State of Alaska

DRAFT

Electric Vehicle Infrastructure Implementation Plan FY25

ALASKA ENERGY AUTHORITY

TRANSPORTATION & PUBLIC FACILITIES • STATE OF ALASKA •

Plan Development

This plan was developed by the Alaska Energy Authority, Alaska Department of Transportation and Public Facilities, electric vehicle stakeholders, utilities, communities, and residents, with the assistance of Michael Baker International.

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Cover photo of an electric vehicle charging at the Dimond Center in Anchorage, courtesy of AEA

Acronyms

AATCA	Alaska Apprenticeship Training Coordinators Association
ABC	Associated Builders and Contractors
AEA	Alaska Energy Authority
AFC	Alternative fuel corridor
AFN	Alaska Federation of Natives
AGC	Alaska General Contractors
AJEATT	Alaska Joint Electrical Apprenticeship and Training Trust
AKEVA	Alaska Electric Vehicle Association
AKEVWG	Alaska EV Working Group
AMHS	Alaska Marine Highway System
API	Application programming interface
ATV	All-terrain vehicles
AUCP	Alaska Unified Certification Program
AWP	Alaska Works Partnership
BIL	Bipartisan Infrastructure Law
CCS	Combined Charging System
CFR	Code of Federal Regulations
CHAdeMO	CHArge de MOve Protocol
CISA	Cybersecurity and Infrastructure Security Agency
DAC	Disadvantaged community
DBE	Disadvantaged business enterprise
DCFC	Direct current fast charging
DEC	Department of Environmental Conservation
DNR	Department of Natural Resources
DOT&PF	Department of Transportation & Public Facilities
EEO	Equal employment opportunity
EV	Electric vehicle
EVSE	Electric vehicle supply equipment
EVITP	Electric Vehicle Infrastructure Training Program
FHWA	Federal Highway Administration
GIS	Geographic information systems
GPS	Global Positioning System
IBEW	International Brotherhood of Electrical Workers
ICE	Internal combustion engine
kW	Kilowatt
kWh	Kilowatt-hour

LRTP	Long Range Transportation Plan
MOA	Memorandum of Agreement
MP	Mile post
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MW	Megawatt
NACS	North American Charging Standard
NEMA	National Electrical Manufacturers Association
NEPA	National Environmental Policy Act of 1969
NEVI	National Electric Vehicle Infrastructure
NHS	National Highway System
NPRM	Notice of Proposed Rulemaking
OEM	Original Equipment Manufacturer
PCI-DSS	Payment Card Industry Data Security Standard
PKI	Public Key Infrastructure
PII	Personally identifiable information
RCA	Regulatory Commission of Alaska
RFA	Request for Applications
RFI	Request for Information
RPS	Renewable Portfolio Standard
SAE	Society of Automotive Engineers
SEP	State Energy Program
SESP	State Energy Security Plan
STIP	Statewide Transportation Improvement Program
SUV	Sport utility vehicle
TIP	Transportation Improvement Program
USC	United States Code
USDOT	United States Department of Transportation
VW	Volkswagen

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Introduction

The Bipartisan Infrastructure Law (BIL) offers a unique funding opportunity to advance a statewide electric vehicle (EV) fast charging network and community-based charging installations in urban and rural areas throughout the state. The National Electric Vehicle Infrastructure (NEVI) formula program will provide $5 billion over five years for states to build electric vehicle service equipment (EVSE) charging stations along highway corridors. NEVI goals for the EVSE network include being reliable, affordable, equitable, and seamless between states and networks while reducing emissions and increasing clean air.

Through the BIL NEVI Formula Program, Alaska will receive more than $50 million over five years. The Federal Highway Administration (FHWA) requires states to submit an implementation plan to be eligible for these funds. The Alaska Energy Authority (AEA or The Authority) and the Alaska Department of Transportation and Public Facilities (DOT&PF) have worked with partners and stakeholders to develop the state's Electric Vehicle Infrastructure Implementation Plan (The Plan) and will continue to gather feedback and update The Plan over the coming years. NEVI program funds will be received by DOT&PF and administered by AEA for the duration of the program.

The NEVI formula program will provide $5 billion over five years for states to build charging stations along highway corridors. Alaska will receive more than $50 million of those funds.

The Plan outlines a strategy for using the NEVI formula funds to deliver EV charging infrastructure that will enable light-duty EV travel and provide confidence when commuting throughout the state for work, recreation, and tourism. The Plan was developed in coordination with DOT&PF, other State agencies, local governments, utilities, and other stakeholder groups in Alaska. This Plan supports the goals and objectives of the State's long-range transportation plan. Programs and projects funded through the NEVI program will follow United States Department of Transportation (USDOT) and

FHWA regulatory requirements and will be included in DOT&PF's Statewide Transportation Improvement Plan.

