#### **ALASKA ENERGY AUTHORITY**

## ELECTRIC VEHICLE PROGRAM UPDATE

Taylor Asher Assistant Project Manager

2021 Electrify Alaska! Conference Electric Vehicles and Storage Panel October 27, 2021







### **About the Alaska Energy Authority**





Our Mission

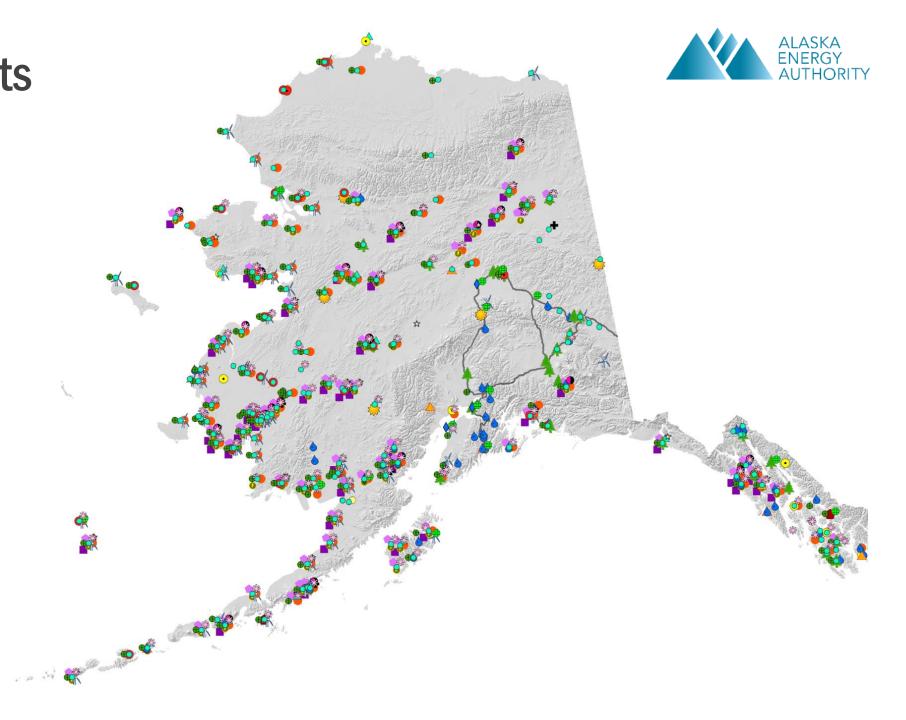
Reduce the cost of energy in Alaska.



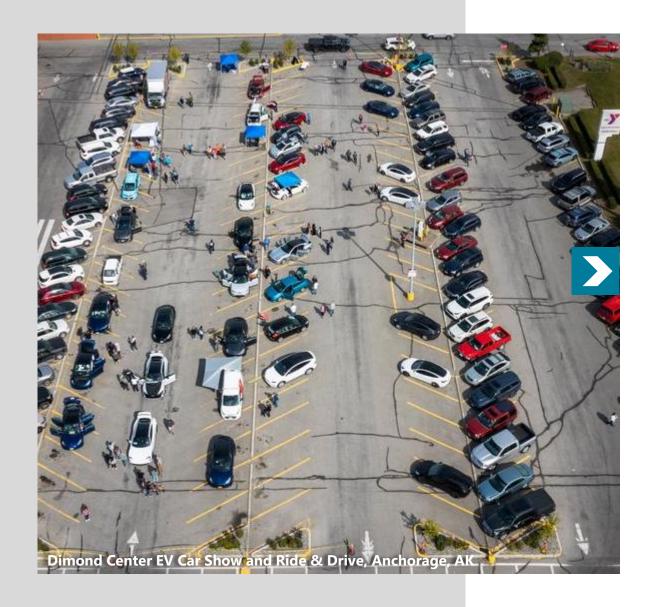
Created in 1976 by the Alaska Legislature, the Alaska Energy Authority (AEA) is a public corporation of the State of Alaska governed by a board of directors with the mission to "reduce the cost of energy in Alaska." AEA is the state's energy office and lead agency for statewide energy policy and program development.

### **AEA Active Projects** and Services

- ▲ Biomass/Biofuels
- **Bulk Fuel Upgrades**
- Circuit Rider Assistance
- ♣ Diesel Emission Reduction Act
- Electrical Emergency Response
- Emerging Energy Technology Fund
- Heat Pump
- Heat Recovery
- Hydroelectric
- Maintence and Improvement
- Ocean/River
- PCE Community
- △ PCE Utility Clerk Training
- Rural Power System Upgrade
- 🐥 Solar
- Storage
- Transmission
- Utility Operator Training
- Utility Technical Assistance
- → VEEP (Efficiency)







AEA Electric Vehicle (EV)
Mission Statement

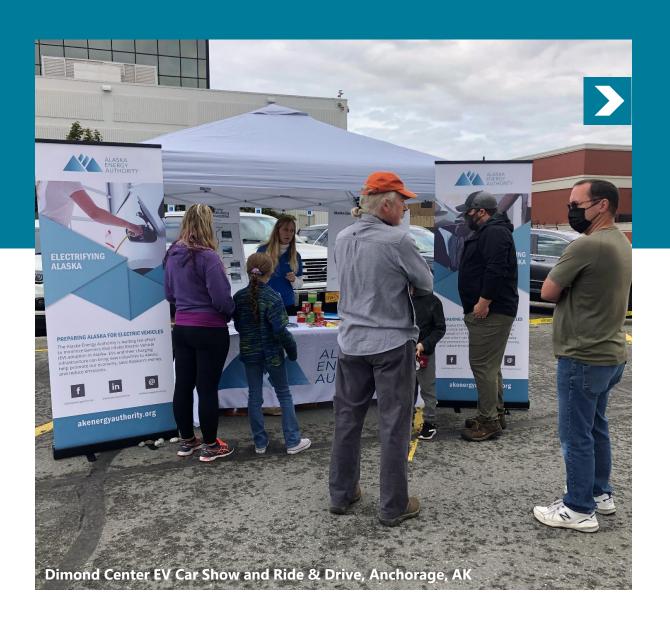
Lead the effort to minimize barriers that inhibit EV adoption in Alaska.

