

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) FINANCIAL CASE STUDIES

The cost to install EVSE can vary widely and is highly dependent on each project's unique context. Factors such as electrical capacity, surrounding infrastructure, cost of materials, and workforce availability can influence the price to install EVSE. The case studies below provide examples of the real-world cost of EVSE installation in Eagle County, Colorado

PROJECT A- TWO PUBLIC LEVEL 2 STATIONS

Location: Town of Vail Municipal Building; Vail, Colorado

Year of Install: 2022

Project Specs: Two Level 2 dual-port ChargePoint stations intended for public use. This project required trenching, removal of old stations, new concrete pads and bollards, electrical work, and reseeding the disturbed landscape.

Total Cost (before grant): \$53,007

Total Cost (with grant): \$35,007 ([Charge Ahead Colorado Grant](#))

PROJECT B- BUS CHARGING

Location: Town of Vail Bus Barn; Vail, Colorado

Year of Install: 2020-2021

Project Specs: Two dual-port ChargePoint CPE 250 Level 3 stations installed for transit fleet. This project also future-proofed the bus barn for the transition to all-electric. Project required extensive construction, electrical service upgrades, and a new generator.

Total Cost (before grant): \$1.6 million

Total Cost (with grant): \$500,000 ([CDOT FASTER Grant](#))

PROJECT C- FLEET LEVEL 2 CHARGER

Location: Eagle River Water & Sanitation District Edwards Wastewater Treatment Facility; Edwards, Colorado

Year of Install: 2022

Project Specs: One dual-port SemaConnect Level 2 station installed for fleet vehicles and also open for employees to charge personal vehicles during work hours. Existing electric panel had enough capacity for the station, but additional conduit was installed to accommodate a future charging station. Project required minimal drilling to connect the conduit to the outdoor station through the existing building wall.

Total Cost (before grant): \$14,092

Total Cost (with grant): \$5,860 ([Charge Ahead Colorado Grant](#))

Lessons Learned [provided by collaborator]: Have electrical capacity inspected by an electrician prior to grant applications. Schedule a pre-visit or walk-through to ensure all costs are considered before applying for funds. Budget for EVSE installs annually so you have an account to code expenses to and can easily provide the grant match when needed. Ensure you account for annual networking fees that will be charged each future year after the install.

PROJECT D- EAGLE VALLEY LIBRARY LEVEL 2 PUBLIC & FLEET CHARGERS

Location: Eagle Valley Library; Eagle, Colorado

Year of Install: 2022

Project Specs: Six Level 2 chargers (+2 donated by Holy Cross Energy) installed at the Eagle Library. Project required conduit, wiring, concrete pads, bollards, permitting, and charger activation.

Total Cost (before grant): \$93,950 (Includes chargers donated by Holy Cross Energy)

Total Cost (with grant): \$39,950 (Includes chargers donated by Holy Cross Energy) (Cost share between Eagle County and the Eagle Valley Library District) ([Charge Ahead Colorado Grant](#))

PROJECT E- MULTIFAMILY LEVEL 2 CHARGER

Location: Eagle River Water & Sanitation Edwards Employee Housing; Edwards, Colorado

Year of Install: 2022

Project Specs: One dual-port station installed at an ERWSD employee housing complex in Edwards. Project required snowmelt, ground thaw, excavation, bollard installation, extending additional electric service from a nearby transformer, and adding a new electric meter.

Total Cost (before grant): \$26,980

Total Cost (with grant): \$18,748 ([Charge Ahead Colorado Grant](#))

Lessons Learned [provided by collaborator]: Ensure you can secure work from your electrician and contractor of choice during the time in which you'd like the install to occur. Some re-scoping of this project was required, pushing the installation timeline from the fall to the following spring. Needing to meet grant deadlines and excavate in the spring required higher costs due to necessary snow removal, ground thaw, and excavation. Staffing also proved a challenge during this time on the electrician and contractor side.

PROJECT F- LEVEL 3 CHARGER AT A PARK & RIDE

Location: Eagle Park & Ride; Eagle, Colorado

Year of Install: 2019

Project Specs: One dual-port Level 3 station installed at a park & ride in Eagle. Project required removal of original Level 2 charger, trenching, conduit, permitting, meter upgrades, landscaping, and a dedicated transformer, with capacity to add another station in the future. The transformer, equipment, and installation was provided in-kind by Holy Cross Energy.

Total Cost (before grant): \$55,105.73 (not including Holy Cross Energy in-kind contribution)

Total Cost (with grant): \$25,105.73 (not including Holy Cross Energy in-kind contribution) ([Charge Ahead Colorado Grant](#))

