VERMONT ELECTRIC CO OP

Senate Transportation Feb 5, 2025
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VERMONT ELECTRIC CO-OP

At a Glance	
Number of Members: 33,000 (approx.)	Annual Revenue (2023): $ 94 million
Meters Served: 40,726	Vermont Property Tax (2024): $5 million
Square Miles Served: 2,056	Number of Communities Served: 75
Miles of Line: 2,880	Counties Served: 8 (Addison, Caledonia, Chittenden, Essex, Franklin, Grand Isle, Lamoille, and Orleans).
Meters served per mile of line: 16	
2024 VEC Total Load: 511,761 MWh	VEC 2024 Peak Load: 82 MW Sun 12/22/24 hour ending 6:00 pm

VEC Energization Day 1938

About VEC and Our Member-Owners:

- Established in 1938 to bring electricity to rural underserved Vermonters.
- Largest locally owned and second largest electric distribution utility in Vermont.
- Not-for-profit, member-owned cooperative with 106 employees.
- Democratically controlled: one member, one vote.
- Approximately one-half of electric sales are residential.
- In 2024, 50% of residential members were on fixed incomes, 53% percent were age 65 or older, 47% have been member-owners for 20 years or more.
- Serves five of the top nine Vermont towns (and three of the top five counties) with greatest energy burden,
- Excellent record of member satisfaction.
- Meets or exceeds all Service Quality and Reliability Goals (SQRP).