### **EV Program Overview**





- Working Group
- Technical Sessions
- EV Car Show / Ride and Drive
- School bus in Tok
- Transit bus in Juneau
- MOA box truck
- Installation of L2 and DCFC



# Barriers to EV Adoption in Alaska

- Lack of charging infrastructure
- Range anxiety
- High demand charges
- Cold climate performance
- Market availability of electric AWD, SUVs, and trucks

### DEVELOP EV CHARGING INFRASTRUCTURE

#### **DC Fast Charger**

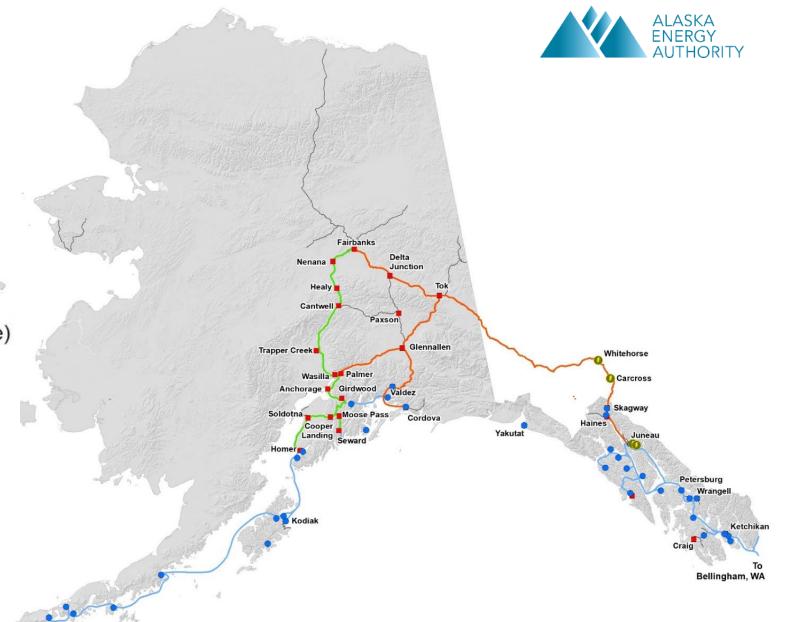
Statewide DC fast-charging network along highway system to facilitate long-range driving and reduce range anxiety

#### Level 2

Community-based Level 2 charging to provide charging at destinations within typical day-to-day driving range

### **EV Fast-Charging Corridor**

- Existing DC Fast Charger (via Plug Share)
- Community
- Ferry Terminal
- Marine Highway
- ✓ Highway
- DC Fast Charging Corridor Phase 1
- DC Fast Charging Corridor Phase 2



### DC Fast-Charging Network: Phase 1



#### **CONNECT HOMER AND SEWARD TO FAIRBANKS**

### 9 sites selected 15 DCFC and 8 Level 2 chargers

#### **TOTAL INVESTMENT OF \$1.52 MILLION**

VW: \$875,000

SEP: \$90,000

**Private: \$555,000** 

**ANTICIPATED COMPLETION** 

**Summer 2022** 

### Planned EV Fast-Charging Locations

- Homer AJ's Old Town Steakhouse & Tavern
- Soldotna Custom Seafood
- Cooper Landing Grizzly Ridge
- Seward Seward Chamber of Commerce
- Anchorage Dimond Center
- Chugiak Three Bears Alaska
- Trapper Creek Three Bears Alaska
- Cantwell Jack River Inn
- Healy Three Bears Alaska







### **Vendor Options**

- FreeWire Technologies Homer, Soldotna, Cooper Landing
  - Battery Powered
- Flo
- ChargePoint
- Siemens

- Two sites completed in Anchorage 2021
  - Linny Pacillo Parking Garage
  - Snowden Administration Building
- Two more sites planned for 2022
  - AEA office parking lot
  - To be determined
- State and Federal SEP funds



Level 2 Chargers
At State Facilities







### **Next Steps**

- \$375,000 VW Trust Funds Remaining for EVSE
  - Continue development of fast-charging network
  - Community-based Level 2 charging
- RFAs for VW grants: between late-fall 2021 and winter 2022
- Identify sites and pursue other funding sources



# Start Planning Now

- Utilities, state and local governments
- Public/private partnerships
- Select transportation corridors
- Pick out potential sites
- Identify State and Federal funding opportunities
- Identification of underserved communities

**AEA** provides energy solutions to meet the unique needs and opportunities of Alaska's rural and urban communities.

### **Alaska Energy Authority**

813 W Northern Lights Blvd. Anchorage, AK 99503



Main: (907) 771-3000

Fax: (907) 771-3044



akenergyauthority.org



@alaskaenergyauthority



@alaskaenergyauthority

