

Electric Vehicle Supply Equipment Infrastructure: (b) Housing, employers, and community attractions

PRESENTATION FOR HOUSE TRANSPORTATION COMMITTEE, FEBRUARY 9, 2022

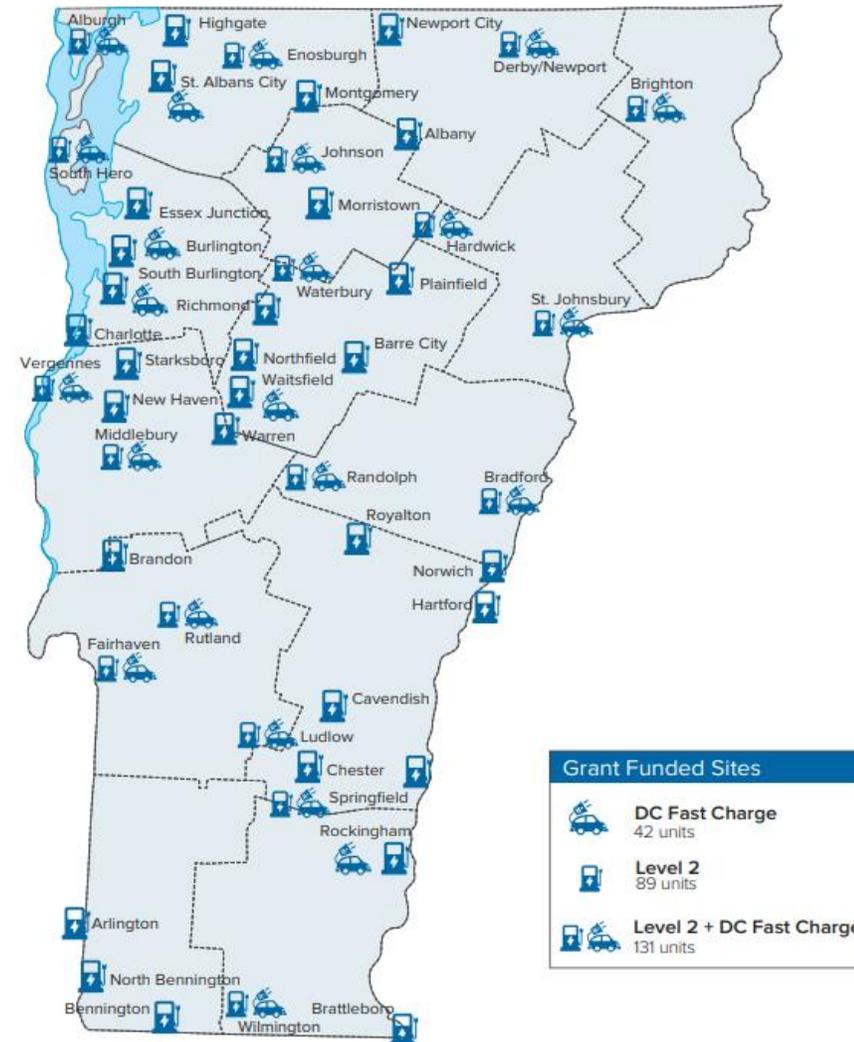
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Funding Timeline

- 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 to Norwich Technologies for 6 locations
- 2022: \$1 million to residential charging for multiunit housing

Public Investments in Vermont



Department of Housing and Community Development: [Interactive map](#)

