

# Vehicle Electrification in Vermont

---

PRESENTATION FOR HOUSE TRANSPORTATION COMMITTEE, JANUARY 17, 2023

PATRICK Ó. MURPHY, SUSTAINABILITY + INNOVATIONS PROJECT MANAGER, VT AGENCY OF TRANSPORTATION

A solid green horizontal bar at the bottom of the slide.

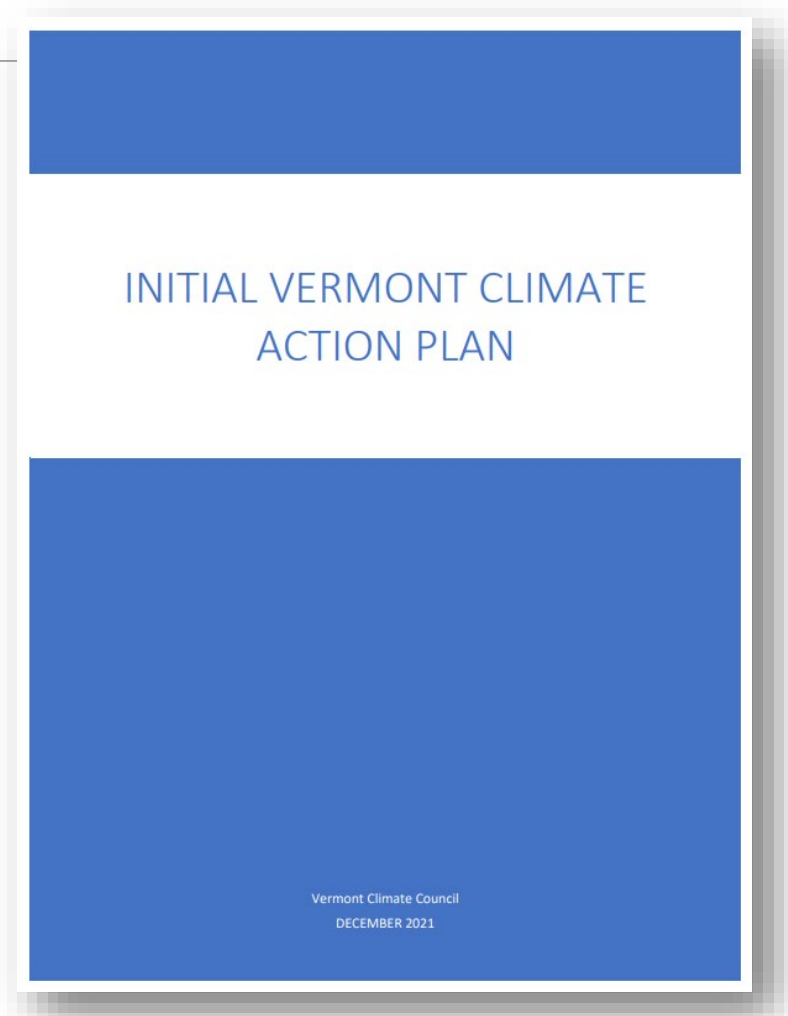
# Climate Action Plan

---

Initial plan finalized in December 2021

## EV Adoption Goals:

- **27,000** PEVs by **2025** (17% of sales)
- **126,000** PEVs by **2030** (68% of sales)
  
- Reduce GHG emissions below 2005 GHG emissions in Vermont by no less than 26% below 2005 GHG emission levels by January 1, 2025;
- by no less than 40% below 1990 GHG emission levels by January 1, 2030;
- and no less than 80% below 1990 GHG emission levels by January 1, 2050.



# CAP – Pathway 1 – Light Duty Electrification Strategies

---

## 1) Technology Forcing ZEV Regulation (100% by 2035)

## 2) EV Purchase Incentives

- a) New & used EVs and electric bicycles, designed for equity
- b) Expand to fleets
- c) Continue MileageSmart and Replace Your Ride
- d) Vehicle Efficiency Purchase and Use Tax Adjustment

## 3) EV Charging Investment

- a) Continue support for DCFC and Level 2
- b) Public, workplace and multifamily priorities
- c) Direct the PUC to consider EV charging rates

## 4) Transportation Climate Initiative (TCI)

## 5) EV and VMT reduction Outreach and Education

Electrify 27,000  
vehicles by 2025

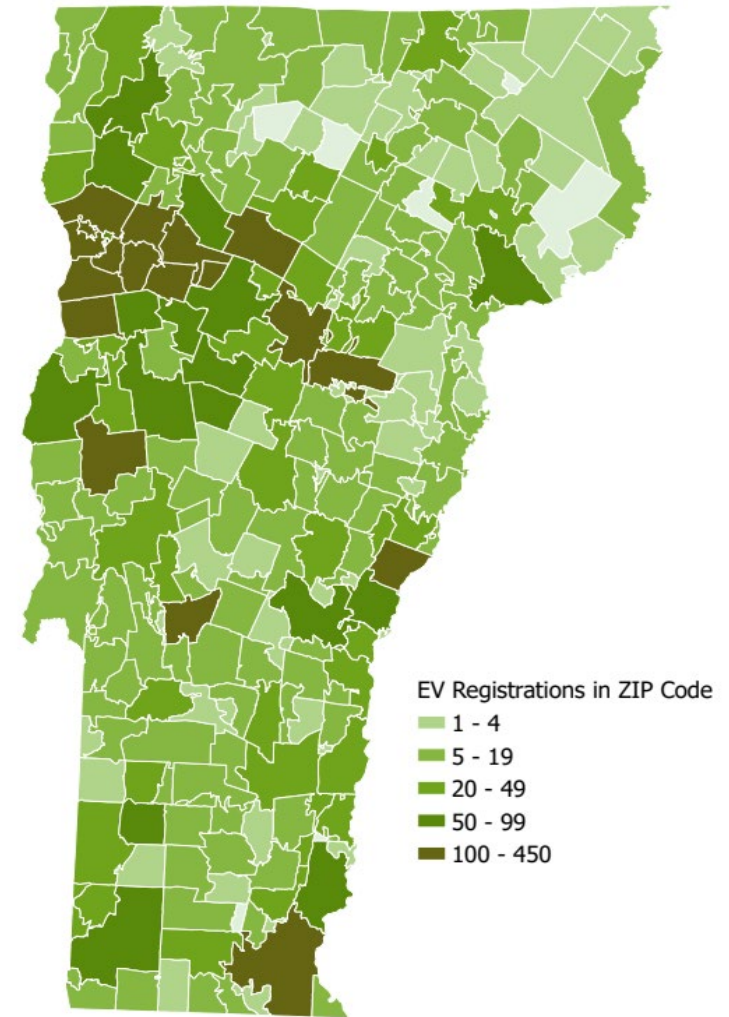
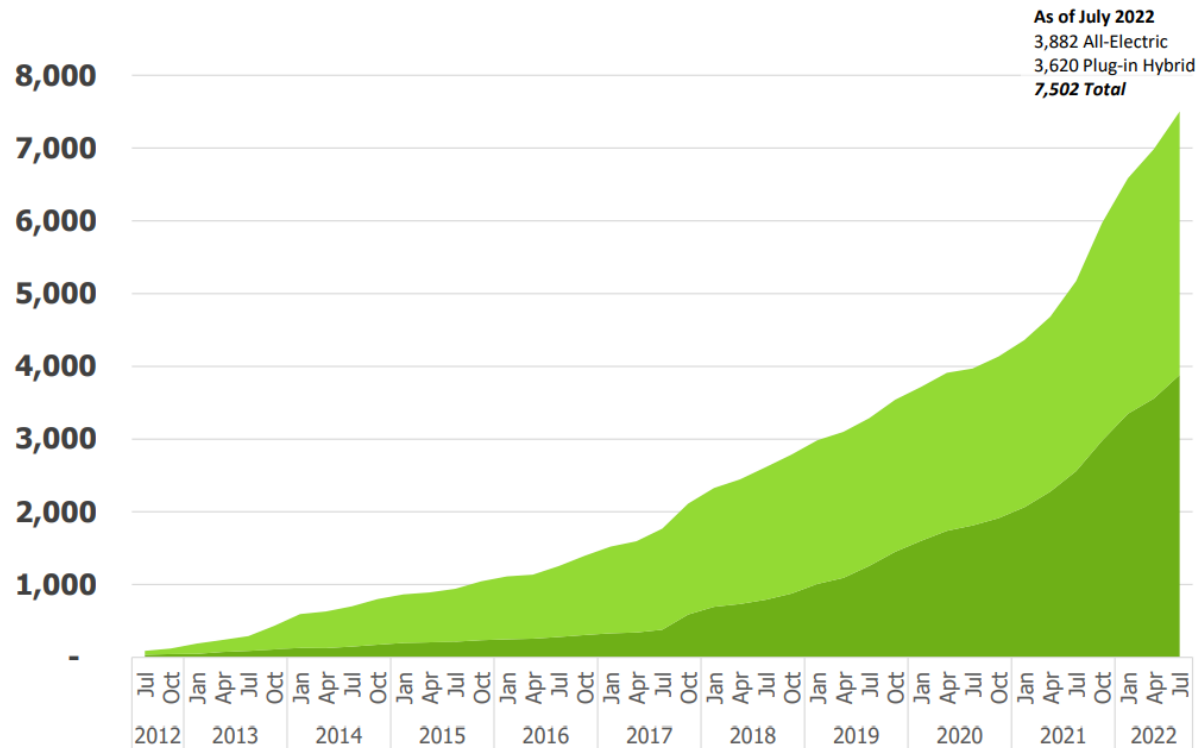
126,000 by 2030

