Electric Vehicle Charging Grant Programs



Bronwyn Cooke, Department of Housing and Community Development House Committee on Transportation

Community Planning & Revitalization (CP&R)



"The Community Planning and Revitalization team uses a collaborative, place-based approach to land-use planning and community development that empowers state and local leaders to plan for and build vibrant, inclusive, and resilient [places] downtowns, villages, and neighborhoods."

Community Planning & Revitalization (CP&R)

Why is CP&R doing EV Charging?

- EVSE is an opportunity for local economic development
- Downtowns & villages are a good fit for siting EVSE – people can walk to amenities while waiting to charge
- Ties to community planning, zoning and bylaws, housing



Electric Vehicle Supply Equipment

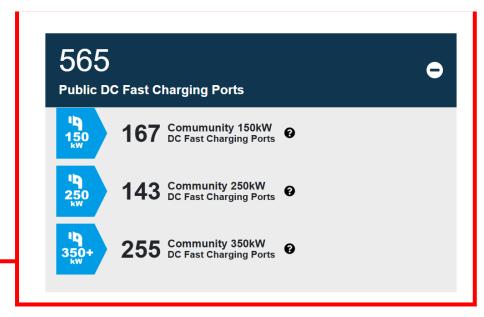
Differences	Location	Charge Time	Price	Level	Driver
between Community and Corridor Charging	Interstate Travel	Travel 20 min	\$\$\$\$	Fast Charging	Parked
 Cost of infrastructure Cost of charging Charging speed Trip purposes Dwell times 	Entertainment/ Shopping/ Recreation	Public 0.5 – 3 hours	\$\$\$	L2/L3	Parked
	Work/Transit Parking/Airport	Workplace 4 – 8 hours	\$\$	L1/L2	Parked
	At Home	Residential 8 – 10 hours	\$	L1/L2	Sleeping Parked

Electric Vehicle Supply Equipment



- DOE tool for estimating charging infrastructure
- Based on State goal of 126,000 EVs by 2030
- Assumes 71% of drivers have access to home charging, 42% PHEVs

 Greater % of residents with access to home charging reduces need for DCFC



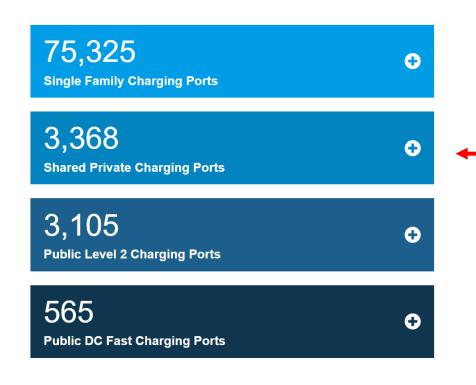
Electric Vehicle Supply Equipment

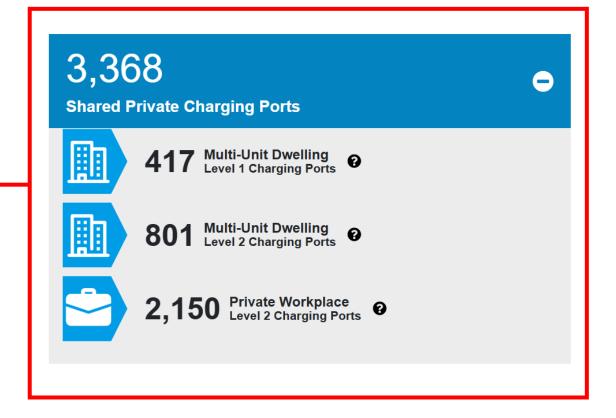


EVI-X

Electric Vehicle Infrastructure Toolbox

- DOE tool for estimating charging infrastructure
- Based on State goal of 126,000 EVs by 2030
- Assumes 71% of drivers have access to home charging, 42% PHEVs