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

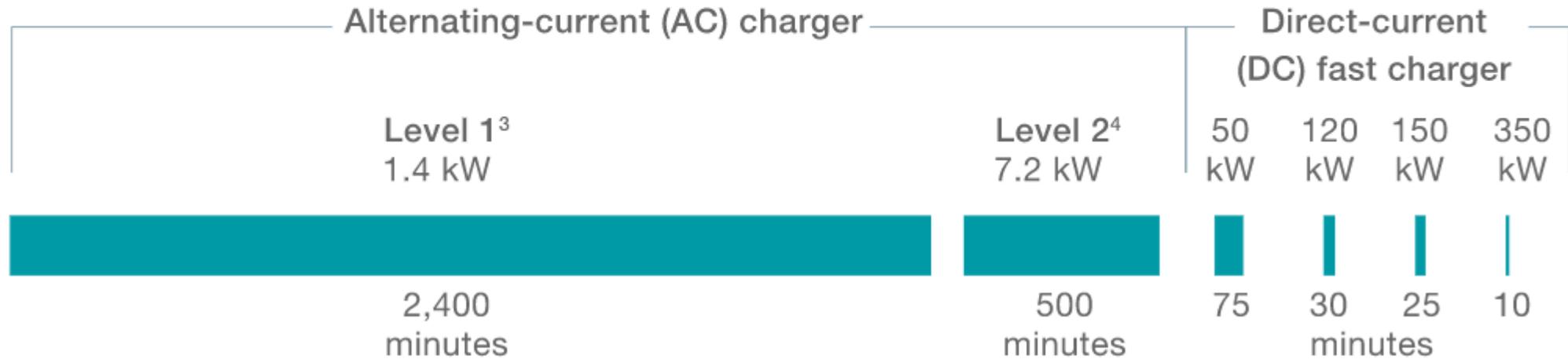


Tesla

Plug Types →

Charging Equipment

Time to “fill up” a 60-kWh electric-vehicle (EV)¹ battery using different chargers²



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

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

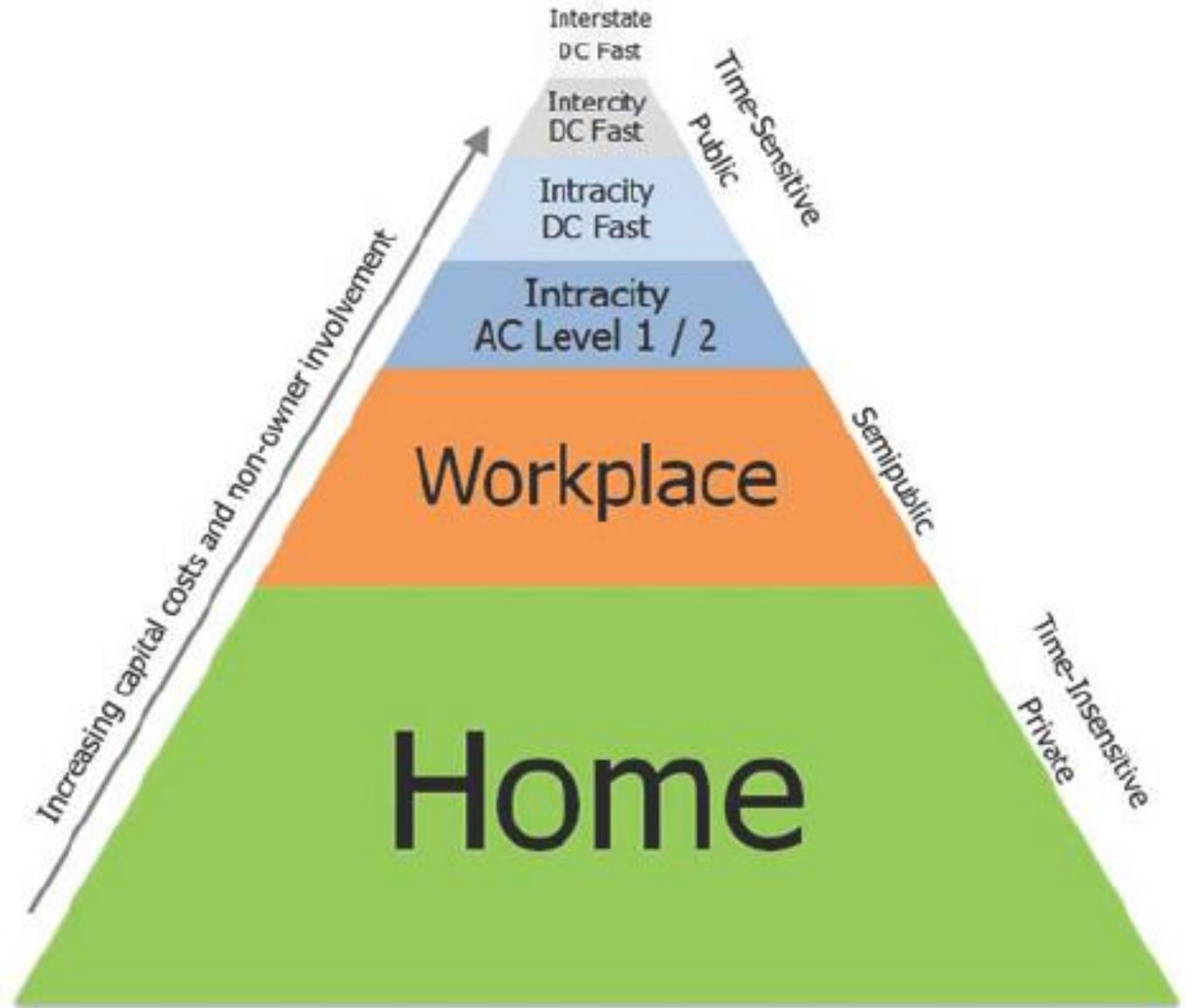
³Level 1 equipment provides charging through a 120-volt AC plug; it generally refers to a household outlet.