# EV Adoption in Vermont

As of July 2022

## Vermont Electric Vehicle Registrations

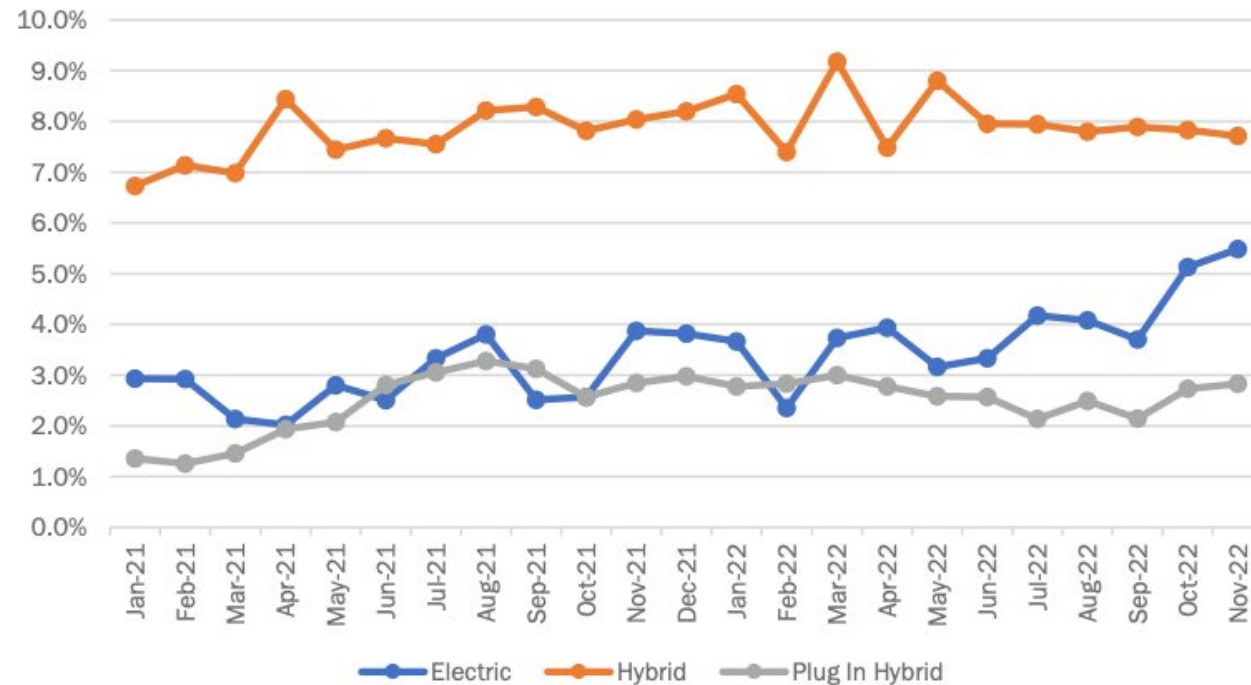
■ All-Electric Vehicles   ■ Plug-in Hybrid Electric Vehicles



# EV Adoption in Vermont

## HYBRID AND ELECTRIC VEHICLES

**Estimated Alternative Powertrain Market Share  
(includes hybrid and electric vehicles)**



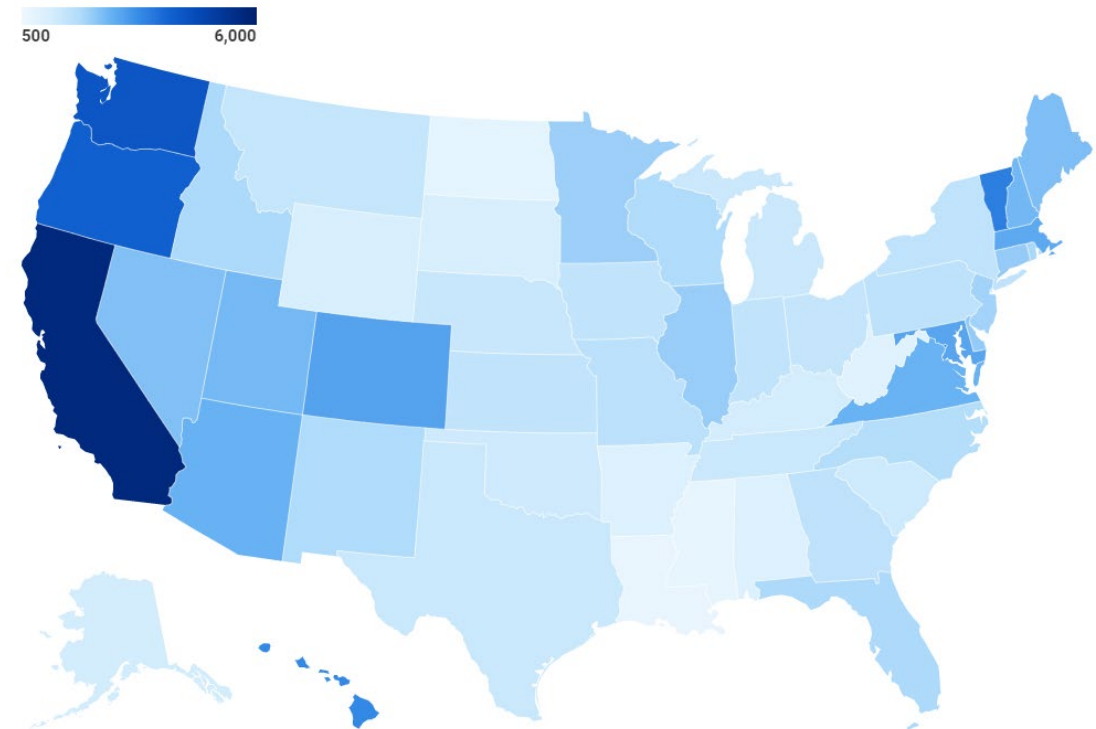
**Market Share by Engine Type  
(YTD '22 thru November)**

	YTD '21	YTD '22	
Hybrid	7.7%	8.1%	↑
Electric (BEV)	2.8%	3.9%	↑
Plug In Hybrid (PHEV)	2.4%	2.6%	↑

# EV Adoption in Vermont

- Vermont ranked 4<sup>th</sup> in nation for EV adoption
- 6.5% of sales for 2022 YTD, climbing to over 8%
- Inflation Reduction Act modifies federal tax credit to include automakers who had hit prior cap; introduces new used PEV tax credit up to 30% or \$4,000; restarts EV charger tax credit up to \$1,000; creates point-of-sale option for 2024
- Advanced Clean Cars II rules have some flexibility to allow for early compliance and lower vehicles cost credits
- Local utilities continue to offer stackable rebates

Electric and Hybrid Vehicles per 100,000 People



2021 data.

Map: Chris Gilligan • Source: USA Facts

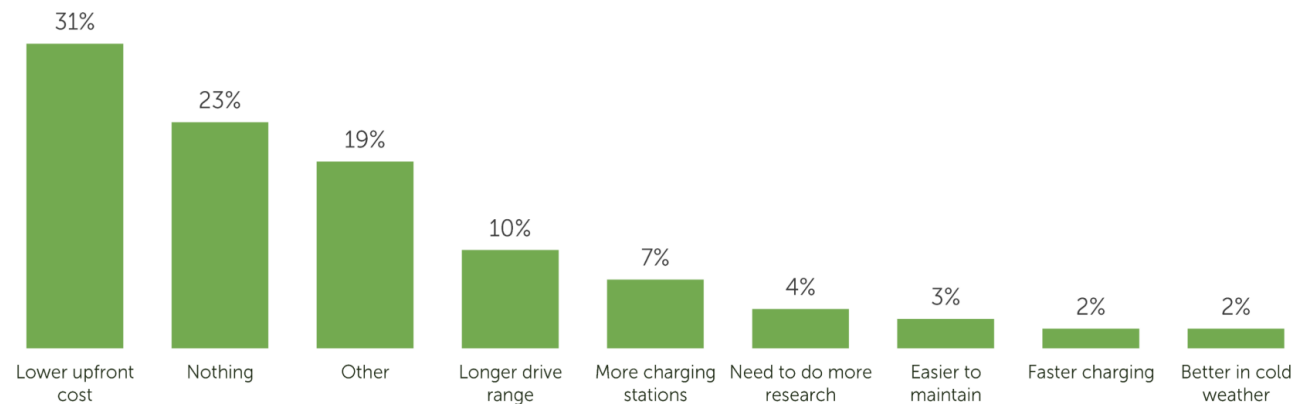
U.S. News

# EV Adoption in Vermont

## Continued Challenges:

- High prices of electric vehicles—52% of US consumers think EV prices are too high
- Vehicle availability—lingering impacts of microchip and other supply chain issues
- Lack of clarity on vehicle eligibility based on the sourcing of critical minerals and battery components

## What would make a VTer more likely to buy an EV?



Source:  
Efficiency Vermont

[Webinar: Are Vermonters Ready To Drive Electric? | Efficiency Vermont](#)



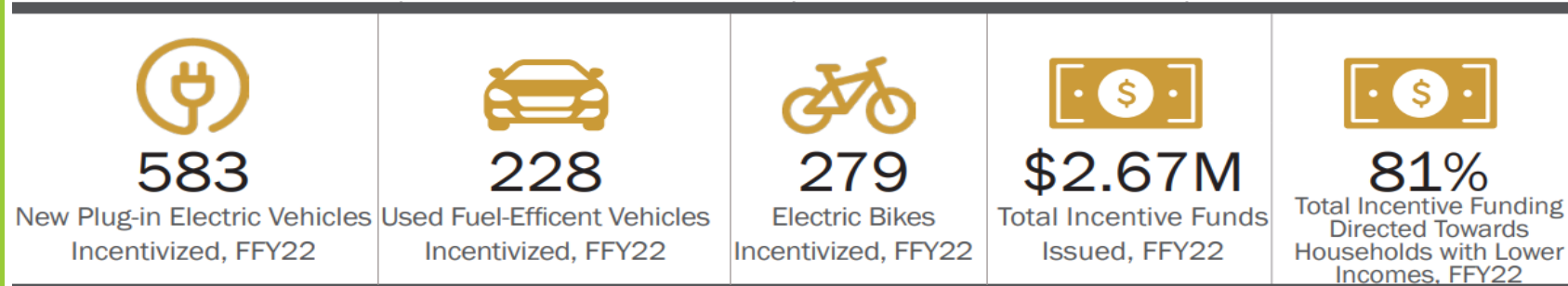
# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership

# Vermont Investments in Electrification

Over **\$36 million** authorized in SFY2023 for vehicle incentives and electric vehicle charging infrastructure

- Incentives for New PEVs, \$12 million
- MileageSmart, \$3 million
- Replace Your Ride, \$3 million
- eBike Incentive Program, \$50k
- Drive Electric Vermont, \$2 million
- Corridor fast-charging, \$6.25 million
- Community charging, \$10 million





# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership






# Incentive Program Administration



**Center for Sustainable Energy** tapped to streamline administration of incentive programs:

- **Incentives for New PEVs** transitioned from Drive Electric Vermont and utilities
- **MileageSmart** continued to be administered by Capstone Community Action
- **Replace Your Ride** launched in two phases this fall
- **eBike Incentive Program** launched this summer, first in the nation