AEA and DOT&PF will strategically manage the NEVI funds to deploy publicly accessible EVSE. The guidance requires designated alternative fuel corridors of the National Highway System to be fully "built out" and approved by FHWA with guidance coming from the USDOT/Department of Energy Joint Office of Energy and Transportation (Joint Office). Alaska currently has one pending Alternative Fuel Corridor (AFC), located between Anchorage and Fairbanks. Alaska will revisit nominating additional AFCs in subsequent years.

An EV enthusiast stands next to his EV while it charges
Photo courtesy of Mark Kelliher

After the AFC is built and accepted by FHWA, the Authority plans to install Direct Current Fast Charging (DCFC) and Level 2 charging stations throughout the rest of the state as funding allows. AEA and DOT&PF will also advocate for rural charging locations through the federal discretionary grant process to meet the needs in this plan.

- Phase 1: Build Out Alaska's Alternative Fuel Corridor
- Phase 2: Build Out Alaska's Highway and Marine Highway Systems
- Phase 3: Install Charging Stations in rural Hub Communities, as funding allows
- Phase 4: Develop charging sites in Urban and "Destination" Locations, as funding allows

The expected dates of the phases identified above are as follows:

- Phase 1: 2022-2025
- Phase 2: 2024-2027
- Phase 3: 2025-2027
- Phase 4: 2026

Dates of State Plan for Electric Vehicle Infrastructure Deployment Development and Adoption

AEA has partnered with Michael Baker International, an engineering firm with expertise in EV Infrastructure Planning, to assist in developing The Plan. Following is a summary of activities conducted prior to and while developing The Plan:

- 2020: AEA formalized the Alaska EV Working Group (AKEVWG) to conduct public education and outreach. The AKEVWG meets quarterly.
- April 2022: AEA entered into a Memorandum of Understanding (MOU) with the Alaska Department of Motor Vehicles to receive EV registration data.

- April 2022: AEA created the AEA/DOT&PF interagency advisory group.
- May 2022: Request for Information (RFI) released by AEA to gather public feedback on the NEVI program and to solicit information from potential site hosts.
- May 2022: RFI and outreach events advertised at the Sustainable Energy Conference.
- May-July 2022: RFI and outreach events advertised on the Online Public Notices (OPN) platform.
- June 2022: Hosted four virtual informational sessions.
- June 2022: In-person presentations: Southeast Conference, Fairbanks FAST Planning (x3), Bradley Lake
- Project Management Committee.
- July 2022: The Plan released for public comment.
- July 12, 2022: Coordination meeting with utilities.
- July 13, 2022: Two hybrid (in-person with virtual component) presentations/listening sessions to solicit
- feedback on The Plan.
- July 14, 2022: Presentation to Alaska Municipal League.
- July 29, 2022: The Plan submitted to the Joint Office.
- September 27, 2022: Year 1 FHWA approval.
- October 2022: In-person presentations: Mat-Su Borough, Seward Chamber, Fairbanks City Council, Fairbanks Alliance, NASEO, Mat-Su Transportation Fair, Wasilla City Council, Alaska Federation of Natives Annual Convention.
- November 2022: In-person presentations: Southeast Conference and Alaska Electric Light & Power, Juneau Working Session, Alaska Municipal Climate Network Meeting, National Women in Construction.
- December 2022: In-person presentations: All Hazards Planning Committee, Alaska Municipal League Annual Local Government Conference.
- January 2023: In-person presentations: Anchorage Transportation Fair, AKEVWG Quarterly Meeting.
- February 2023: In-person presentations: Kenai NEVI Workshop, Alaska Forum on the Environment.
- March 1, 2023: AEA released Request for Applications (RFA) for Site Hosts along the AFC (Phase 1)
- March 2023: In-person presentations: DBE Conference for the Civil Rights Office, AEA EV RFA Pre-Application Meeting, Electric Vehicle Infrastructure Training Program (EVITP) Training (IBEW), Alaska EV Working Group (AKEVWG) Quarterly Meeting, Electrifying Alaska.
- April 2023: In-person presentations: AKEVWG technical session, Mat-Su NEVI Workshop.
- May 2023: In-person presentations: AKEVWG quarterly meeting, Alaska Sustainable Energy Conference.
- May 15, 2023: RFA for Site Hosts along the AFC (Phase 1) closed.
- June 12–15, 2023: NEVI Plan and Program Update Workshops in Anchorage, Mat-Su, Juneau, and Fairbanks.
- June 16–July 16, 2023: Public comment period on draft plan.
- June 22, 2023: Selection Committee meeting for Phase 1 AFC Projects.
- July 31, 2023: Year 2 Plan submission to Joint Office.
- September 27, 2023: Presented at the Alaska Infrastructure Development Symposium
- September 29, 2023: FY24 Plan Approval.
- December 8, 2023: Presented at AML 73rd Annual Local Government Conference
- May 10-20, 2024: FY25 Plan Update and Phase 2 Workshops in Ketchikan, Glennallen, Homer, Seward, and Anchorage.