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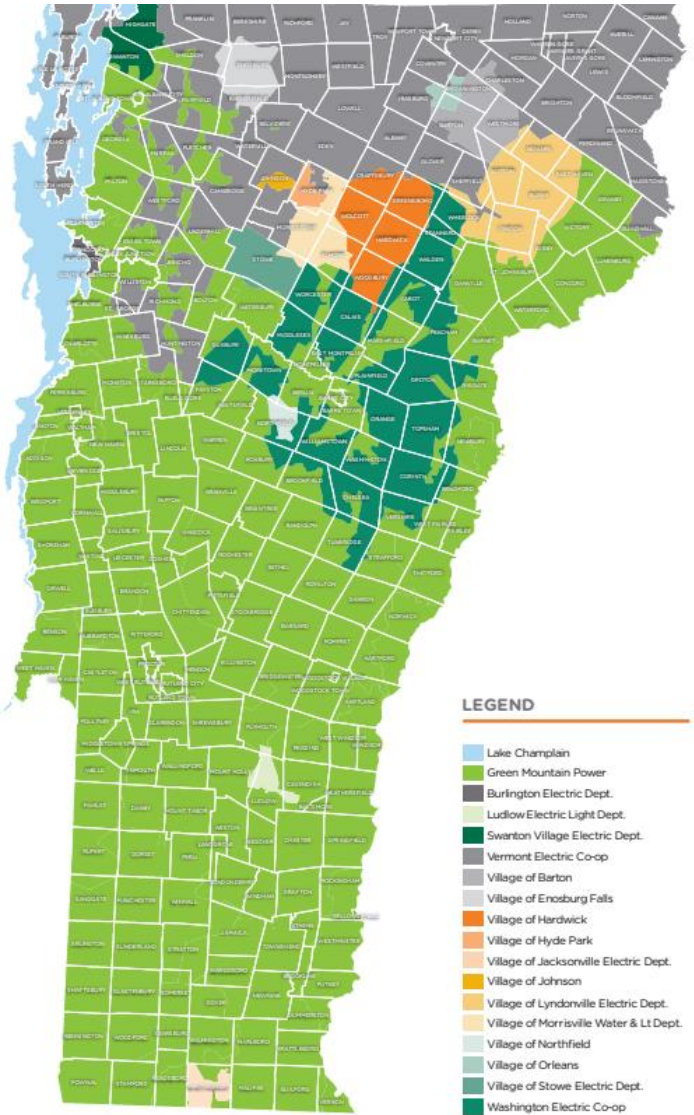
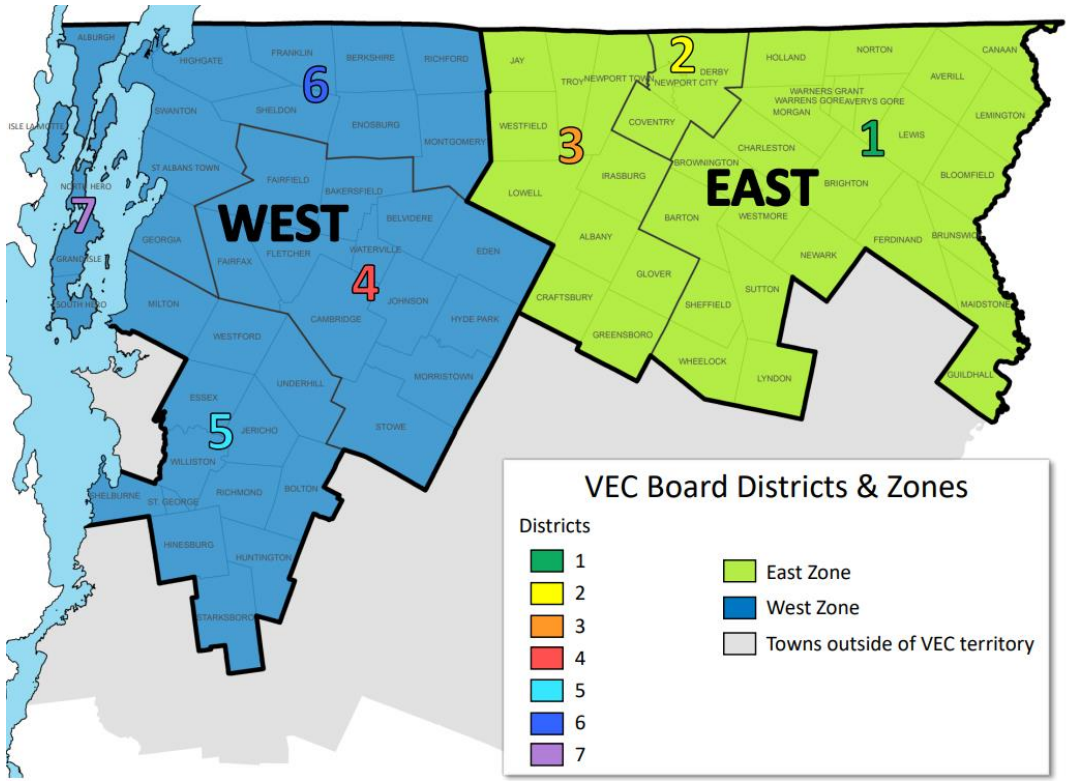
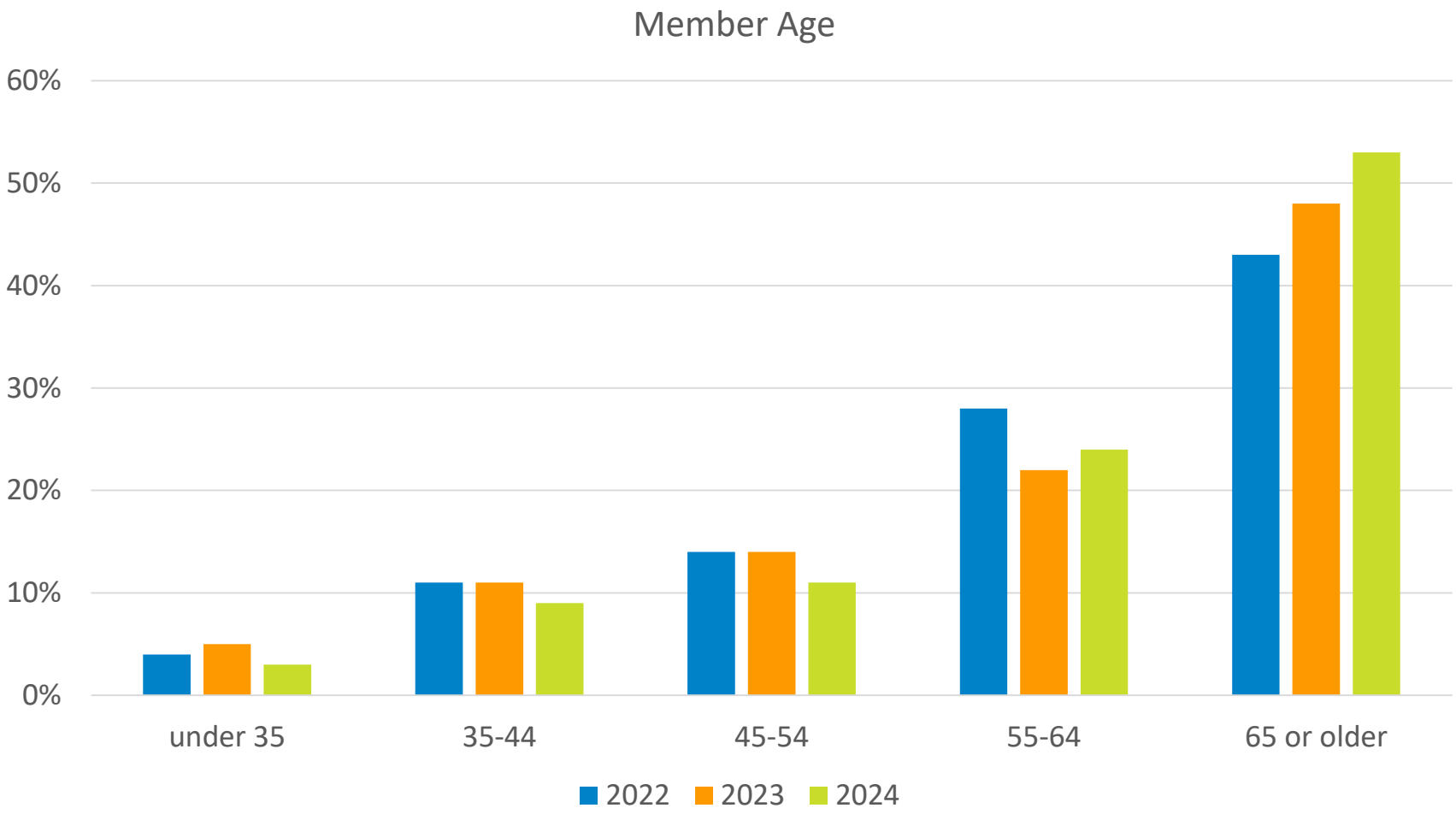
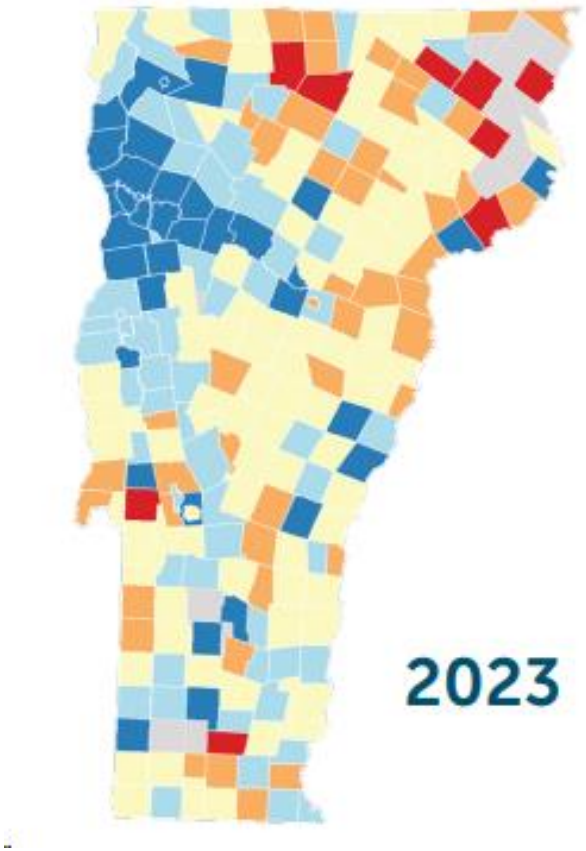




VEC Member Demographics



Energy Equity and Affordability



2023 Efficiency Vermont Energy Burden Report
Red areas indicate high burden and blue areas indicate low burden.

7 of top 11 Towns with largest energy burden

Montgomery	Franklin	23.1%
Charleston	Orleans	19.1%
East Haven	Essex	18.9%
Lowell	Orleans	17.1%
Concord	Essex	15.9%
Brighton	Essex	15.5%
Castleton	Rutland	15.2%
Dover	Windham	15.2%
Bloomfield	Essex	15.1%
Eden	Lamoille	14.8%
Jay	Orleans	14.7%
Pawlet	Rutland	14.7%
Windsor	Windsor	14.4%

VEC Priorities

Keeping the Lights On!

