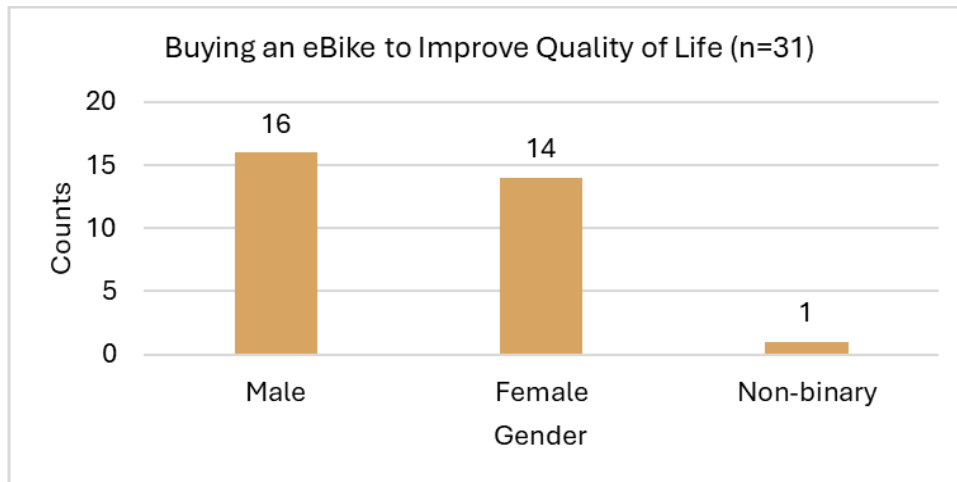


Figure 9 Reduce Environmental Impact by Gender

Applicants who had a household income between \$25K and \$50K most often stated they purchased their eBike to reduce environmental impacts (n=22) (Figure 55) and for exercise (n=16) (Figure 56), while those who earn between \$50k and \$75k were tied with households that earn between \$25K and \$50K on buying an eBike to improve their quality of life (n=10) (Figure 57). The figures below display the top reasons for respondents to acquire their eBike by income distribution.

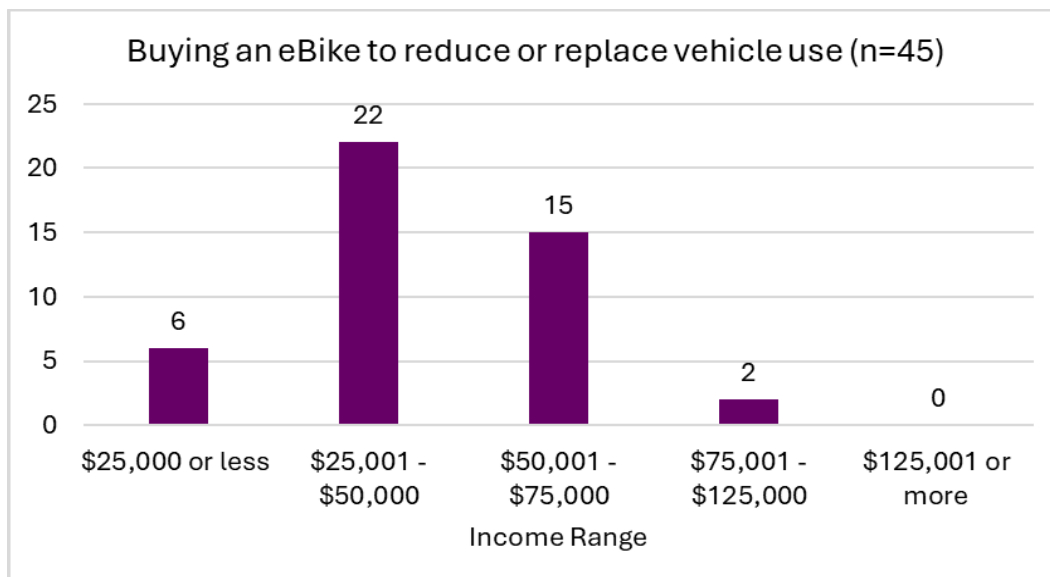


Figure 10 Reduce or Replace Vehicle Use by Income Range



Figure 11 Exercise Use by Income Range

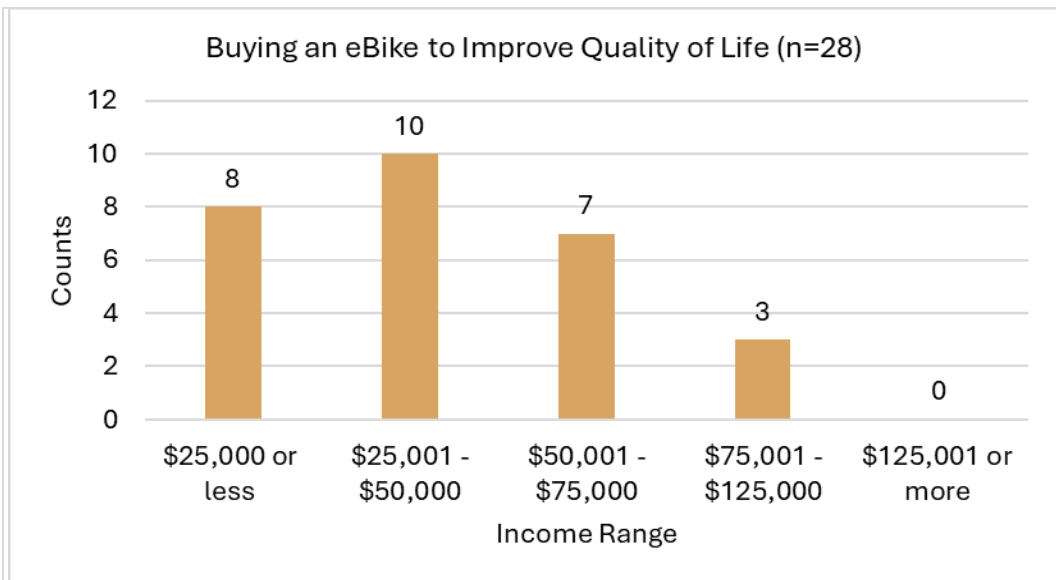


Figure 12 Quality of Life by Income Range