# ELECTRIC VEHICLE DC FAST-CHARGING SITE SELECTION

Betsy McGregor Preliminary Design and Environmental Manager

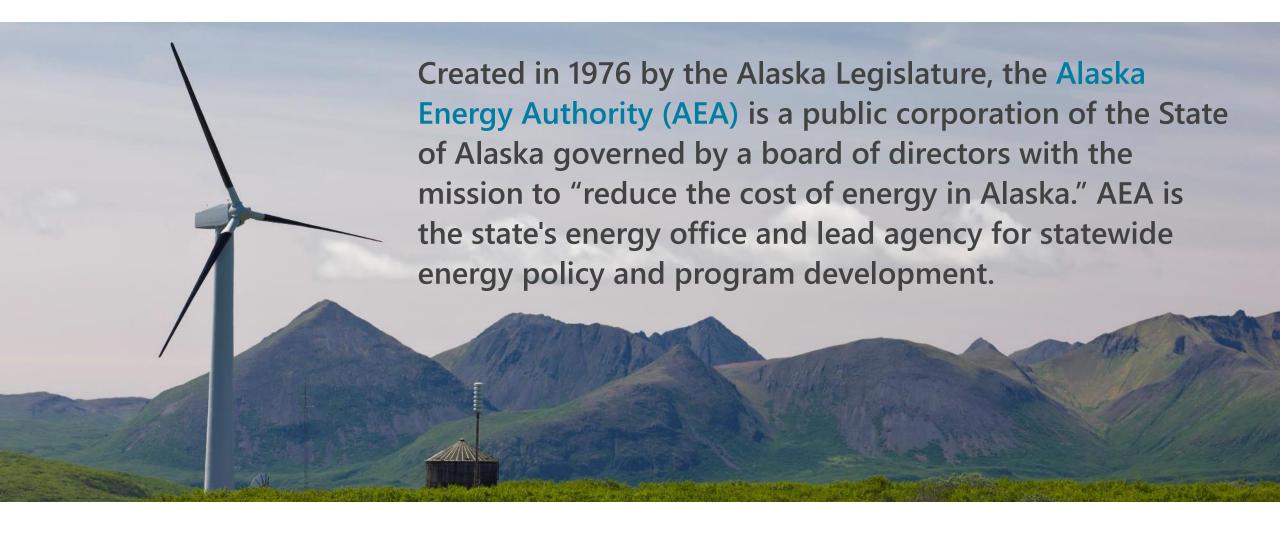
Informational Webinar March 30, 2021





#### WHO WE ARE





#### WHAT WE DO





**Railbelt Energy** – AEA owns the Bradley Lake Hydroelectric Project and the Alaska Intertie. These assets benefit Railbelt consumers by reducing the cost of power.



**Renewable Energy** – AEA provides renewable energy and energy efficiency grants, analysis, and expertise to benefit Alaskans. These include hydro, biomass, wind, solar, and others.



**Power Cost Equalization** – The Power Cost Equalization Program reduces the cost of electricity in rural Alaska for residential customers and community facilities.