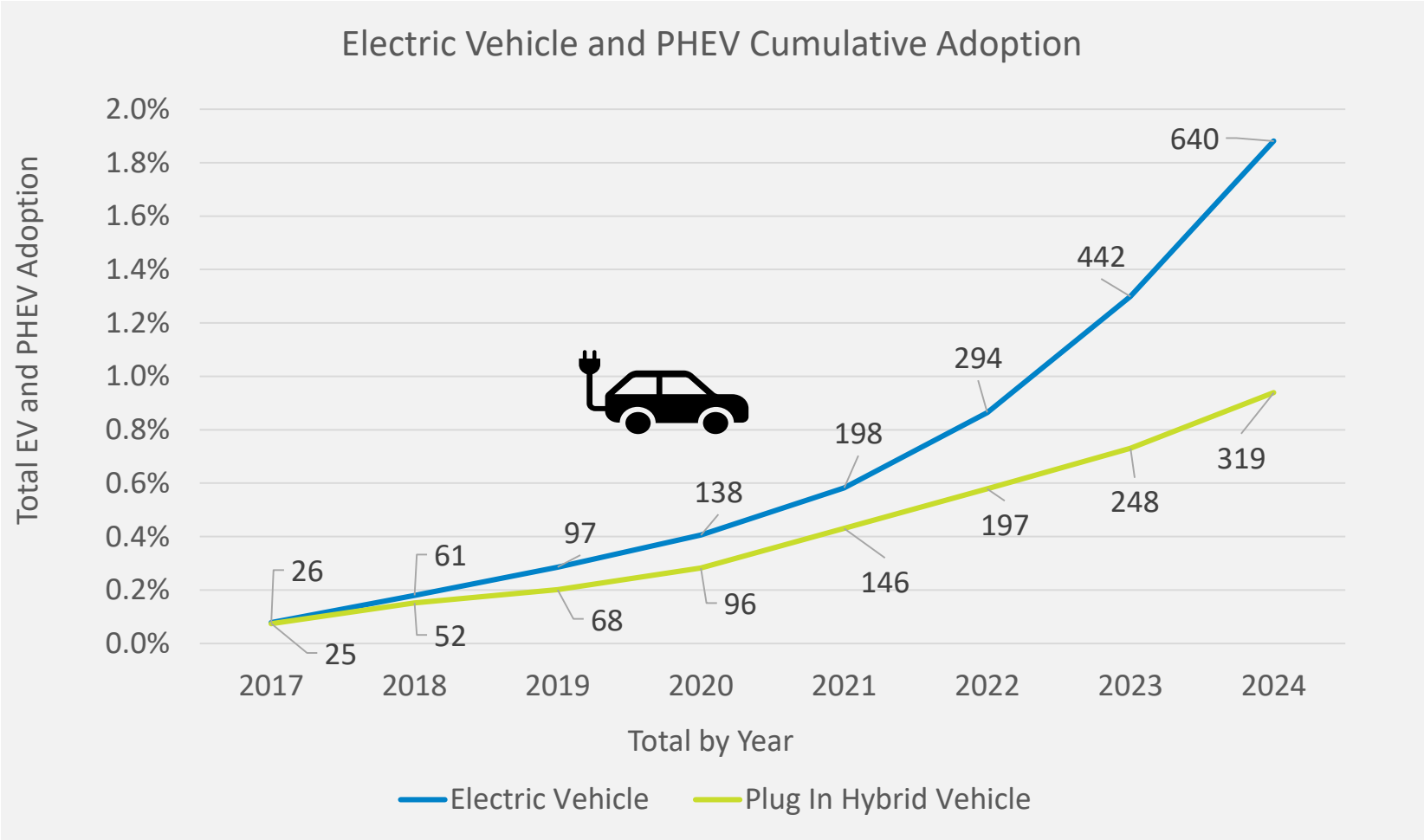
Ensuring Affordability

Reducing Carbon

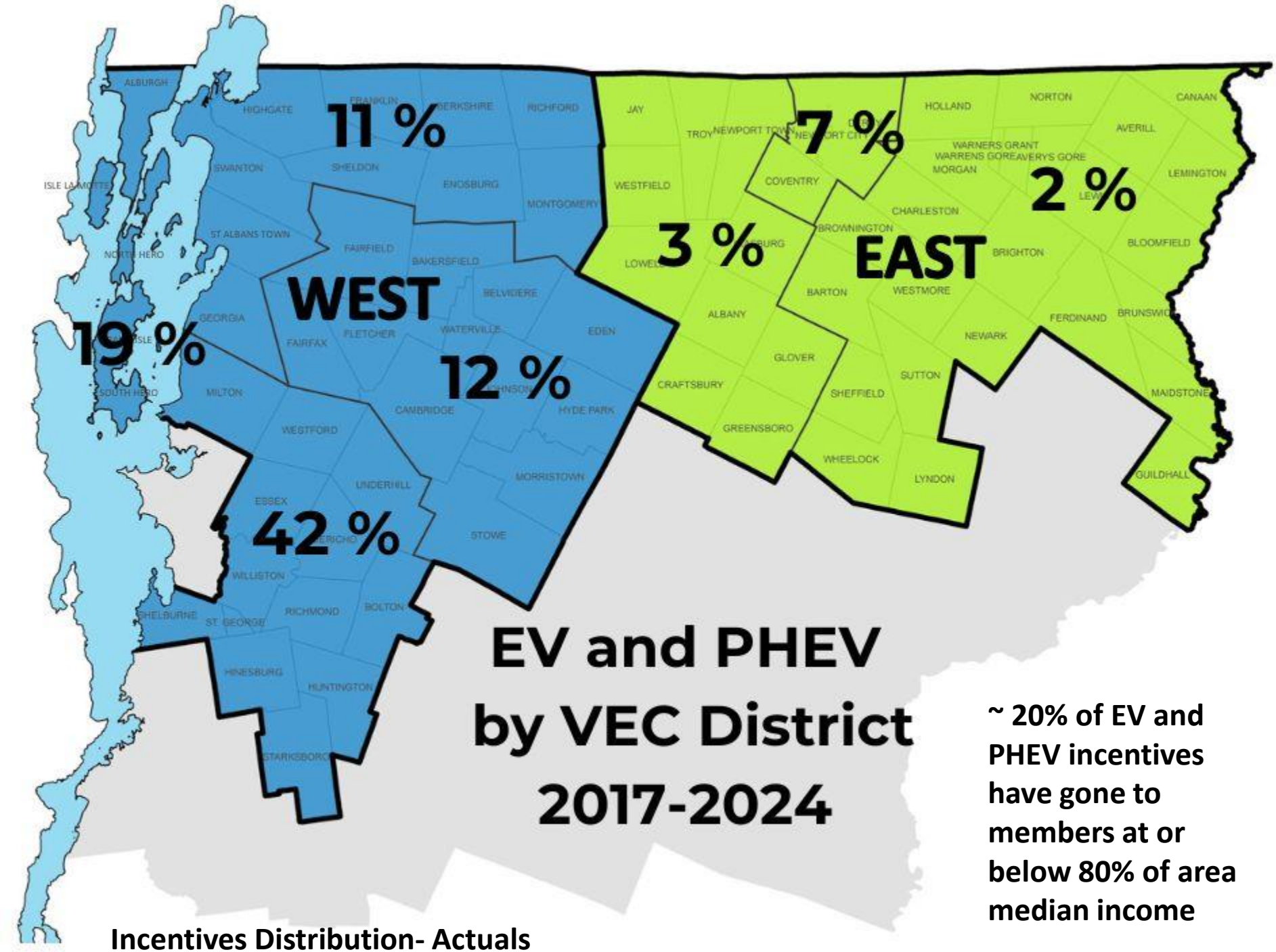
Energy Transformation & Carbon Reduction

Full Suite of incentives for qualifying products. Electric Vehicles, EV Charging Equipment, Ducted and Ground Source Heat Pumps, Heat Pump Water