 <p><b>583</b> New Plug-in Electric Vehicles Incentivized, FFY22</p>	 <p><b>228</b> Used Fuel-Efficient Vehicles Incentivized, FFY22</p>	 <p><b>279</b> Electric Bikes Incentivized, FFY22</p>	 <p><b>\$2.67M</b> Total Incentive Funds Issued, FFY22</p>	 <p><b>81%</b> Total Incentive Funding Directed Towards Households with Lower Incomes, FFY22</p>
---	--	--	---	---

# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership

# Incentive Program for New PEVs

Up to **\$4000** for a new all-electric vehicle

## Program Guidelines

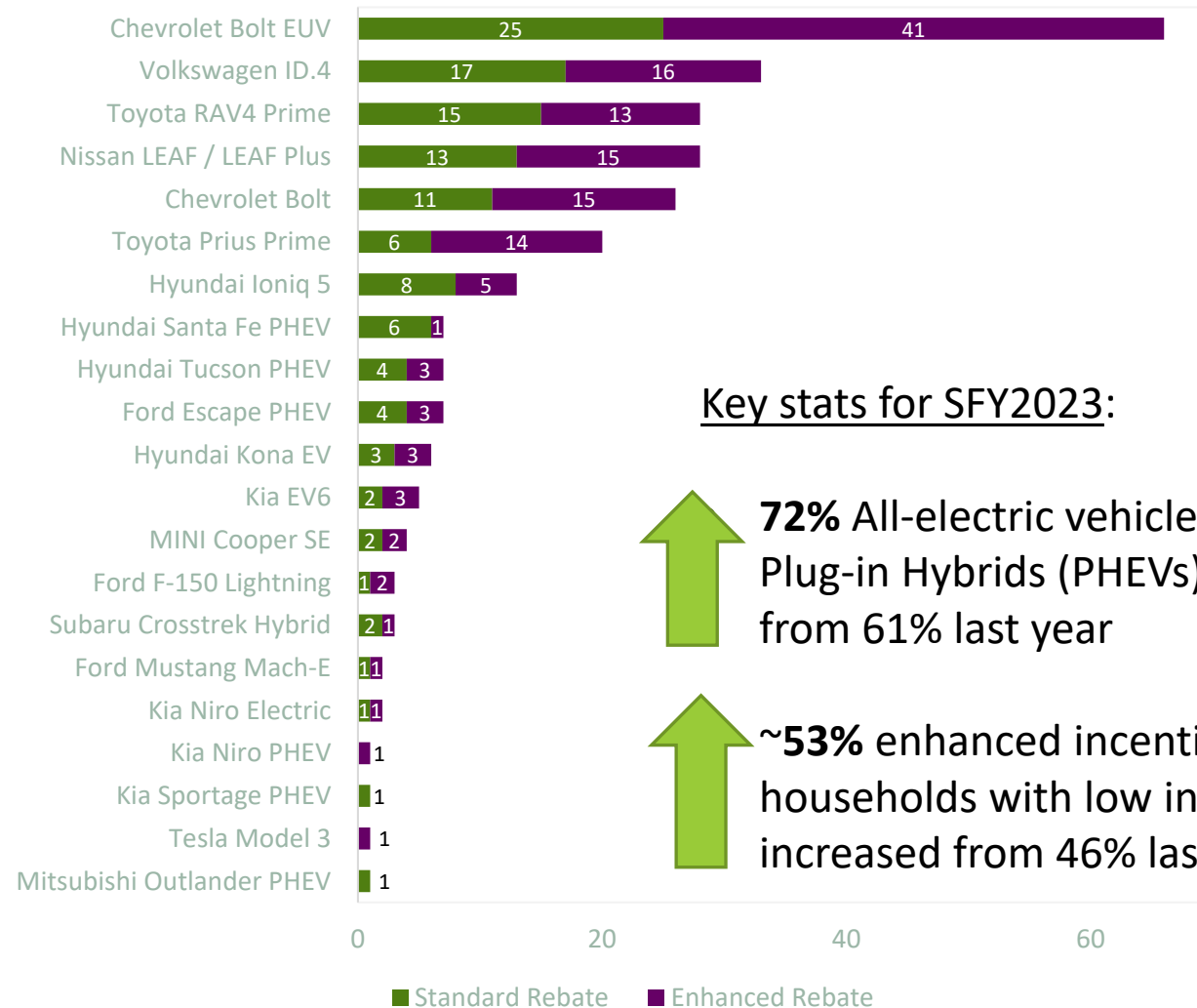
Tax Filing Status	Adjusted Gross Income (AGI) Limits for Enhanced and Standard Incentives	State Incentive Amount	
		Plug-in Hybrid Electric Vehicle	All-Electric Vehicle
<b>Individual</b> filing as <b>single</b> or <b>head of household</b>	\$50,000 or less	\$3,000	\$4,000
	\$50,001 up to \$100,000	\$1,500	\$2,500
<b>Married</b> filing <b>jointly</b>	\$75,000 or less	\$3,000	\$4,000
	\$75,001 up to \$125,000	\$1,500	\$2,500
<b>Married</b> filing <b>separately</b>	\$50,000 or less	\$3,000	\$4,000
	\$50,001 up to \$100,000	\$1,500	\$2,500
<b>Individual</b> filing as qualifying <b>widower</b>	\$75,000 or less	\$3,000	\$4,000
	\$75,001 up to \$125,000	\$1,500	\$2,500

Over **\$10 million** remaining out of nearly \$15 million in incentive funds

# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership

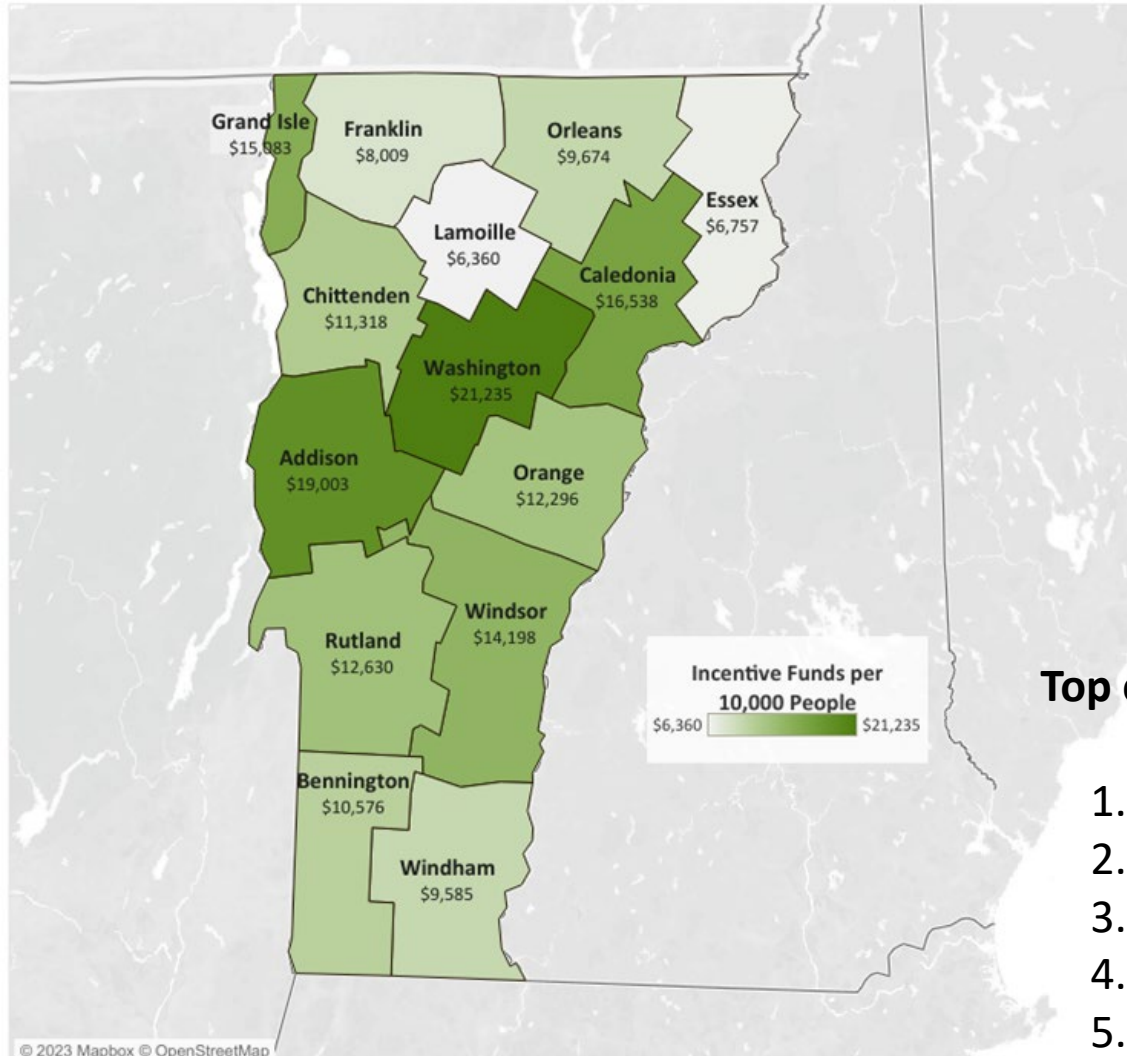
## Incentive Program for New PEVs



# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership

## Incentive Program for New PEVs



### Top counties in FY23:

1. Washington
2. Addison
3. Caledonia
4. Grand Isle
5. Windsor

# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership

## Incentive Program for New PEVs

### Key Considerations:

- Vehicle MSRP cap
- Income guidelines
- Incentive amounts
- PHEV minimum standards

Program	Price Cap
CHEAPR (Connecticut)	\$50,000 MSRP
MOR-EV (Massachusetts)	\$50,000 (PHEV); \$55,000 (BEV & FCEV) Purchase Price
Charge Up New Jersey	\$55,000 MSRP
Drive Clean (New York)	\$42,000 base model MSRP; MSRP >\$42,000 eligible for reduced rebate (\$500)
Vermont New PEV	\$40,000 (PHEV); \$45,000 (BEV) base model MSRP

Center for Sustainable Energy to complete Incentive Program Optimization Study by February to provide recommendations for all three programs (New, Used, Replace Your Ride)