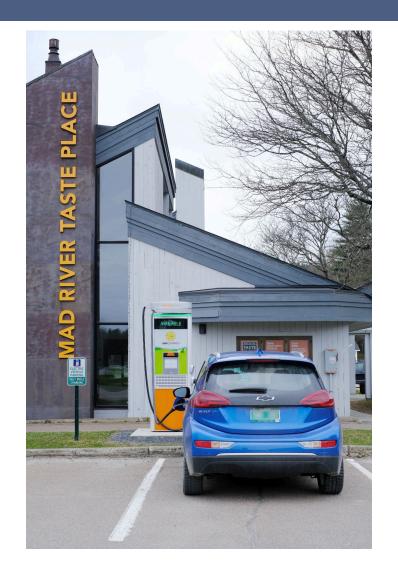




Electric Vehicle Supply Equipment Grants

2014

- \$3.5M of Volkswagen settlement funds
- 5 rounds of grant funding
 - 3 focused on property owners
 - 2 focused on service providers
- Invested in public Level 2 and DCFC to support local economic development in our community centers
 - 6 public DCFC locations 9 ports
 - o 36 public Level 2 locations 121 ports
 - 17 public 150 kW DCFC/L2 locations 68/34 ports

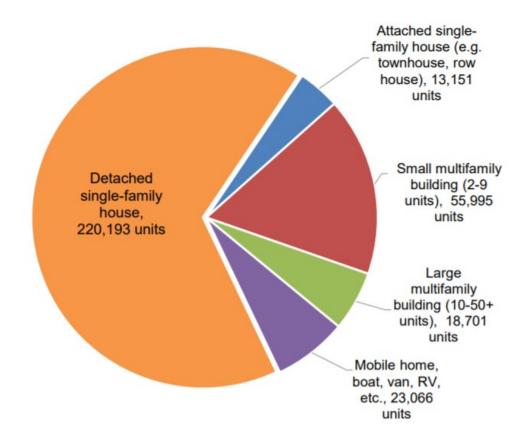


Multiunit Pilot Program

2022

- \$1M of State funds
- 1 round of grant funding
 - o focused on affordable multiunit housing
- Increase access to home charging for residents of multiunit housing
- Test EV charging solutions that work for property owners and residents at multiunit properties
- 35 locations 65 Level 2 ports
- projects provide home EV Charging access to 6,230 residents of affordable housing units

Figure 3-16: Vermont housing units by type of building



Source: U.S. Census Bureau: American Community Survey 5-year estimates, 2013-2017 (Table B25024) from https://doi.org/10.1007/journal.org/10.1007/journal.org. Includes all vacant stock.

EVSE Program Evaluation

- Grant recipient Interviews
- Assessing project costs
- Station use reporting and data analysis
- Case studies



Memphremagog Rentals prides itself in providing quality affordable rental housing in the Northeast Kingdiom. Essential Energy Southors, also based out of the Northeast Kingdiom, provides energy consulting services. The two paired up to install an EV charger that would serve the tenants king at a newly redeveloped multiunit property tucked into a residential neighborhood just outside of Newports designated downtown.

Opportunity

Hazen Converse of Essential Energy Solutions heard a radio spot about a State grant program electric vehicle changing equipment in multimit affordable housing. Hazen recognized that ele of the future of transportation, and knew that multimit property owners might need some help provide home charging access for their tenants. So he resched out to the owner of Memphrem Spates, who also recognized that EV charging would increasingly become an important ameni makes the rental property more attractive to prospective tenants. Together, they applied for a 5 out EV charging in an underutilized corner or one of the parking lots. They were also able to ut incentities offered by Vermort Betchic Coop, which reduced their reflaince on grant funds.

For more information, please contact: Bronwyn Cooke: bronwyn.cooke@vermont.gov or 802.6367126 "This EV charger represents an investment in the future — it is a symbol of innovative thinking and looking forward.

Now, community members, families, and schoolchildren will see this charger as part of the landscape and will see a cleaner option."