⁴Level 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 Locations



Credit: [National Academies Press](#)

Governor's FY23 ARPA Budget

PRIORITIZING SAFE AND HEALTHY COMMUNITIES

Strong and Vibrant Communities

Incentives to Foster Electric Vehicle Adoption

\$15 million total for EV Charging

Climate Change Mitigation Package

- **EV Charging Infrastructure – Highway Network:**

Supports the continued buildout of public charging infrastructure by providing **\$2,000,000** for highway networks to build upon the existing State and VW funding of public charging stations.

Additionally, AOT will receive **\$21,200,000** in Federal Highway funding (IIJA) over the next 5 years for highway network EVSE deployment.

- **EV Charging Infrastructure:**

Supports the continued buildout of public charging infrastructure by providing **\$10,000,000** to ACCD for Level I & II charging for multi-family dwellings, workplaces, and community attractions to build upon the existing State and VW funding of public charging stations.

Additionally, provides **\$3 million** to ANR to install Level II charging at State Parks and FWD Fishing Access Areas paring charging facilities with new solar arrays to the maximum extent practicable.

Proposed Transportation Bill language

- Section 2. INVESTMENTS IN ELECTRIC VEHICLE SUPPLY EQUIPMENT INFRASTRUCTURE

(b) Housing, employers, and community attractions.

The Agency of Commerce and Community Development is authorized to spend up to \$10,000,000.00 in total and as appropriated in the fiscal year 2023 budget to establish and administer one or more grant programs, which may build upon the existing EVSE Grant Program, to support the continued buildout of level 1 and 2 EVSE at multi-unit dwellings, including multi-unit affordable housing as defined in 2021 Acts and Resolves No. 55, Sec. 29(a)(2) and workplaces and level 1, 2, and DCFC EVSE at community attractions.



Contacts

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Electric Vehicle Supply Equipment Infrastructure: (c) State parks and fishing access areas

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Proposed Transportation Bill language

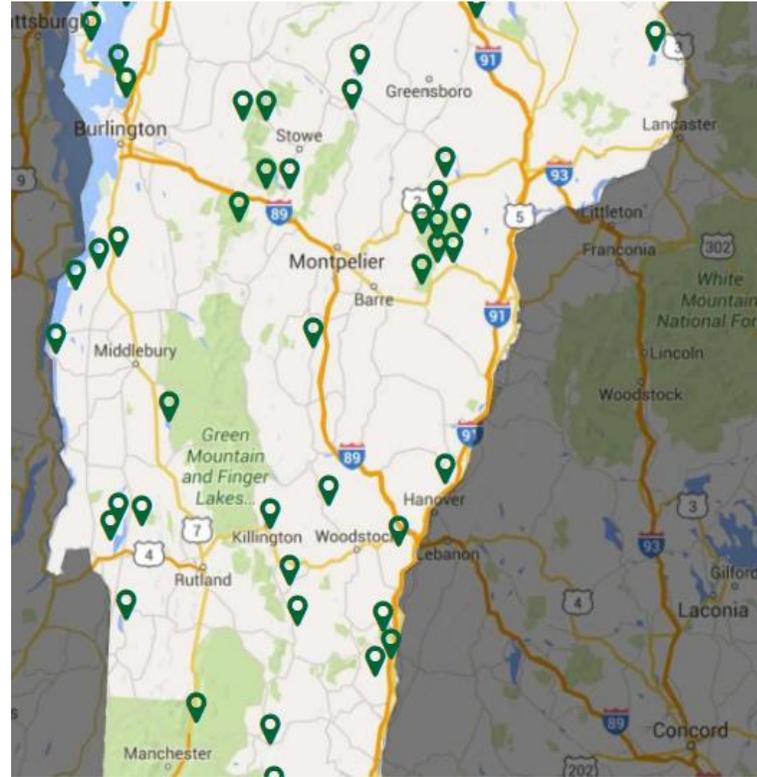
- Section 2. INVESTMENTS IN ELECTRIC VEHICLE SUPPLY EQUIPMENT INFRASTRUCTURE

(c) State parks and fishing access areas. The Agency of Natural Resources is authorized to spend up to \$3,000,000.00 as appropriated in the fiscal year 2023 budget to install level 1 and 2 EVSE at State parks and fishing access areas managed by the State. This authorization shall be used by the Agency of Natural Resources to purchase and install level 1 and 2 EVSE or to provide grants for persons to purchase and install level 1 and 2 EVSE, or both.



Parks and Fishing Access Areas

ARPA funds for EV charging to speed the recovery of the tourism, travel, and hospitality sectors



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