Program/State	2022 population	Approved applications (July '22 – Nov. '22)	Approved applications per 1,000 residents
CHEAPR (CT)	3,626,205	583	0.16
MOR-EV (MA)	6,981,974	1,267	0.18
Charge Up New Jersey (NJ)	9,261,699	1,293	0.14
Drive Clean (NY)	19,677,151	12,518	0.64
Vermont New PEV (VT)	647,064	264	0.41

# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership



## Program Summary

- For Vermonters at or below 80% of State Area Median Income
  - For used vehicles rated by EPA at **40 MPG** or higher
  - Incentives up to 25% of vehicle cost, capped at **\$5,000**



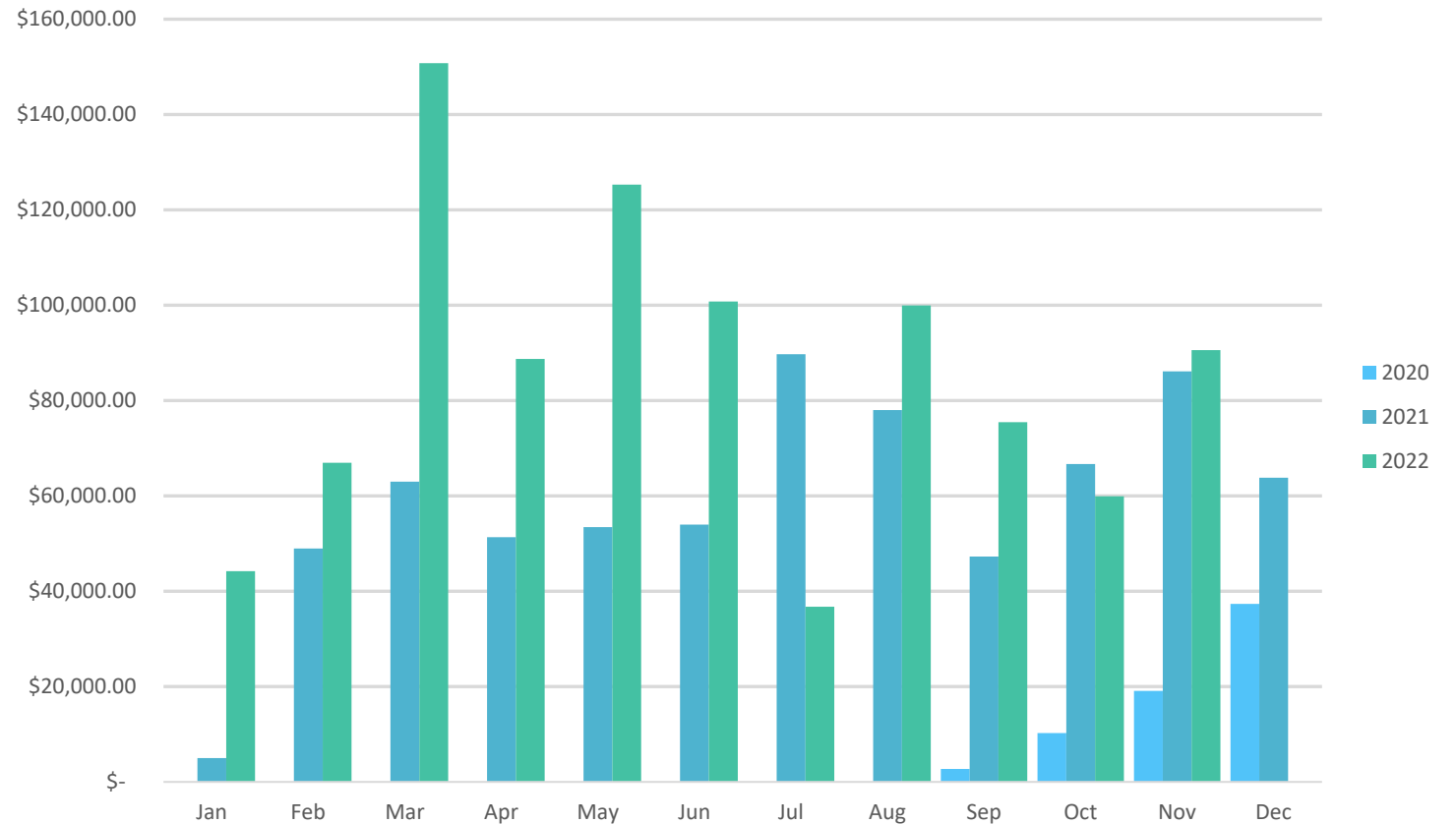
**~\$3.1 million in incentive funds remaining**  
(Out of \$5,200,000 total since 2020)

**\$3 million authorized for SFY2023 in Act 184**

Up to 15% of incentives issued allowed for program administration

# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership



- More than **\$1 million** invested in **403** used vehicle incentives historically; **82** issued in SFY2023 YTD
- Over **40%** of funding toward purchases of used PEVs



# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership



## Key Considerations:

- Vehicle MSRP cap
- Income Guidelines
- Incentive Amounts (AEVs, PHEVs, conventional hybrids)
- Limited vehicle supply—ideas to increase supply in short-term

Pre-Owned 2016 Nissan LEAF 4dr HB SL FWD 4dr Car  
VIN: 1N4BZ0CP6GC310344 STOCK: C230310A

PRICE \$14,988  
[Details](#)

This is getting attention.  
46 people have recently viewed it.

[Confirm Availability](#)

(32) Photos

- Over 1,000 on waitlist;
- Deal duration up 33% in SFY2023

# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership

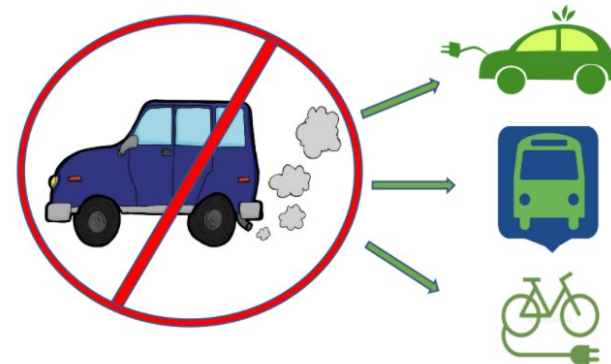
## Replace Your Ride

### Program Summary

**Center for Sustainable Energy launched program in September 2022**

\$3,000 voucher for Vermonters to replace 10+ year-old less efficient vehicles with cleaner transportation options (PEVs, bikes, e-bikes, e-motorcycles, shared mobility)

**\$3,000,000 authorized for SFY2023 in Act 184**



Participants must qualify for either MileageSmart or lower income bracket for New PEV Incentives

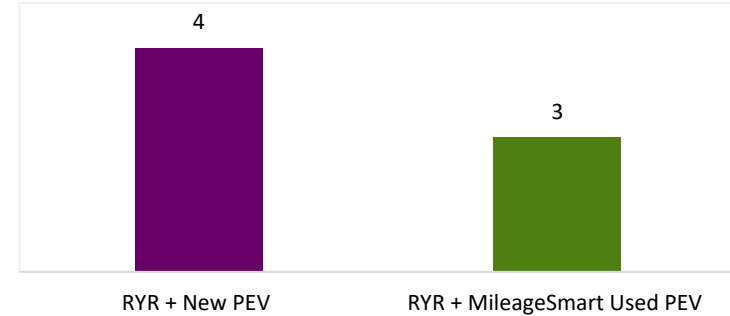
# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership

## Replace Your Ride

### Key Considerations:

- Income Guidelines
- Incentive Amounts
- Eligible Vehicles
- Participating vendors



	Replaced Vehicle			Incentivized Vehicle		
	Make/Model	Model Year	Odometer (miles)	Vehicle Type	Make/Model	Model Year
	Chevrolet Cruze	2011	57,840	Used PHEV	Chevrolet Volt	2017
	Nissan VRS	2008	92,793	Used PHEV	Kia Optima	2017
	Mazda MZ3	2008	138,061	Used BEV	Kia Niro	2020
	Subaru Legacy	2005	215,162	New BEV	Nissan Leaf	2023
	Volvo V70	2006	204,990	New BEV	Chevrolet Bolt	2023
	Honda Civic	2008	195,671	New BEV	Nissan Leaf	2023
	Honda Pilot	2008	201,884	New BEV	Nissan Leaf	2023

# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- **eBike Incentive Program**
- Drive Electric Vermont partnership

# Incentive Program for Electric Bicycles

## Program Summary

**Vermont launched first statewide e-bike incentive program in the nation, July 2022**

**\$105,000 total authorized in SFY2022 and SFY2023 (Acts 55 & 184)**

- Program mirrored Incentive Program for New PEVs with two pathways:
  1. Point of Sale rebate at participating Vermont retail shops
  2. Consumer direct rebate post purchase to allow purchases online
- Incentive could be stacked on existing utility incentives (such as those offered by GMP, BED, Stowe Electric, etc)



# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- **eBike Incentive Program**
- Drive Electric Vermont partnership

# Incentive Program for Electric Bicycles

Table 1. Incentive Amounts by Tax Filing Status, Adjusted Gross Income, and eBike Cost

<b>Enhanced Rebate Eligibility and Incentive Amount</b>		
<b>Adjusted Gross Income</b>	<b>State Incentive Amount</b>	
	<b>New eBike Cost: less than \$800.00*</b>	<b>New eBike Cost: greater than \$800.00*</b>
<ul style="list-style-type: none"> <li>• <b>\$50,000 or less</b> for an Individual filing as <b>single</b> or <b>head of household</b></li> <li>• <b>\$50,000 or less</b> for a <b>Married couple</b> filing <b>separately</b></li> <li>• <b>\$75,000 or less</b> for a <b>Married couple</b> filing <b>jointly</b></li> <li>• <b>\$75,000 or less</b> for an <b>Individual</b> filing as a qualifying <b>widower</b></li> </ul>	50% of sale price	\$400
<b>Standard Rebate Eligibility and Incentive Amount</b>		
<b>Adjusted Gross Income</b>	<b>State Incentive Amount</b>	
	<b>New eBike Cost: less than \$833.33*</b>	<b>New eBike Cost: greater than \$833.33*</b>
<ul style="list-style-type: none"> <li>• <b>\$50,001 to \$100,000</b> for an <b>Individual</b> filing as <b>single</b> or <b>head of household</b></li> <li>• <b>\$50,001 to \$100,000</b> for a <b>Married couple</b> filing <b>separately</b></li> <li>• <b>\$75,001 to \$125,000</b> for a <b>Married couple</b> filing <b>jointly</b></li> <li>• <b>\$75,001 up to \$125,000</b> for an <b>Individual</b> filing as <b>qualifying widower</b></li> </ul>	30% of sale price	\$250

\*The Purchase Price does not include sales tax.