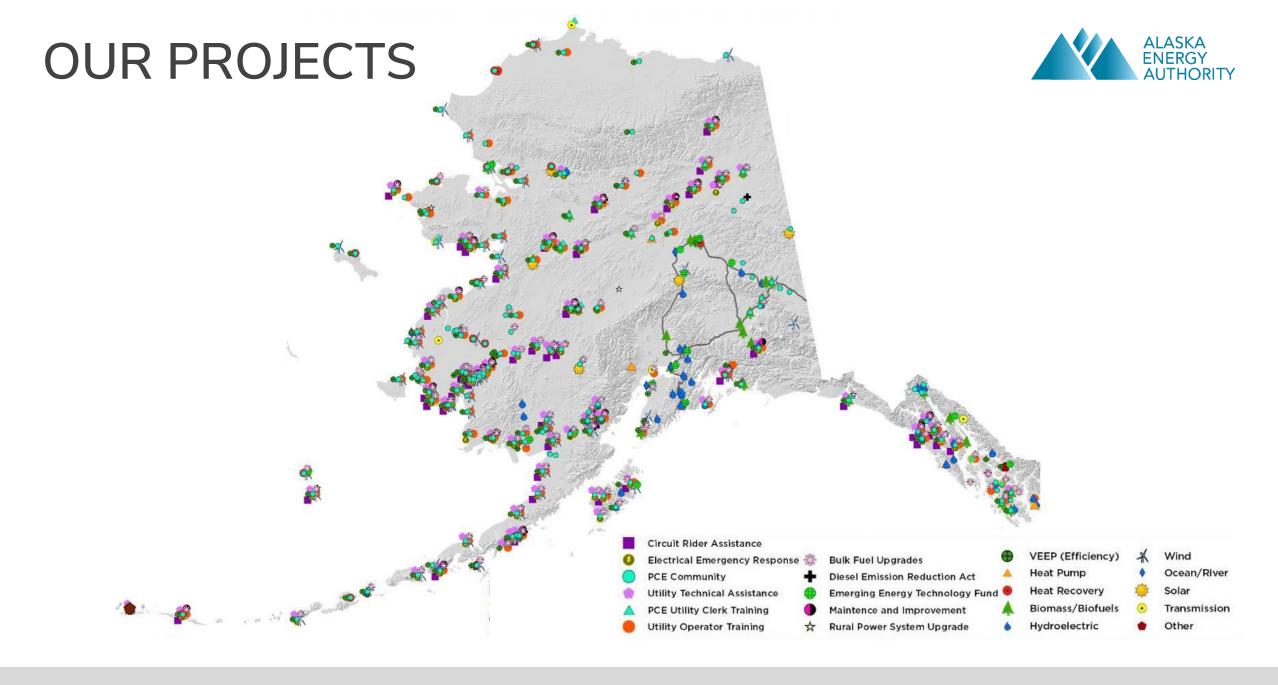
**Grants and Loans** – AEA provides loans to local utilities, local governments, and independent power producers for the construction or upgrade of power generation and other energy facilities.



**Rural Energy** – AEA constructs bulk fuel tank farms, diesel powerhouses, and electrical distribution grids in rural villages. AEA supports the operation of these facilities through circuit rider and emergency response programs.



**Energy Planning** – In collaboration with local and regional partners, AEA provides critical economic and engineering analysis to plan the development of cost effective energy infrastructure.



#### VW ENVIRONMENTAL MITIGATION TRUST

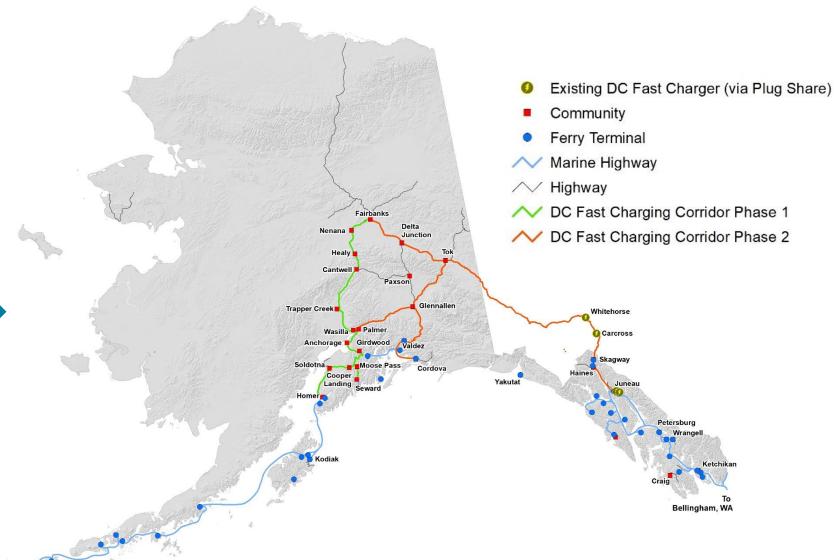
- AEA designated the Lead Agency in 2018
- School Bus Replacement
- Public Transit Bus Replacement
- Replacement of gensets used for prime power in Rural Alaska
- EV Charging Infrastructure (15%)
  - DC Fast-Charging Network (~\$1 million)
  - Community-based Level 2 Chargers