Rebecca Elder, Former Starksboro Town Administrator

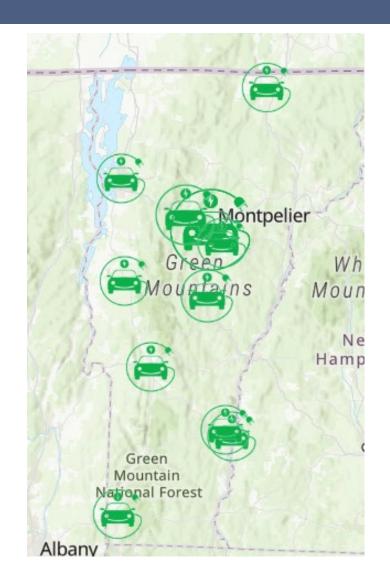
EVSE Program

Act 185	
(1) In fiscal year 2023, \$10,000,000 is appropriated in Sec. G.600 (b) of this act to the Agency of Commerce and Community Development to support the following:	ACCD admin \$500,000
(a) Level 1 and 2 EVSE at multiunit dwellings, including multiunit affordable housing, with less than 20 units prioritized and not less than 30 percent of the total appropriation	
(b) Level 1 and 2 EVSE at private workplaces, with the workplaces of employers with fewer than 100 employees prioritized	Charge VT \$7M
(c) Level 1, 2, and 3 EVSE at public venues and attractions, such as parks, State parks and access areas, downtowns, museums, and ski mountains, that are available to any member of the public	
(d) Level 1 and 2 EVSE that is available to the public at State workplaces or to provide grants to persons for the purchase and installation of level 1 and 2 EVSE that is available to the public at State workplaces	MOU w/BGS \$500,000

BGS - Public EVSE at State Workplaces

Public Charging at State Workplaces

- (d) Level 1 and 2 EVSE that is available to the public at State workplaces or to provide grants to persons for the purchase and installation of level 1 and 2 EVSE that is available to the public At State workplaces.
 - \$500,000 via MOU with BGS
 - Level 2 chargers at 8+ locations
 - Informed by State employee survey





March 2023

Selected Green Mountain Power to develop new program in partnership with DHCD, and administer \$7M in funding for the program

July 2023

Launched a rolling Level 1 & 2 incentive program for multiunit residences, workplaces, and community attractions.

July 2024

Competitive DCFC awards in locations >10 miles from existing DCFC



Original Estimates - Level 1 & 2 incentive program projects

- \$4,860,000 Total for multiunit, workplace, public attractions
 - ~150 projects

Updated Estimates - Level 1 & 2 incentive program project and port based on averages from completed projects

- \$4,860,000 Total for multiunit, workplace, public attractions
 - ~200 projects and approximately 800 ports



Rolling Applications

- \$4,860,000 Total
 - o \$2.7M for L1 & L2 at multiunit
 - o \$1.8M for L1 & L2 at workplace
 - \$360,000 for L2 public attractions
- No one county can receive more than 10% (\$486,000) of the total funds
- Utility territory caps reflect customer base served

Public Attraction Level 2 and Workplace Level 1 and 2 Funding	Multi-unit Level 1 and 2 Funding				
Fully subscribed	Funding available				
Fully subscribed	Funding available				
Fully subscribed	Funding available				
Fully subscribed	Fully subscribed				
Fully subscribed	Funding available				
Fully subscribed	Funding available				
Fully subscribed	Funding available				
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Fully subscribed	Fully subscribed				
Fully subscribed	Fully subscribed				
	Fully subscribed				



	Prog	gram Funds	Contracted			In Pipeline				Total			
			# of	# of		# of			# of				
			projects	\$ in	centives	projects	\$ in	centives	ı	projects	\$ in	centives	
Rolling Applications	\$	4,860,000.00	59	\$	1,041,308.00	93	\$	2,483,636.90		152	\$	3,524,945	
Multiunit L1 & L2	\$	2,700,000.00	28	\$	444,065.00	38	\$	990,677.00		66	\$	1,434,743.00	
Public Attraction L2	\$	360,000.00	10	\$	208,834.00	6	\$	148,475.00		17	\$	357,309.00	
Workplace L1 & L2	\$	1,800,000.00	21	\$	388,409.00	52	\$	1,414,681.00		69	\$	1,803,090.00	

- Average incentive per contracted project has been lower than what was estimated during program design
- If the average incentive trend holds, the program will be able to solicit more project applications than what is currently in the **pipeline**, but only for multiunit residential, and only in counties that have not reached the 10% funding cap.