# Clean Transportation Incentive Programs

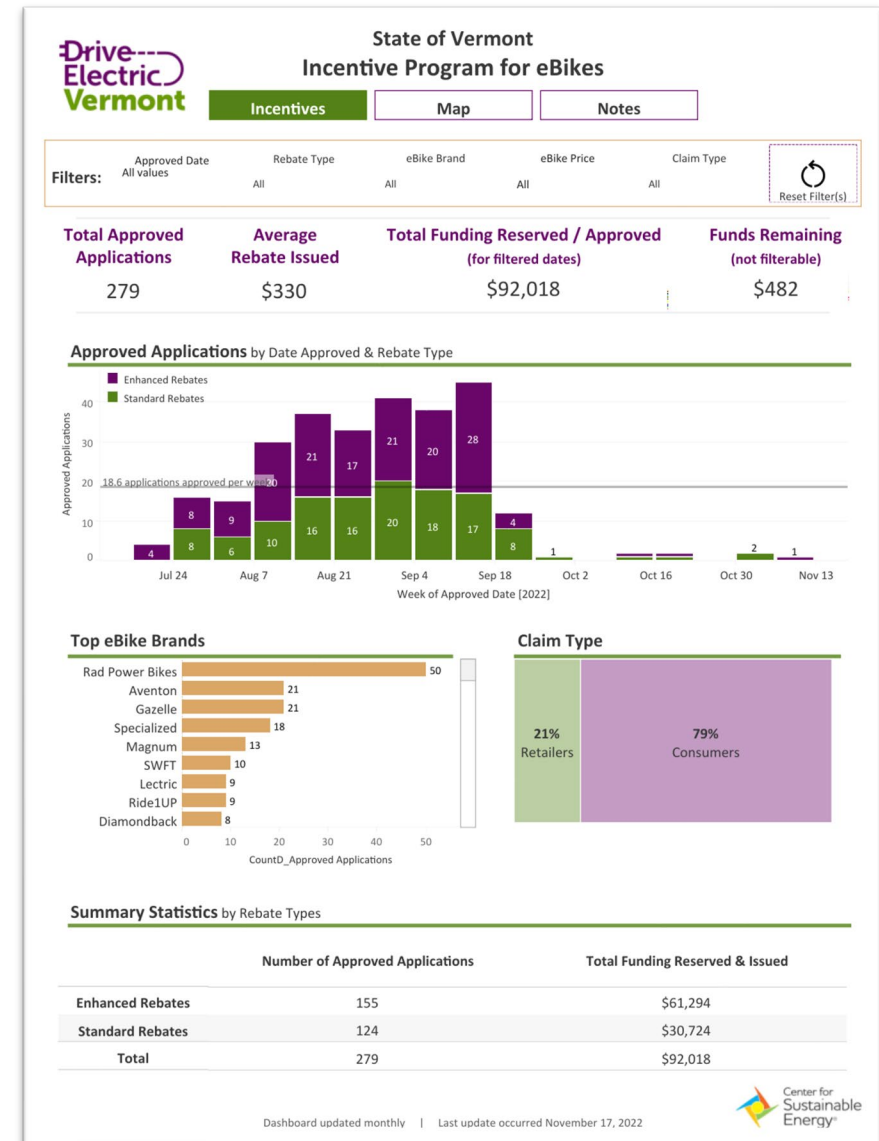
- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership

# Incentive Program for Electric Bicycles

## Key Stats:

- **279** incentives issued
- **\$330** average incentive
- **70%** of funding for enhanced incentives to households with lower incomes
- **21%** purchases at local shops; 79% online

Center for Sustainable Energy to finish survey of participants this month

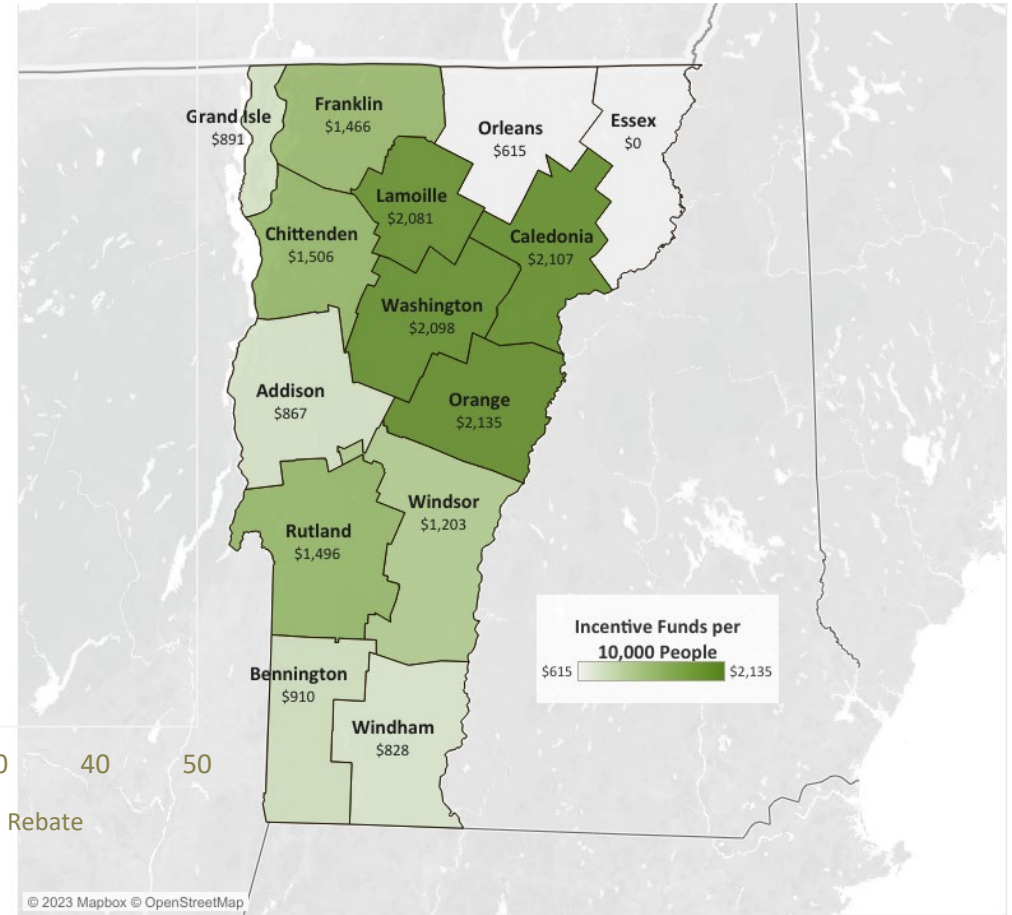
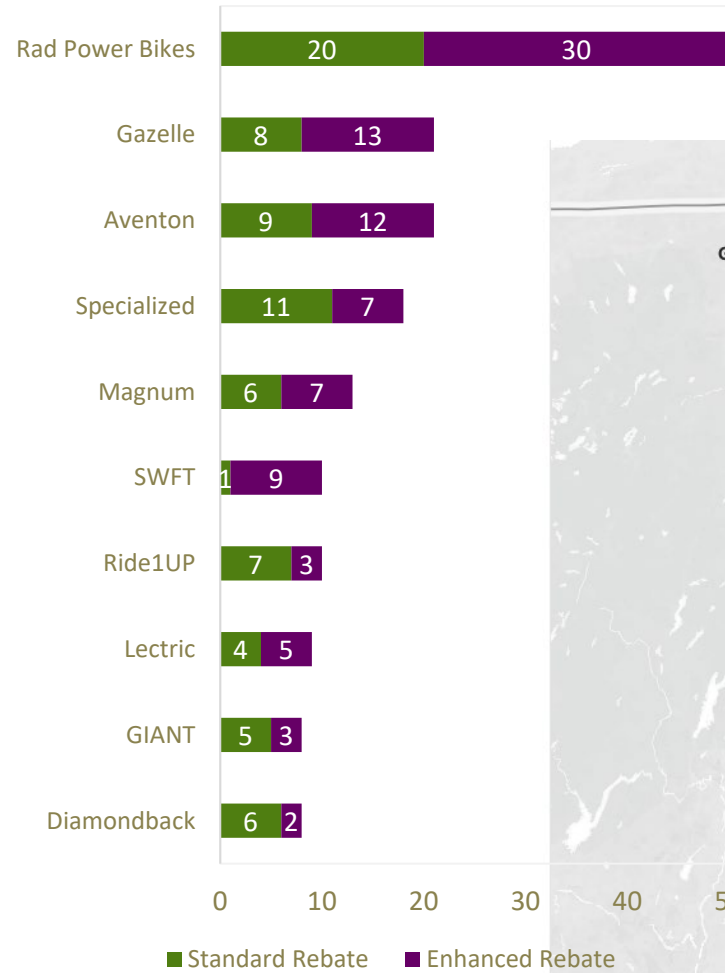




# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- **eBike Incentive Program**
- Drive Electric Vermont partnership

# Incentive Program for Electric Bicycles





# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- [Drive Electric Vermont partnership](#)

## Partnership with Drive Electric VT

**\$2 million authorized in FY2023 for Transportation Electrification, in addition to continued support to Incentive Program for New PEVs**

Drive Electric Vermont is a public-private partnership established in 2012 by Vermont Energy Investment Corporation (VEIC) and the State, working to advance transportation electrification through:

- Stakeholder coordination
- Policy engagement
- Consumer education & outreach
- Infrastructure development

