

Electric Vehicles in Idaho

Industry Acronyms:

Alternating Current (AC)
Alternative Fuel Corridor (AFC)
Direct Current (DC)

Electric Vehicle (EV)
Electric Vehicle Supply Equipment (EVSE)

Federal Highway Administration (FHWA)
Plug-in Electric Vehicle (PEV)



Types of charging

Level 1

2-5 miles of range per hour



J1772 connector

Vehicles receive an AC charge through a 120-volt plug. Most PEVs come with a Level 1 cordset. Level 1 charging is primarily for at-home charging.

8 hours of charging can replenish about 40 miles of range on a mid-size PEV.

Level 2

10-20 miles of range per hour



J1772 connector

Vehicles receive an AC charge through a 240-volt plug. Level 2 charging is used for at-home and extended stay charging at 1 location, such as at a workplace or commercial business / park.

About 3 hours of charging can replenish a mid-size PEV from empty to nearly full.

Level 3/ DC Fast Charging

60-80 miles of range per 20 minutes



CCS



CHAdeMO



Tesla

Vehicles receive a DC fast charge through 480-volt plug. DC Fast charging is used for rapid charging along heavily trafficked corridors. There are 3 types of plug connectors available for Level 3 charging, shown above, which depends on the make of the car.

About 30 minutes of charging can replenish a mid-size PEV to nearly full.

[Data from U.S. Department of Energy's Alternative Fuels Data Center](#)

Want a Charging Station in Your Community: How to Get Involved

- **Recommend to the owner of a good location to apply for funding.**

At minimum, EV owners are spending 20 minutes in a location while their vehicle charges, this not only helps the business hosting the charging station but can help other places around that location.

- **Talk to your local city or county officials.**

Under the state and federally run programs, listed on back, publicly owned sites can apply for funding. City and county officials can also help with zoning, permitting and signage if the location needs specific requirements to install an EV station on that site.

- **Talk to your local electric service provider.**

It is important to know the costs of maintaining an EV charging station. The local electric service provider will need to help provide power to the site for the EV charging stations; they can help explain the costs of the power demand related to the different types of stations.



Photo: Idaho Office of Energy & Mineral Resources

State-Run Programs to Install EV Charging Infrastructure

Idaho Gem Grant

Managed by the Idaho Department of Commerce. Although not explicitly for EV charging, rural communities can apply for it to be used for EV charging.

For more information contact: info@commerce.idaho.gov

Idaho EVSE Program

Managed by the Idaho Office of Energy and Mineral Resources

Not federal dollars, money allocated to states via a court settlement (Volkswagen Settlement)

Program to install DC Fast Charging stations near highway corridors in Idaho.

80% of installation costs reimbursable to private sites, 100% installation costs reimbursable to public-owned sites. **About \$2 million left in funding, application is open now.**

For more information or to apply contact Emily Her: emily.her@oer.idaho.gov or 208-332-1663

Idaho NEVI Program

Managed by the Idaho Office of Energy and Mineral Resources

Federal funding under the National Electric Vehicle Infrastructure (NEVI) Formula Program

Program to install DC Fast Charging stations along designated AFCs approved by FHWA.

Federal cost-share is 80%, stations must be 1 mile from highway.

About \$29.8 million to be given to Idaho to be spent over 5 years.

State must submit an EV Infrastructure Deployment Plan prior to spending money, plan approval expected 9/30/22.

Federally Run Programs to Install EV Charging Infrastructure

Competitive Grant Program

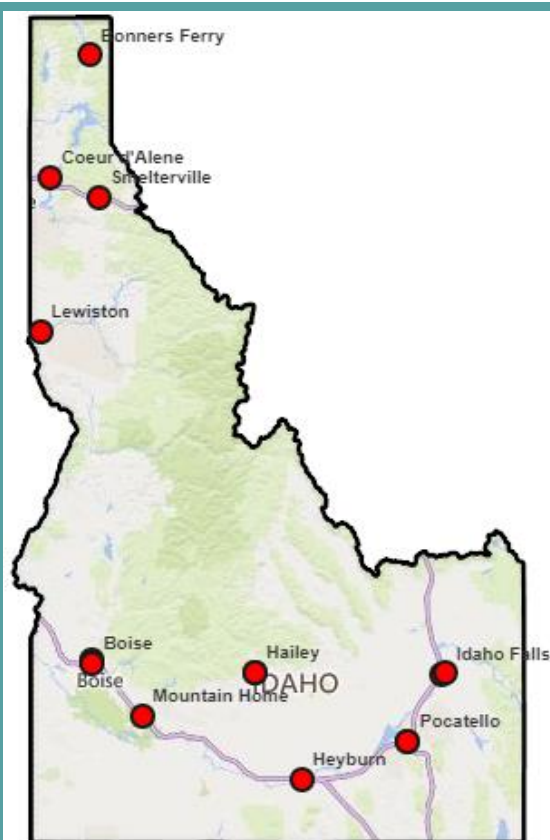
Managed by US Department of Transportation and FHWA

Federal funding under Discretionary Grant Program for Charging and Fueling Infrastructure Program.

Program to install charging stations with priority for low to moderate-income neighborhoods and rural communities.

\$2.5 billion available to apply for as a competitive grant; open to states, MPOs, local governments and tribes. Further grant guidance expected soon; toolkit to be updated [here](#).

Idaho's DC Fast Charging Station Locations



Map: Idaho Office of Energy & Mineral Resources