Heaters, Pellet Stoves, Induction Cooktops, Electric Forklifts, and more.

EV Adoption



Data from EV Incentives List and Camus EV Analytics

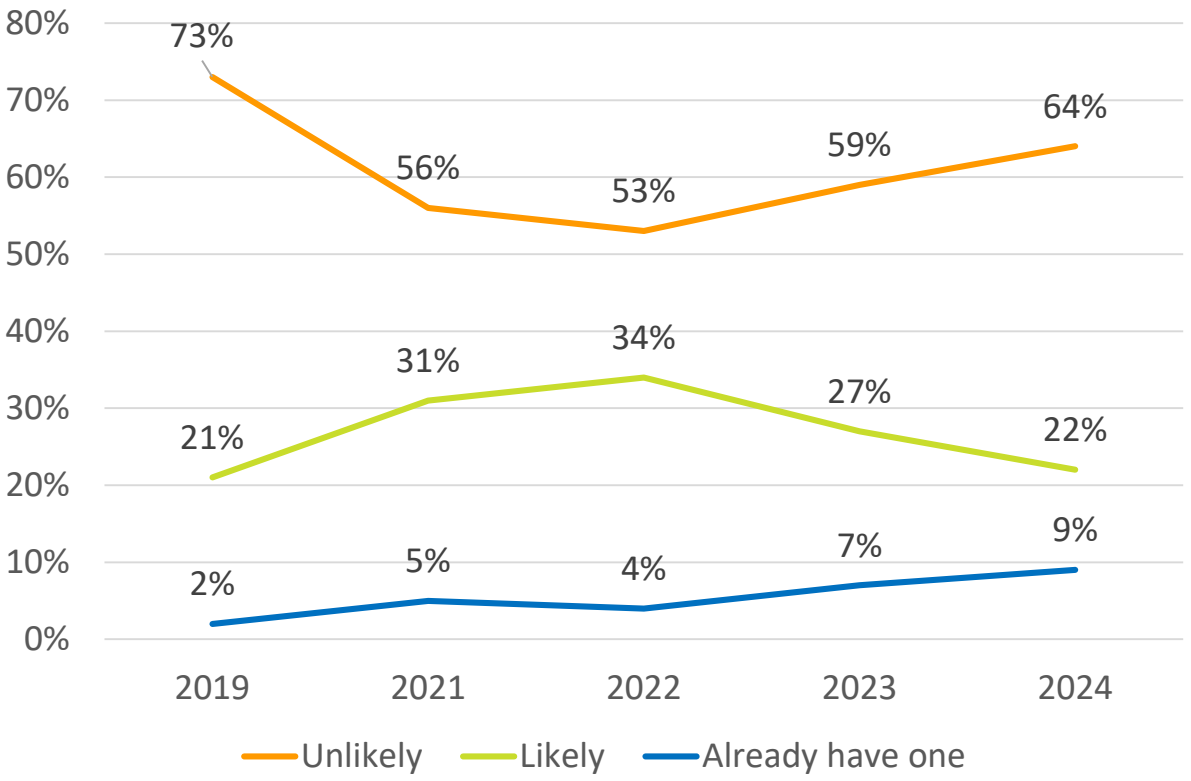


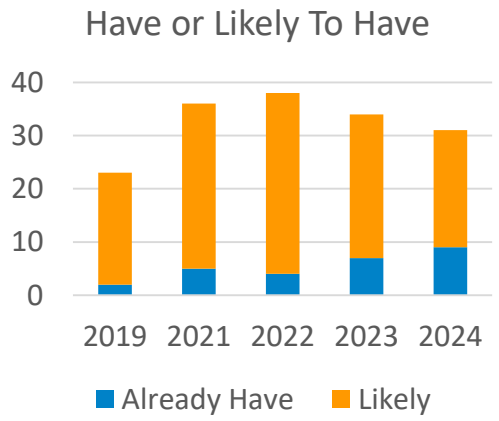
~ 20% of EV and PHEV incentives have gone to members at or below 80% of area median income