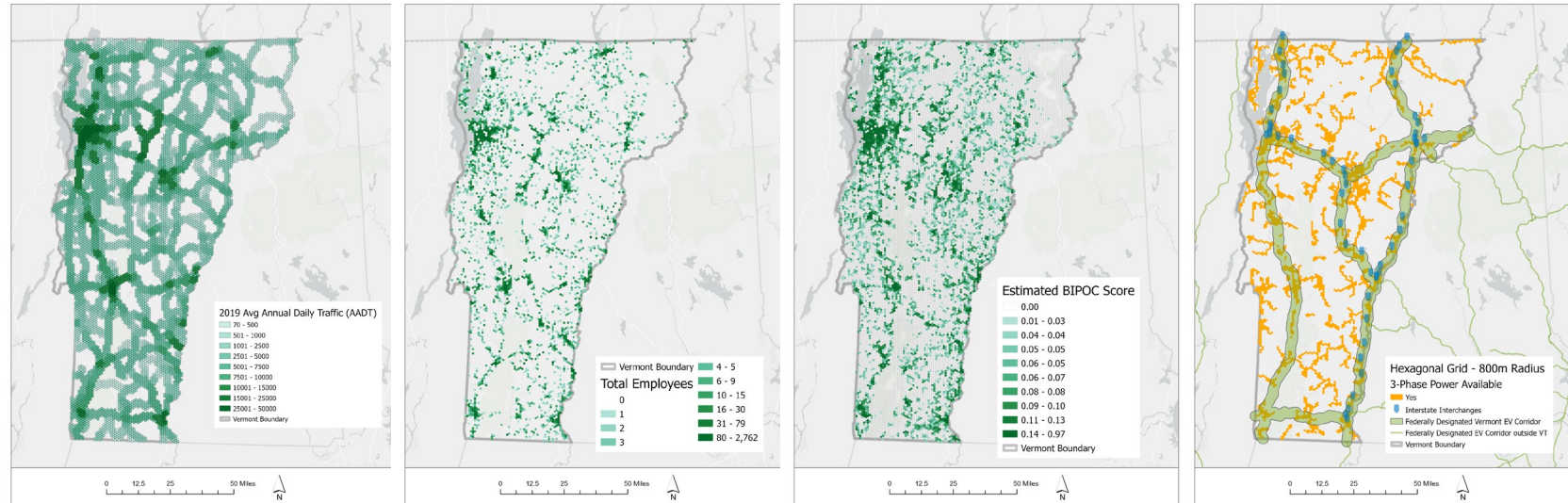


# Clean Transportation Incentive Programs

- Incentive Program for New Plug-in Electric Vehicles (PEVs)
- MileageSmart (Used EVs/PHEVs/hybrids)
- Replace Your Ride
- eBike Incentive Program
- Drive Electric Vermont partnership

# Partnership with Drive Electric VT

- VEIC supported VTrans in developing and submitting FHWA-approved National Electric Vehicle Infrastructure (NEVI) Plan to guide federal fast-charging investments along highway corridors
- Provided informational resources and technical assistance to residents, businesses, municipalities, nonprofits
- New priorities for 2023 and beyond include a leading-by-example Agency electrification plan, EV workforce development and diversity efforts, increased fleet support, deeper public engagement



# Contact

---

**Patrick Ó. Murphy**

Sustainability & Innovations Project Manager  
Policy, Planning & Intermodal Development Division  
*Vermont Agency of Transportation*

802.595.6738

[Patrick.Murphy@vermont.gov](mailto:Patrick.Murphy@vermont.gov)

# Electric Vehicle Infrastructure in Vermont

---

PRESENTATION FOR HOUSE TRANSPORTATION COMMITTEE, JANUARY 17, 2023

PATRICK Ó. MURPHY, SUSTAINABILITY + INNOVATIONS PROJECT MANAGER, VT AGENCY OF TRANSPORTATION

A solid green horizontal bar at the bottom of the slide.

# Charging Equipment

## Level 1 Charging

120V

5 miles range / hr



J1772



Tesla

## Level 2 Charging

240V

10-20 miles / hr



J1772



Tesla

## DC Fast Charging

480V

Up to 1,000 miles / hr



CCS



CHAdemo

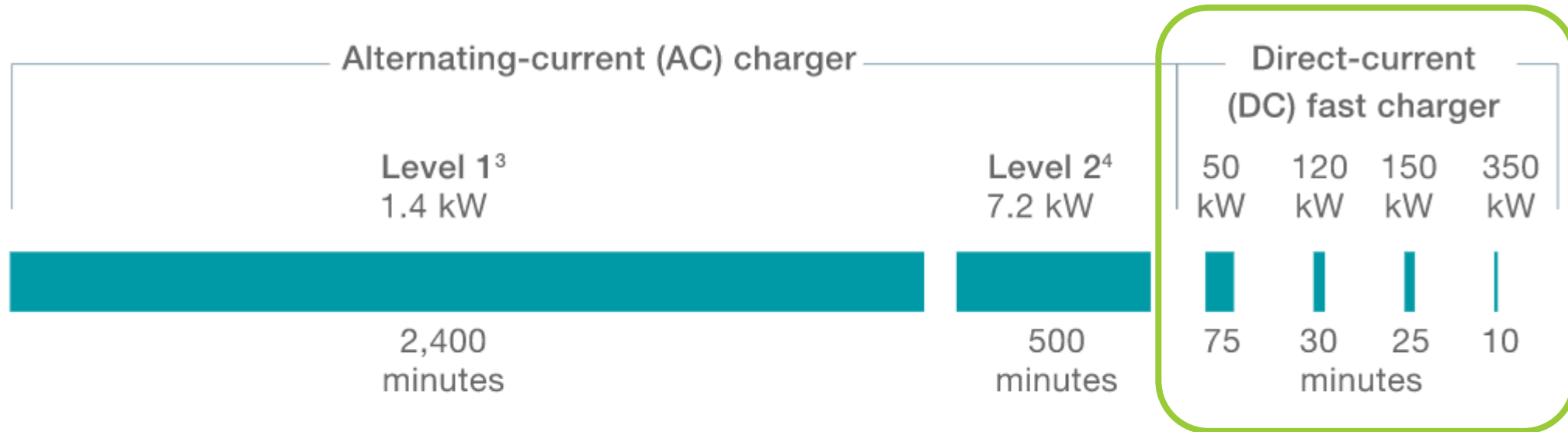


Tesla

Plug Types →

# Charging Equipment

Time to “fill up” a 60-kWh electric-vehicle (EV)<sup>1</sup> battery using different chargers<sup>2</sup>



<sup>1</sup>This assumes that the EV can charge at the higher kW direct-current fast-charging stations; most EVs today cannot charge faster than 100 kW.

<sup>2</sup>This assumes that the EV can charge at maximum speed during the entire charge. In reality, the charging speed varies.

<sup>3</sup>Level 1 equipment provides charging through a 120-volt AC plug; it generally refers to a household outlet.

<sup>4</sup>Level 2 equipment provides charging through a 240-volt AC plug and ranges from 16 to 40 amps. The most common is the 240-volt, 30-amp charger, which is 7.2 kW.

McKinsey&Company

[Mckinsey.com](https://www.mckinsey.com)

# Charging Equipment

## Differences between Community and Corridor Charging

- Cost of infrastructure
- Cost of charging
- Charging speed
- Trip purposes
- Dwell times

Location	Charge Time	Price	Level	Driver
Interstate Travel	<b>Travel</b> 20 min	\$\$\$\$	Fast Charging	Parked
Entertainment/ Shopping/ Recreation	<b>Public</b> 0.5 – 3 hours	\$\$\$	L2/L3	Parked
Work/Transit Parking/Airport	<b>Workplace</b> 4 – 8 hours	\$\$	L1/L2	Parked
At Home	<b>Residential</b> 8 – 10 hours	\$	L1/L2	Sleeping Parked



# Charging Equipment – Capital Costs

	<b>Level 1</b>	<b>Level 2</b>	<b>DC Fast Charging</b>
<b>Equipment Price</b>	\$30 - 900	\$600 - 9,000	\$15,000 - 150,000+
<b>Installation</b>	\$200 - 450+	\$2,000 - 12,000+	\$10,000 - 100,000+
<b>Total Capital Cost</b>	<b>\$230 - 1,350+</b>	<b>\$2,600 - 21,000+</b>	<b>\$25,000 - 250,000+</b>

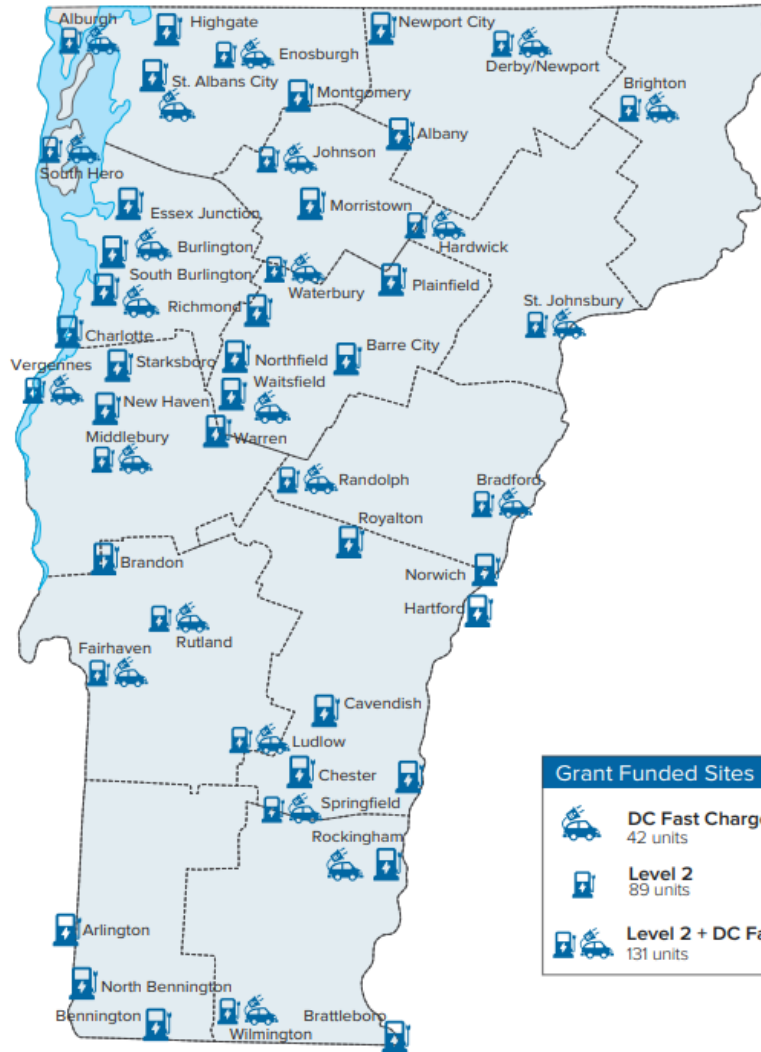
# Charging Equipment – Operating Costs

	<b>Level 1</b>	<b>Level 2</b>	<b>DC Fast Charging</b>
<b>Energy</b>	\$200 – 800+	\$200 – 2,500	\$500 - 15,000+
<b>Networking (optional)</b>	\$150 – 300	\$200 – 400	\$200 - 500+
<b>Maintenance</b>	\$200 – 400+	\$400 – 800	\$400 – 10,000+
<b>Total Annual Cost</b>	<b>\$550 - 1,500+</b>	<b>\$800 – 3,700+</b>	<b>\$1,100 - 25,500+</b>