L1 &L2 at multiunit, workplace, L2 at	Program Funds	Contracted		In Pipeline				Total			
public attractions		# of projects	¢ ir	icentives	# of projects	¢ i	ncentives		# of projects	¢ iı	ncentives
Rolling Applications	\$ 4,860,000.00	59	•	1,041,307	93	•	2,483,632		152	•	3,524,939
Addison		1	\$	17,668	10	\$	276,223		11	\$	293,891
Bennington		1	\$	10,918	3	\$	70,200		4	\$	81,118
Caledonia		1	\$	24,254	6	\$	145,000		7	\$	169,254
Chittenden		22	\$	380,942	3	\$	104,561		25	\$	485,503
Essex		0	\$	-	1	\$	28,800		1	\$	28,800
Franklin	no county can receive	5	\$	84,147	8	\$	223,400		13	\$	307,547
Grand Isle	more than 10% of	1	\$	10,756	2	\$	43,793		3	\$	54,549
Lamoille	funds (no more than	4	\$	57,698	7	\$	164,605		11	\$	222,303
Orange	\$486,000)	1	\$	22,703	4	\$	104,900		5	\$	127,603
Orleans		1	\$	25,157	2	\$	52,200		3	\$	77,357
Rutland		4	\$	97,100	9	\$	217,350		13	\$	314,450
Washington		8	\$	139,984	12	\$	336,150		20	\$	476,135
Windham		5	\$	51,351	14	\$	421,900		19	\$	473,251
Windsor		5	\$	118,628	12	\$	294,550		17	\$	413,178

EVSE Program

Act 148

Sec. 4 (d) Electric vehicle supply equipment (EVSE). Notwithstanding of 19 V.S.A. § 11a or any other provision of law to the contrary, the Agency shall distribute \$1,700,000.00 in one-time Transportation Fund monies to the Agency of Commerce and Community Development for the purpose of providing grants to increase Vermonters' access to level 1 and 2 EVSE charging ports at workplaces or multiunit dwellings, or both

Charge VT county funding floor \$1.7M



Program Plans

Create a funding floor of \$486,000 for each county

- \$2,160,000 needed (\$1,944,000 for direct incentives, \$216,000 for admin)
 - Reserve the \$1.7M appropriated from Act 148 for this purpose
 - Allocate \$460,000 from original Act 185 appropriation
 - This will support ~30 projects/year over the next 3 years
 - Assumes the "pipeline" in more rural communities will continue to be slower to fill/move



CLOSED APPLICATIONS	TOTAL
BY COUNTY, PROJECT TYPE, REASON	
PUBLIC ATTRACTION	115
Funding Unavailable	80
Out of Pocket Costs	4
Ineligible/Withdrawn/No Response/Duplicate	31
WORKPLACE	106
Funding Unavailable	55
Out of Pocket Costs	4
Ineligible/Withdrawn/No Response/Duplicate	47
MULTI-UNIT RESIDENTIAL	101
Funding Unavailable	60
Out of Pocket Costs	1
Ineligible/Withdrawn/No Response/Duplicate	40
TOTAL	322

Majority of applications that have not moved forward is due to either:

- Oversubscription of the funds available in a program type (workplace and public attraction)
- Oversubscription of the funds available in the applicant's county (\$486,000)



Program Plans

Identify steady funding source to advance applications for projects in counties with higher demand

- Charge VT can manage ~80 successful contracted projects per year
 - Program funds reserved for supporting a funding floor in all counties will support ~30 projects/year over 3 years
 - Program systems are built to manage an additional 50 projects/year ~\$1.6M



Competative Grants	Program Funds	Contracted		ne	
Dublic Attraction					
Public Attraction DCFC	\$ 1,440,000.00		9	\$	1,440,000

Eligibility

- Parking available to the public
- More than 10 miles from another DCFC



Multiunit and Community EV Charging Grant Programs



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