Incentives Distribution- Actuals

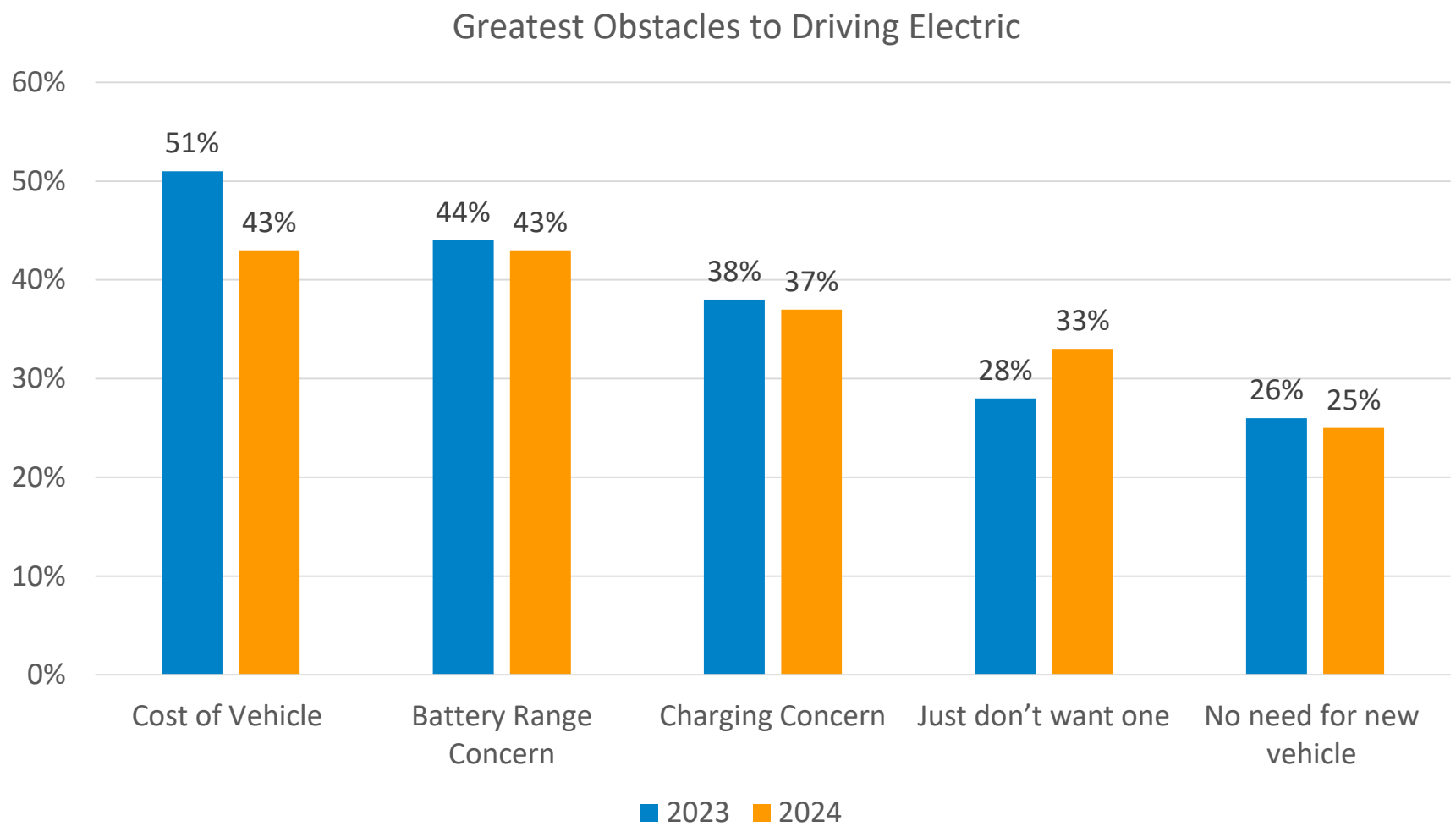
VEC Annual Member Survey: Plug-In Electric Vehicles

What is the likelihood of you Owning/Leasing a Plug-In Electric Vehicle in Next 5 Years?