# Funding Timeline

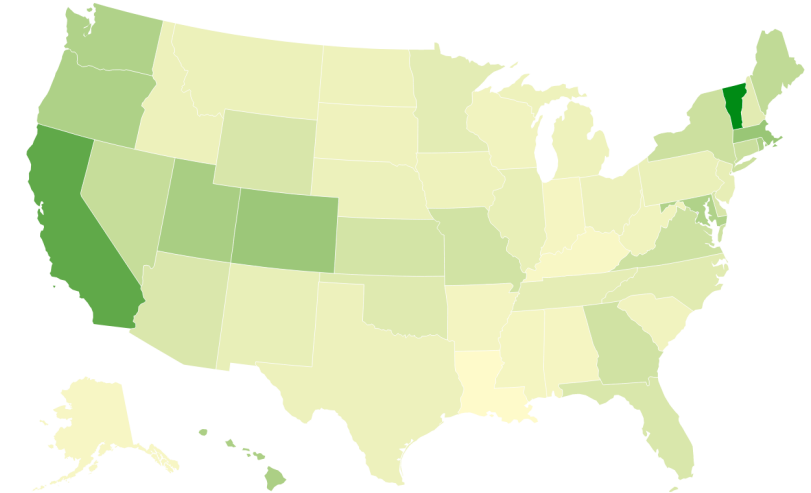
- 2014: DHCD and Dept of Environmental Conservation launch Electric Vehicle Supply Equipment (EVSE) Program with \$200k
- 2017: Volkswagen Settlement, \$2.8 million
- 2019: ~ \$1 million for 75 Level 2 + 5 DC Fast Chargers
- 2020: \$1.7 million to Blink for 11 locations
- 2021: \$750k in capital funds to Norwich Technologies for 6 locations
- 2022: \$1 million to residential charging for multiunit housing

# Public EVSE Investments in Vermont



## Alternative Fueling Station Density Across the U.S.

EV Chargers Per 100,000 Residents  
8.3 139.7



Ranking based upon EV charger density per capita; a rank of 1 is the best, most-dense.  
Source: CoPilot • Created with Datawrapper

Grant Funded Sites	
	DC Fast Charge 42 units
	Level 2 89 units
	Level 2 + DC Fast Charge 131 units

Vermont has highest number of public chargers per capita in U.S.

139.7 charging ports per 100,000 people

# Annual EVSE Map

**17** locations under contract and in progress with Blink Charging and Norwich Technologies

Minimum 2 DC Fast Chargers, with Level 2 charger for redundancy

## New Station Locations

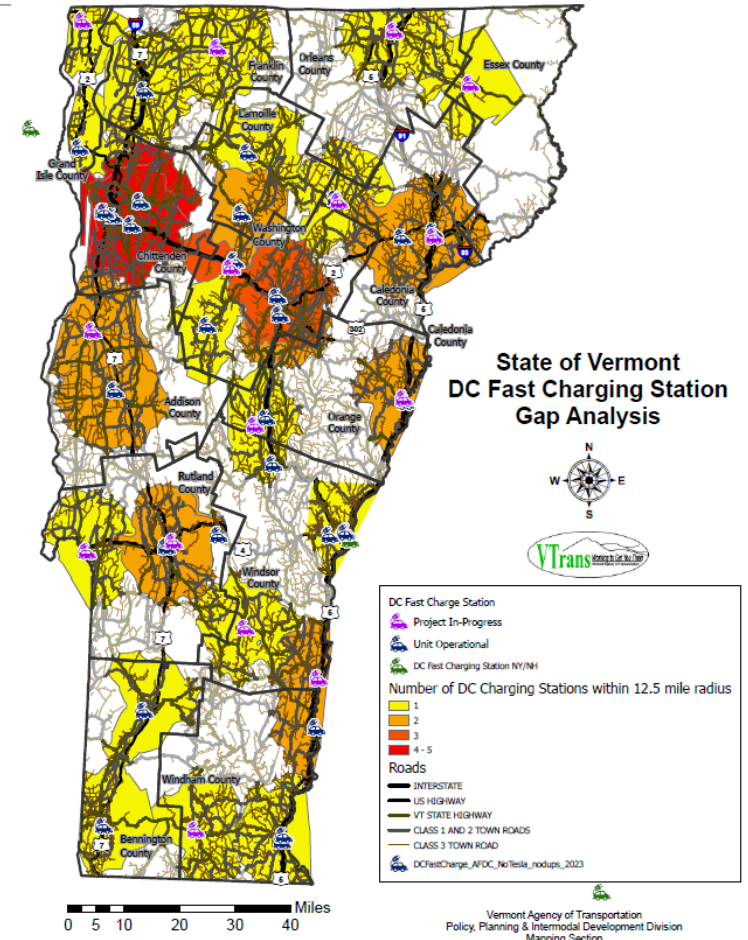
Waterbury, Bennington, Brattleboro, Royalton/Bethel, White River Junction, Killington, Hardwick, Hartford, Randolph, St. Johnsbury

## Challenges:

- Limited state funding
- Slow rollout of federal
- Site host agreements
- Electrical upgrades
- Supply chain issues
- Rural business case

## Private Investments:

- GMP/utilities
- Auto Dealerships
- Convenience stores/gas
- Community Attractions

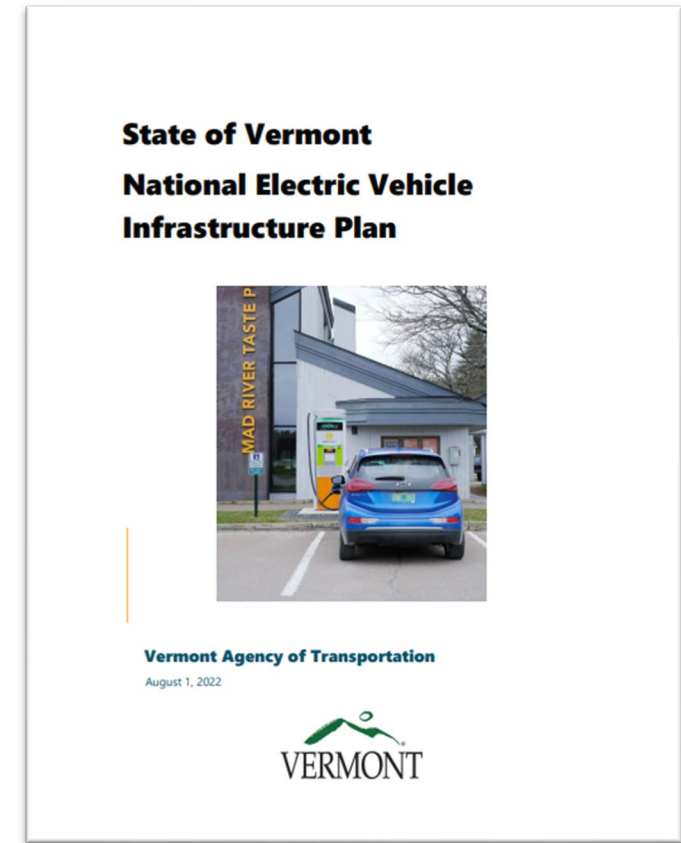


# EV Charging Infrastructure

**\$6.25 million in federal funds** authorized in SFY2023 for fast charging along highway corridors

Coming up:

- **Vermont National Electric Vehicle Infrastructure (NEVI)** Plan approved in September 2022 by FHWA unlocks **\$21.2 million** over five years for corridor charging; annual plan update required
- **Inflation Reduction Act (IRA)** reinstates and expands EV charging tax credits to enable more projects throughout the state
- **Carbon Reduction Program** to allow more flexible investments on important, but non-designated corridors
- **NEVI “gap-filling” and competitive grants** to further build out corridors and communities alike



# Timeline

February – July 2022: Guidance announced in February, Notice of Proposed Rulemaking in June; Outreach and plan development

July 2022: Vermont submitted EV Charging Plan to FHWA

August 2022: Proposed phaseout of existing waiver for EVSE from Buy America provisions of IJA

September 2022: FHWA approval of plan

Winter- Spring 2023: Public Engagement Plan

Updated Plan Due Annually

# NEVI Formula Program Guidance

- Priority given to EVSE along the interstates for corridor nominations, and investments to be made there first. (When fully “built out” as certified by FHWA, State may move onto other locations)
- New minimum requirements: 4 CCS ports of 150 kW each (600 kW total per site)
- 50 mile distance from the next charging location, but now only 1 mile from interstate exit or state highway intersection (prior radius was 5 miles)

## No guidance yet on the following:

- Minimum standards for equipment
- Buy America requirements
- Waiver or buildout certification process
- 10% for Gap-filling grants
- Competitive grant programs for Corridor and Community Charging



