Vermont Agency of Transportation

AOT Fleet Electrification

HARMONY WILDER, AOT FLEET MANAGER

BRAD MCAVOY, AOT FACILITIES MANAGER

FEBRUARY 3, 2022

PRESENTATION TO SENATE TRANSPORTATION



AOT EV Fleet



- AOT's light-duty vehicles are primarily leased through the state's centralized fleet program.
- •In 2005 the Agency added its first hybrid electric vehicle, a Honda Civic hybrid (HEV). The Agency's first plug-in hybrid (PHEV) a Chevy Volt, arrived in 2013. In 2017, AOT received the State's first fully electric (BEV) fleet vehicle and, more recently, introduced an electric motorcycle to the DMV Enforcement fleet.
- •Today, the Agency's light-duty passenger fleet, which consists primarily of sedans and utility vehicles, is 46% electric with 5 fully electric, 1 plug-in hybrid, and 24 hybrid electric vehicles.

AOT Fleet Vehicles Being Considered for Electric Replacement

- DMV Enforcement Vehicles
- ½ Ton Trucks
 - 6 Ford Lightning on order
- Specialty Equipment
 - Forklifts
- Heavy-Duty Trucks/Equipment
 - Bucket Trucks
 - Tractor Trucks (long-haul delivery of water, etc.)
 - Flatbed Trucks
- Cargo vans











EV Charging Installations

Project was managed by the AOT Facilities Team.

Installation was completed with District Maintenance personnel and BGS contracted vendor (Apex Solar).

- 7 new sites completed in two weeks
- Level II dual head
- Average cost per site \$12,700.00





AOT EVSE Fleet Infrastructure

10 AOT District and Administrative Office Buildings are equipped to concurrently charge 2 fleet vehicles

- Barre City Place
- Bennington
- Berlin (Dill Building)
- Colchester
- Derby
- Dummerston
- Mendon
- St. Albans
- St. Johnsbury
- White River Junction
- 6 additional locations being scoped

Tunbridge Maintenance Garage (Green Project)











Project Details

- Removed existing ceiling mounted oil furnace
- Spray foam interior walls and ceiling
- Installed (2) Heat Pump Units
 - 3.5 ton 42,000 btuh
 - Cold climate pumps designed to operate to -18° F
- Prior work included 32-panel solar array
 - Net metering will offset heat pump added costs
- Future projects
 - Lunenburg maintenance garage replacement to be designed with heat pump technology