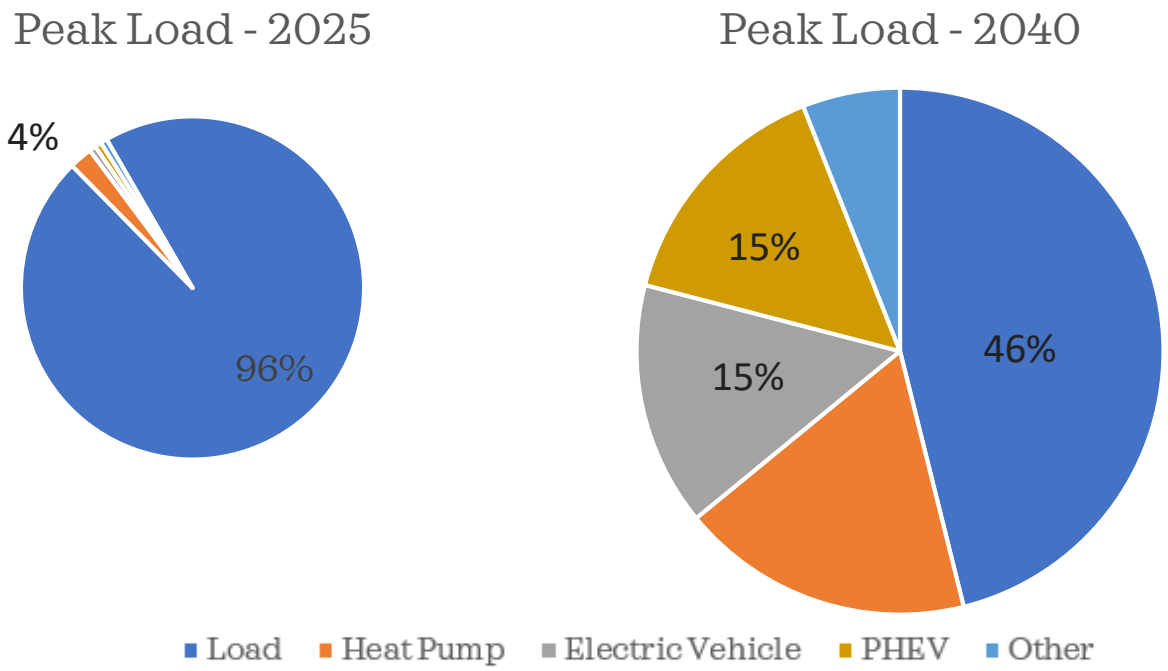




VEC Annual Member Survey: Plug-In Electric Vehicles

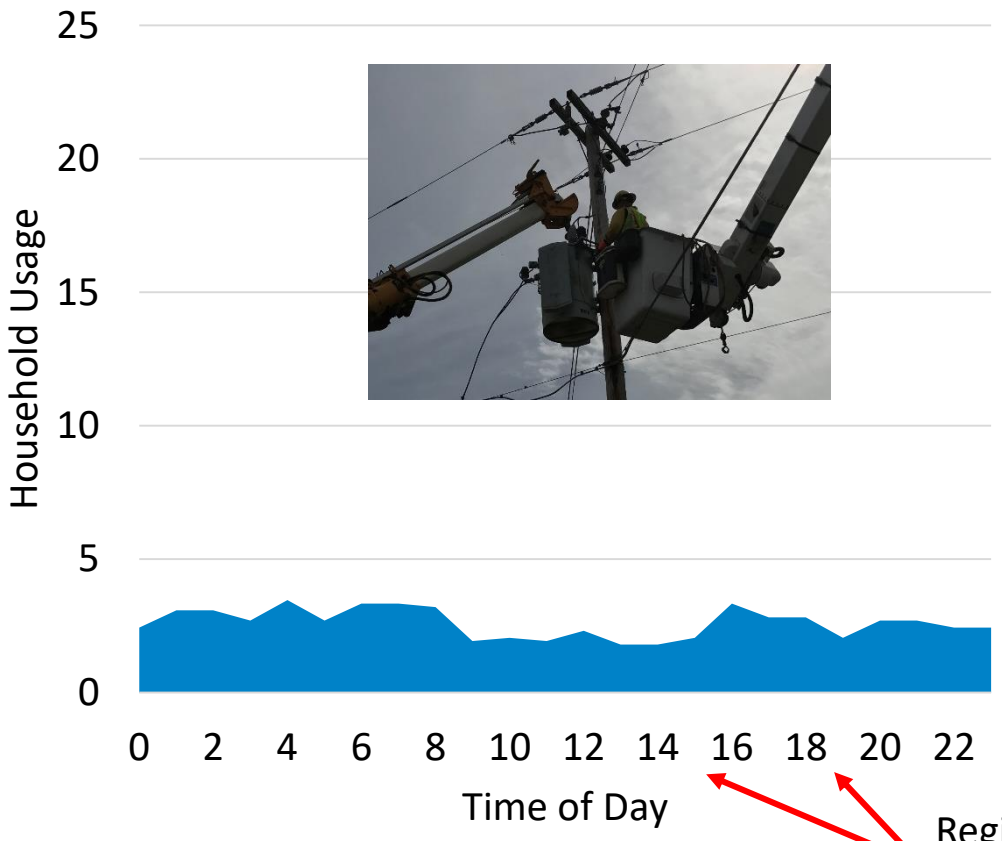


EV Transmission and Infrastructure Impacts



- **Significant load growth** expected by 2040
- Projected 2040 load will overload 30-40% of distribution transformers, lines and substations
- $100 million in grid upgrades, even more at the transmission level
- **Additional load being added at times of transmission peaks**

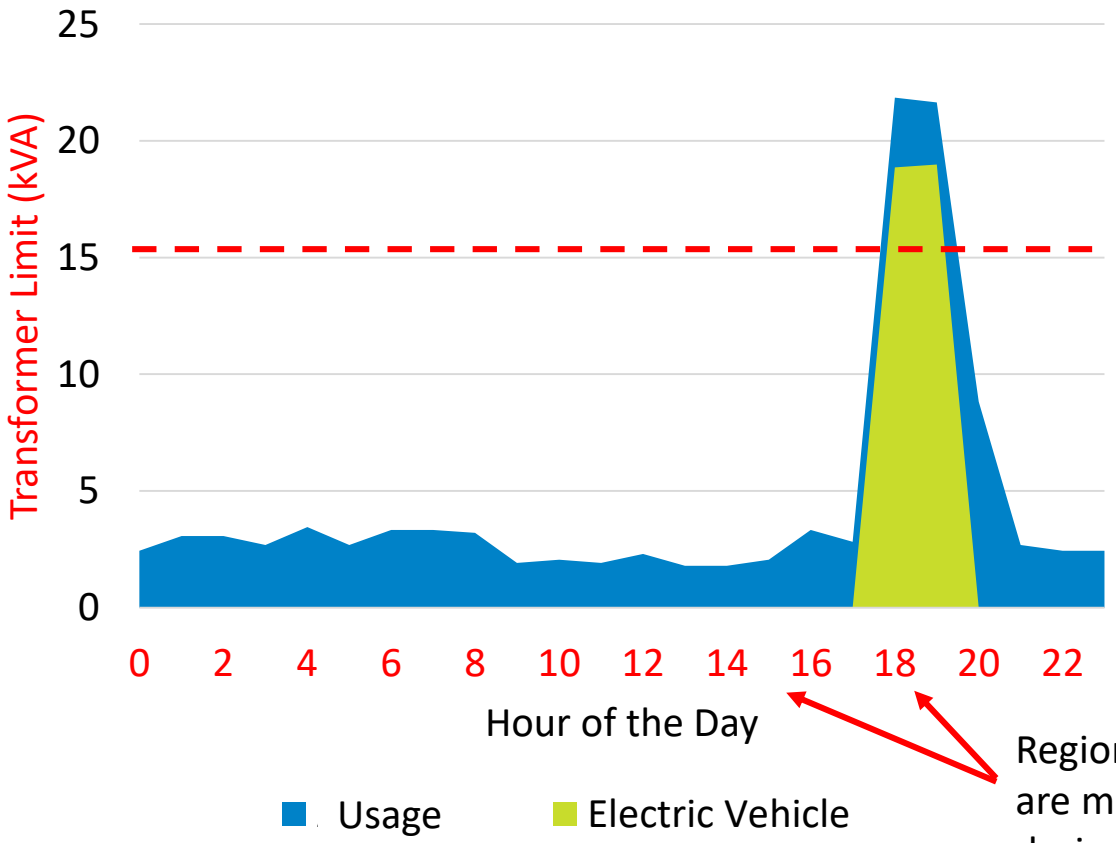
Typical Household Load



- Example data from a member
- Member has a heat pump
- Peak of around 3.5kW (washer, dryer etc.)
- VEC can put several members on the same transformer
- VEC's transmission charges are based at load during peak times (4-10PM typically)