#### DC FAST-CHARGING NETWORK PROGRAM

- Develop DCFC stations along highway corridors
- Stations located 50 to 100 miles apart
- Where communities and infrastructure exist
- Within 5 miles of highway system

# DC FAST-CHARGING CORRIDOR





#### PHASE 1

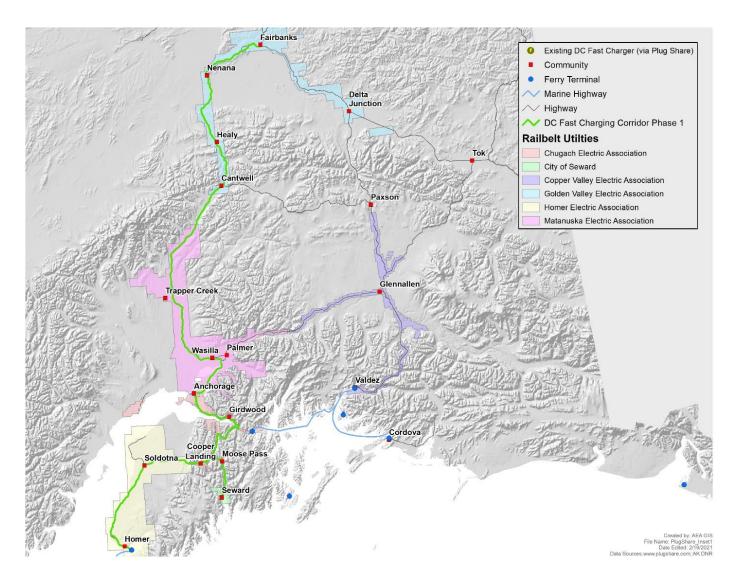
Kenai Peninsula to Fairbanks

#### DC FAST-CHARGING CORRIDOR



#### PHASE 1

- 615 miles
- 5 utility service territories
- Electricity calculator



#### DC FAST-CHARGING CORRIDOR



- RFQ to qualify EVSE Packages open
- RFI to identify interested Site Hosts open
- RFA to select Site Hosts
  - Round 1 closes May 5, 2021 at 2 p.m. (Alaska Time)
  - Selected Hosts notified May 12, 2021
  - Subsequent rounds as needed to meet Program goals

#### **AVAILABLE FUNDING**



- VW Trust 80%, not to exceed \$100,000 per site
- Grantee 20%
- AEA Round 1 Incentive \$10,000 per site (first 10 sites)
  - Must complete and submit:
    - Final site configuration plan
    - Host Site Agreement(s)
    - procure charging infrastructure
    - invoice AEA no later than June 30, 2021

#### **ELIGIBLE EXPENSES**



- Final site design
- Charging equipment and related material
- Electrical contractors
- Installation labor and parts
- Signage
- Network services, customer service, warranties and maintenance for a period of 5 years

#### INELIGIBLE EXPENSES



- Electricity
- Purchase or lease real-estate

- Capital costs
  - Construction of buildings, parking facilities, etc.
- General site maintenance



- Application Form
- Proposal
- Budget Form
- Legal description of Site
- Letter from Servicing Utility

- Proof of Access to the Site
  - Property ownership, lease, letter from property owner
- Letter(s) of Support
  - Planning department, local organizations, EV owners, potentially impacted businesses



#### Project Organization, Staffing, and Qualifications (Section 6.2)

- Organizational Chart
  - **Project Lead**
  - Site Host
  - **EVSE Supplier**
  - **EVSE Management/Maintenance Provider**
  - Grantee
  - Other parties
- Individual Qualifications Project Lead, EVSE Supplier
- Corporate Qualifications Project Lead, EVSE Supplier



#### Financial and Ownership Structure (Section 6.3)

- Host Site Agreement all relevant parties
  - 5 years operation and maintenance
  - Who has legal right to own and operate
  - Who will receive revenue
  - Responsible party to ensure payments
  - Non-disclosure of confidential/proprietary info
  - Disposition plan if agreement terminated
- Fee/rate Structure
  - Point of sale equipment, method for payment