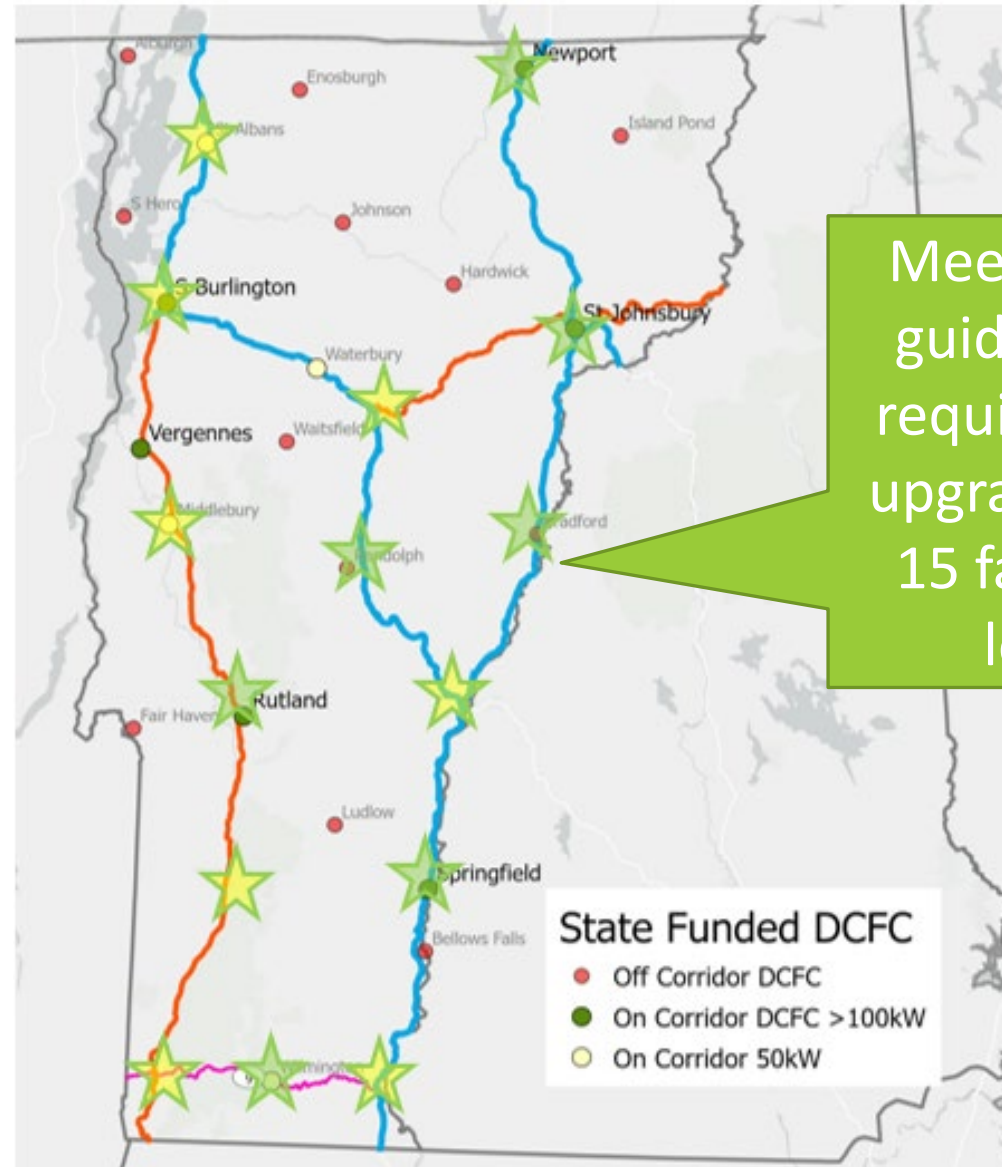




# National Electric Vehicle Infrastructure (NEVI) Plan

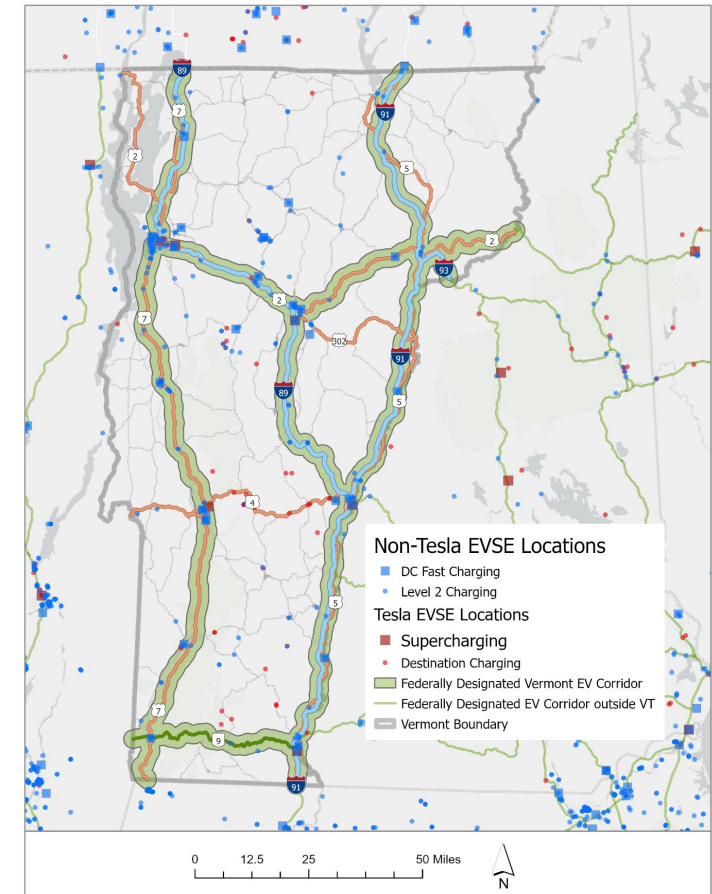
## Planned Upgrades:

- Bradford
- Derby/Newport
- Randolph
- Rutland
- St. Johnsbury
- Springfield
- Wilmington



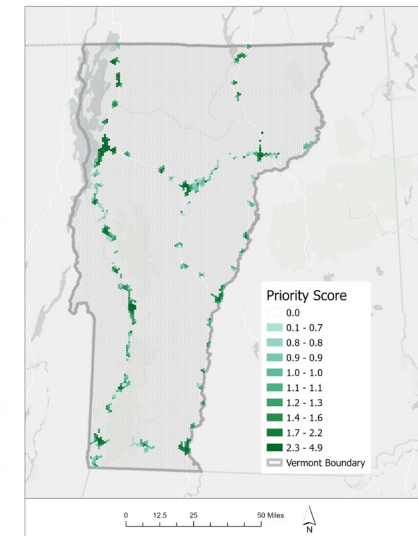
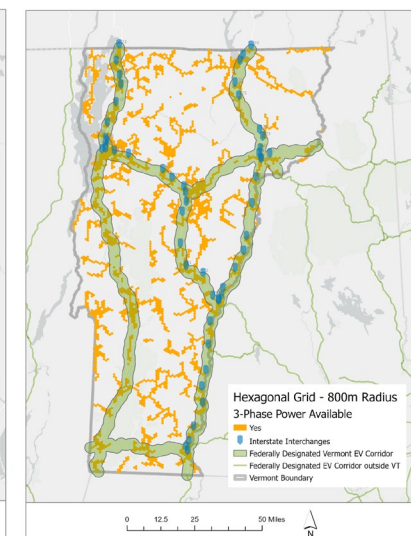
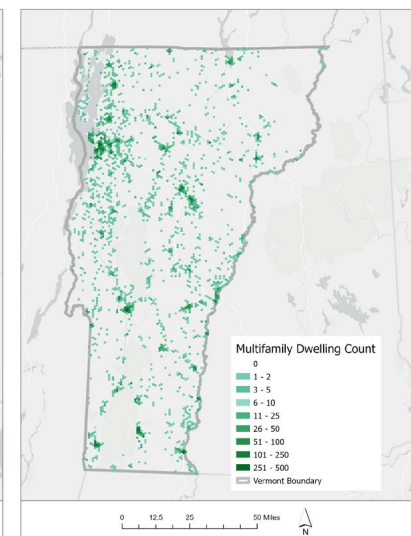
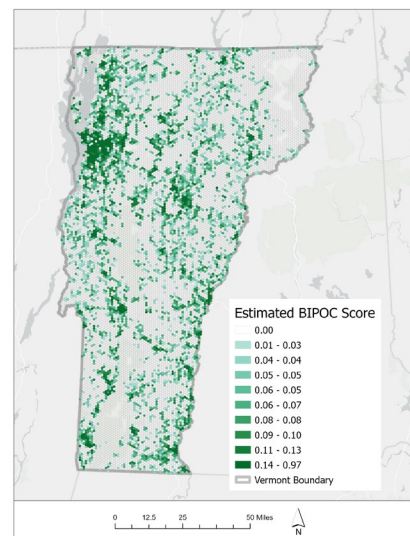
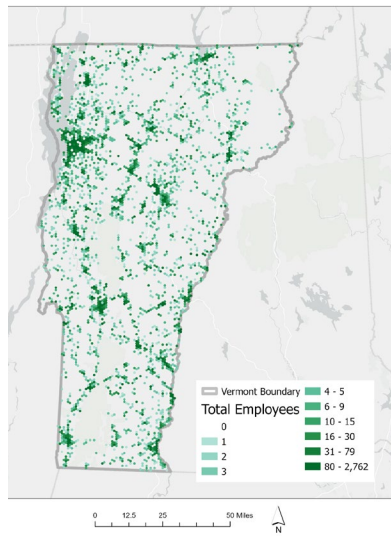
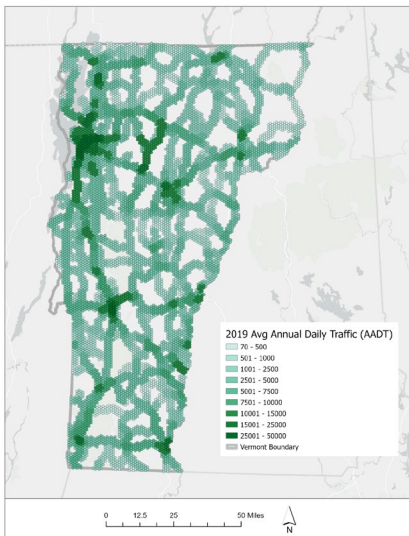
# General Location Prioritization Factors

- Highway traffic volumes
- Travel services and other employment
- Walkability
- Environmental justice factors related to income and race
- Multifamily housing units
- 3-Phase power availability
- Proximity to federally designated EV corridor
- Distance to qualifying EV charging location with four 150kW DCFC ports



# Prioritization Mapping

- Factors are mapped into hexagonal grid cells that are about ½ mile radius
- Quantities are normalized to allow combinations across different types of priorities
- Final priority score for initial NEVI plan is limited to eligible areas along federally designated EV corridors
- Future plans will likely expand on this as additional federal and State guidance develops



# Next Steps

---

- Survey interest of property owners in participating in NEVI and other funding programs for public EVSE
- Contract to upgrade seven existing and planned locations to meet NEVI requirements
- Issue RFQ for qualified EV Charging providers/operators
- Once final rules and Buy America provisions are known, issue RFPs for further buildout of Alternative Fuel Corridors
- Conduct Public Engagement in 2023 for NEVI and Carbon Reduction Programs
- Continue to evaluate and re-develop statewide plans



# Contact

---

**Patrick Ó. Murphy**

Sustainability & Innovations Project Manager  
Policy, Planning & Intermodal Development Division  
*Vermont Agency of Transportation*

802.595.6738

[Patrick.Murphy@vermont.gov](mailto:Patrick.Murphy@vermont.gov)