Regional Power and Transmission are most expensive and least clean during this time (3-9PM typically)

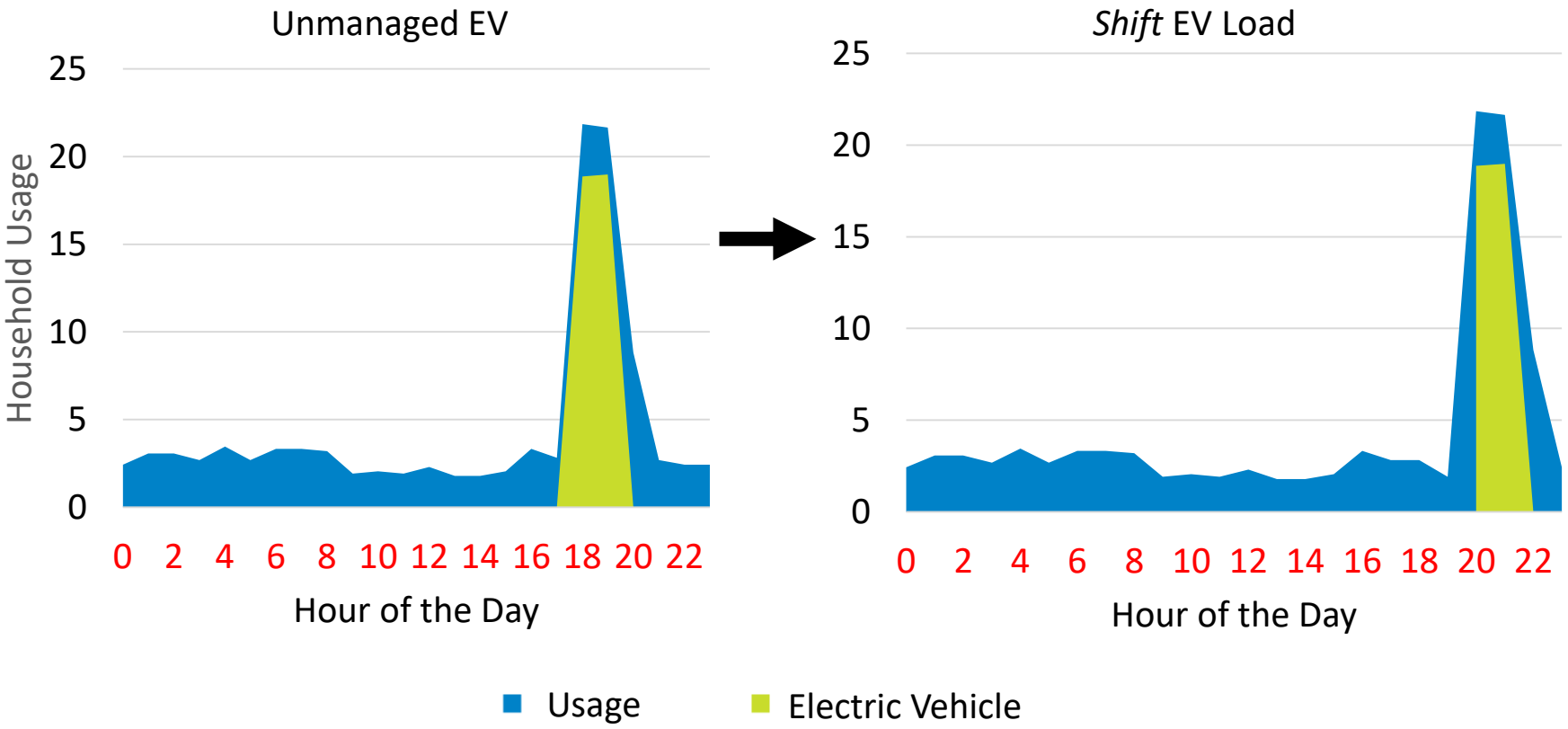
Todays EV Challenge – Transmission Peaks and Utility Infrastructure



- Real world example of Ford Lightning charging at 19.9kW
- Cost to membership to upgrade ~$5,000
- VEC has approximately 24,000 transformers - more than half are 10kVA or smaller
- Impact on transmission peaks