### Site Suitability (Section 6.4)

- Meets requirements in RFA Section 3.1
- Located within 5 miles of highway segments
- 24 hours per day; 7 days a week; 365 days a year
- Wi-Fi or cellular service to support network services
- 2 dedicated parking spaces per DCFC
- Electrical infrastructure to meet load
- Nearby amenities



# Conceptual Site Configuration Plan (Section 6.5)

- Ingress and egress
- Buildings, other facilities on site
- Nearby amenities
- Point of interconnection with the existing electrical service
- Electrical meter
- Separate meter, if applicable

- Existing lighting or proposed lighting, if applicable
- DCFC EV charger
- Level 2 charger
- Dedicated parking spaces for EV
- Area for future expansion
- Signage



# Project Implementation Plan (Section 6.6)

- EVSE Package
- Installation
- Operations and Maintenance
  - Customer payment
  - Customer support
  - EVSE management and maintenance
- Data Capture
- Reporting
- Schedule



# Budget (Section 6.7)

- Complete Budget Form
- Explain budget

Budget Item	Description	VW Funds from AEA <sup>1</sup>	SEP Incentive Funds from AEA <sup>2</sup>	Mandatory Match Cash	Mandatory Match In-Kind	Voluntary Match Cash	TOTAL	
Project Management								
Travel							\$0	
Travei							\$0	
Charging Unit								
Other Mandatory Items (e.g., mounting hardware, activation fees)							\$0	
Other Mandatory It	ems (e.g., mounting n	ardware, acti	vation rees)				\$0	
Engineering and Final Design								
Electrical System Lla	ogrades, other compo	nonts					\$0	
Electrical System of	ogrades, other compo	nents					\$0	
Installation Labor and Parts								
Permitting Fees							\$0	
remitting rees							\$0	
Network Services (5-years)								
EVCE Warranty & M	laintenance (5-years)						\$0	
EVSE Wallality & IV	ialifice (5-years)						\$0	
Other Itemized Costs								
							\$0	
	PROJECT TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	
Perce	nt by Funding Source	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

# SCORING CRITERIA (RFA SECTION 7)



CATEGORY	MAXIMUM POINTS
Application and Supporting Documentation	5
Project Organization, Staffing, and Qualifications	10
Financial and Ownership Structure	5
Site Suitability	20
Conceptual Site Configuration Plan	10
Project Implementation Plan and Schedule	15
Project Budget	10
Community Support	5
Site Location	20
Total	100

#### PHASE 1 HIGHWAY SEGMENTS



#### **Highway 9 (Seward Highway)**

From Seward to intersection with Highway 1

#### Highway 1 (Sterling Highway)

From Homer north to and including Kasilof

North of Kasilof to intersection with Highway 9

#### **Highway 1 (Seward Highway)**

From intersection with Highway 9 north to Potter Valley Road intersection

Anchorage from Potter Valley Road intersection to Muldoon Road exit

#### **Highway 1 (Glenn Highway)**

East of Muldoon Road exit to Highway 3 intersection at Wasilla

#### Highway 3 (Parks Highway)

West of Wasilla up to and including Trapper Creek

North of Trapper Creek up to and including Cantwell

North of Cantwell up to and including Healy

North of Healy up to and including Nenana

North of Nenana up to and including Fairbanks

#### SELECTED DCFC SITES



- Round 1 notified May 12, 2021
- Grant Agreement with AEA for 5+ years
- Incentive Funds Requirements
  - Obtain a DUNS number
  - Complete final site configuration plan
  - Complete Host Site Agreement(s)
  - Procure charging infrastructure
  - Invoice AEA no later than June 30, 2021



# QUESTIONS

#### CONTACTS



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AIDEA/AEA Procurement Home Page aideaaeaprocurement.org

Register to Receive Updates and Amendments aideaaeaprocurement.org/home/register/3212

**AEA EV Webpage** 

<u>akenergyauthority.org/what-we-do/energy-planning-project-development/electric-vehicles</u>

Listserve

list.state.ak.us/mailman/listinfo/alaskaev



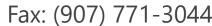


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