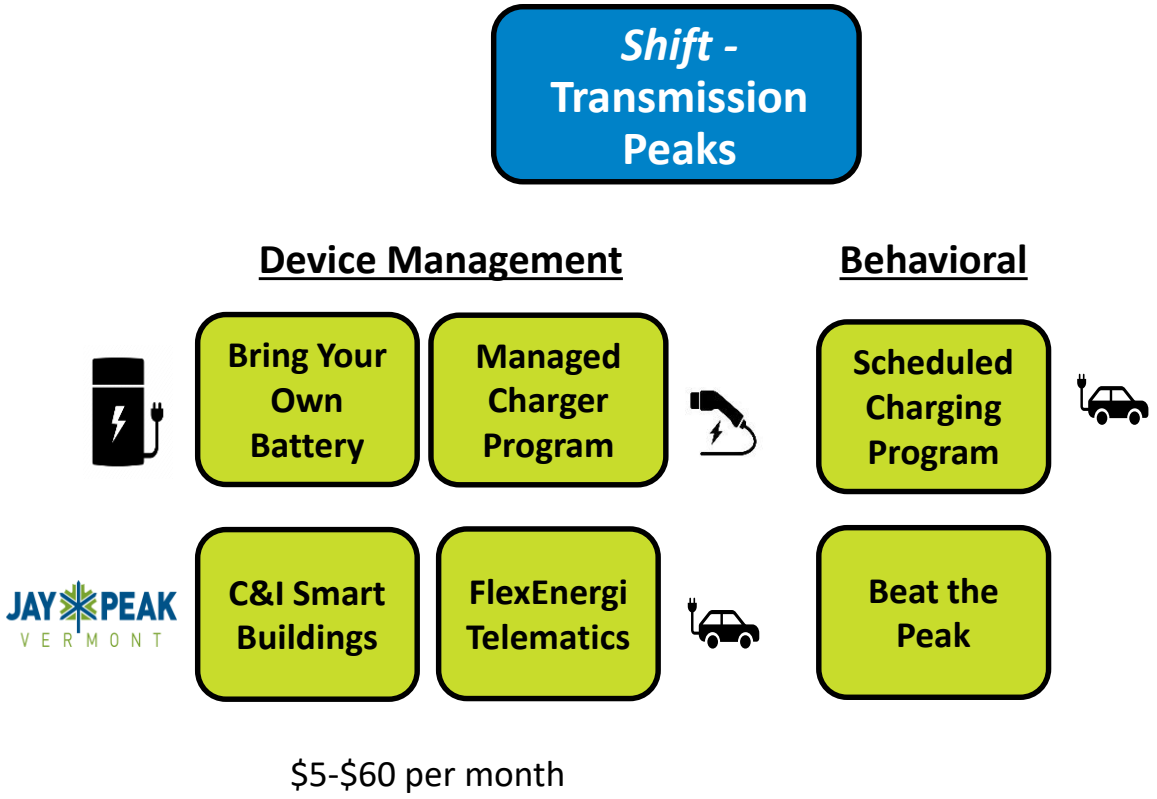
Regional Power and Transmission are most expensive and least clean during this time (3-9PM typically)

VEC Programs *Shift* Load to Less Expensive Times



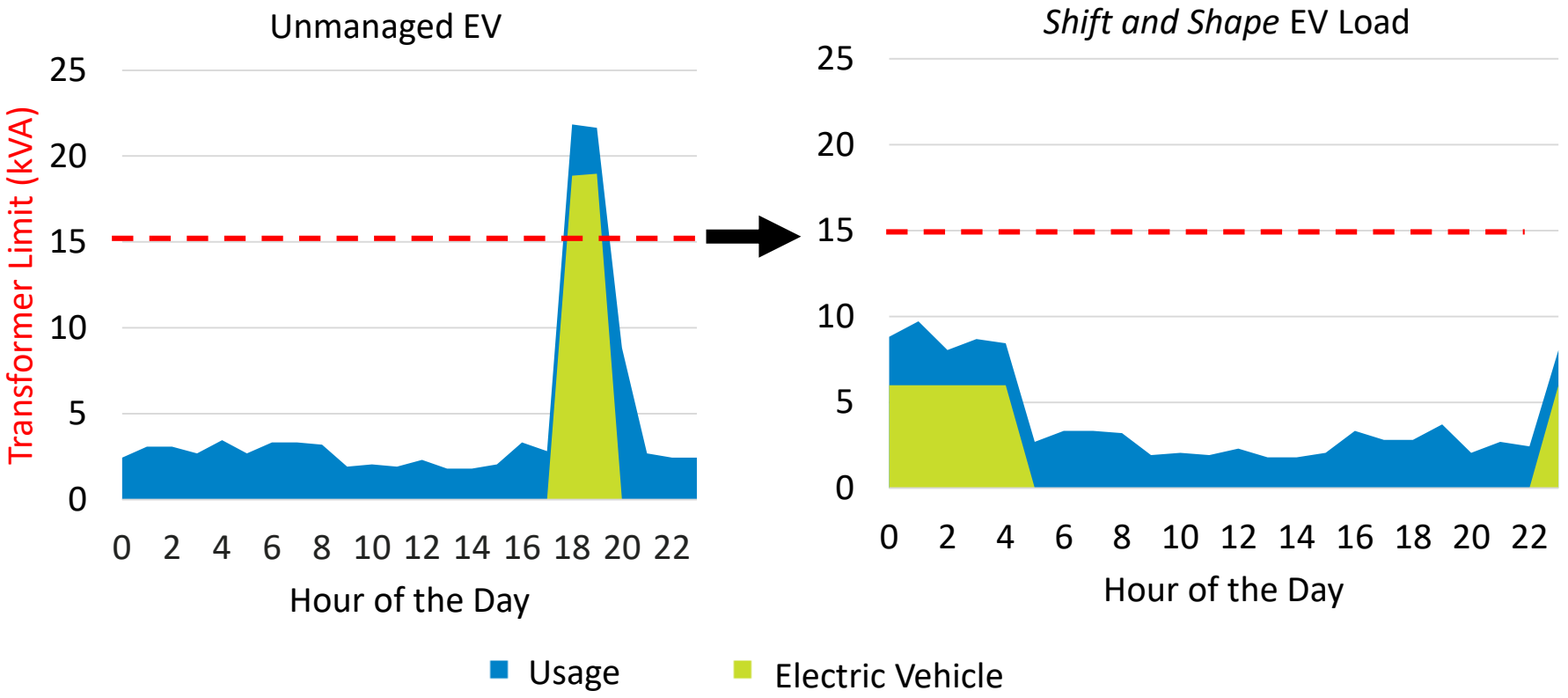
- VEC *shifts* load to less expensive times - after transmission peak (3-9PM typically)

VEC Flexible Load – *Shift* Load to Decrease Transmission Costs



- This helps address the transmission issue
- But distribution infrastructure issues remain

2025 Pilot on Distribution Transformers – *Shift and Shape*



- VEC *shapes* load to reduce infrastructure impacts
- While *shifting* load to less expensive times (after transmission peak)

VEC Flexible Load – *Shift* and *Shape* Load

Shift - Transmission Peaks

Shape - Distribution Electrification Impacts

Device Management

- Bring Your Own Battery
- Managed Charger Program
- C&I Smart Buildings
- FlexEnergi Telematics

$5-$60 per month

Behavioral

- Scheduled Charging Program
- Beat the Peak

Distribution Transformers

- Support Your Local Grid Pilot

$8-$40 per month

Thank you!


Electric & plug-in hybrid electric vehicles. Public charging stations.
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Committed to our members.


Welcome to
Annual Meeting
of the Members
VERMONT
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