- June 12-July12, 2024: Public comment period on draft plan.
- July 31, 2024: FY25 Plan submission to Joint Office.
- September 30, 2024: Expected FY25 Plan Approval.

This plan is intended to be a living document as AEA and DOT&PF collaborate with communities, laws or policies change, adoption projects alter, and additional guidance from the federal government is published. This plan is not intended to impede other DOT&PF infrastructure improvements. The document will be updated annually, and prior year progress and changes will be documented.

Updates from Prior Plan (FY24 Annual Update)

Key items updated in this Plan from the prior year's Plan are:

Section Updates:

- State Agency Coordination –
- Public Engagement –
- Plan Vision and Goals –
- Contracting –
- Civil Rights –
- Existing and Future Conditions Analysis –
- EV Charging Infrastructure Deployment –
- Implementation –
- Equity Considerations –
- Labor and Workforce Considerations –
- Physical Security & Cybersecurity –
- Program Evaluation –
- Discretionary Exceptions –

Dedication of an AEA-funded EV Ultrafast Fast-Charger in Homer, Alaska
Photo courtesy of AEA

State Agency Coordination

AEA is the State Energy Office and the lead agency for statewide energy policy and program development. In 2018, Alaska became a beneficiary of the Volkswagen (VW) Environmental Mitigation Trust (Trust), and the Authority was designated by the Governor 's Office as the State's lead agency for EV planning and implementation. At that time, AEA adopted a secondary mission to reduce barriers to EV adoption. AEA has taken the leading role in developing and implementing the NEVI program.

DOT&PF is the responsible recipient of FHWA Title 23 funds and plays a vital role in the implementation of FHWA's AFC designations and the NEVI program. DOT&PF oversees the funding and management of state highways, bridges, airports, ferries, and state-owned buildings throughout the state.

Since the designation of AEA as the State's lead agency for EVs by the Governor 's Office, AEA has conducted public outreach and education and has worked towards reducing range anxiety by strategically installing EV chargers. In 2020, AEA facilitated the development of the AKEVWG, comprised of representatives of utilities, state and local government, researchers, EV owners, and stakeholder industries. AEA's experience administering the VW settlement grants for DCFC in Alaska provides the agency with the background and experience needed to implement the NEVI program.

AEA's experience administering the VW Settlement grants in Alaska provides the agency the background and experience needed to implement the NEVI program.

A Memorandum of Agreement (MOA) was developed between Alaska DOT&PF and AEA to assign responsibilities for each agency and to define the financial and contracting processes required to implement the Plan. The purpose of the MOA is to provide a framework of collaboration between the two agencies to ensure EV charging infrastructure investments by the State are strategic, coordinated, efficient, and equitable.

The MOA was signed into effect by AEA and DOT&PF on October 20, 2022. This MOA describes the roles and responsibilities for the planning and development phase of work for the NEVI program, which includes work primarily related to the development of this Plan.

Of note, the MOA places AEA as responsible for:

- planning and designating AFCs
- creating, managing, and maintaining a public, fair, equitable, and competitive process for project selection
- developing and administering a public involvement plan that includes consultation and collaboration with Metropolitan Planning Organizations (MPOs) and other critical planning entities
- holding public project evaluation and selection processes
- awarding NEVI funds
- identifying and verifying match requirements are met
- ensuring alignment with the DOT&PF Transportation 'Family of Plans' by identifying that the goals, objectives, strategies, and actions from the Long Range Transportation Plan (LRTP) are incorporated as well as evaluation of regional, area, modal and system plans to incorporate regional needs
- providing oversight of all AEA-handled NEVI funds and being responsible for compliance with Title 23,
- Title 49, and 2 Code of Federal Regulations (CFR) 200 requirements

AEA and DOT&PF staff will meet regularly to coordinate efforts related to NEVI programs and funding. The Executive Director of AEA and the Commissioner of DOT&PF will meet at least twice a year to coordinate and plan for ongoing and new EV program initiatives.

The MOA acknowledges DOT&PF as the responsible recipient of FHWA Title 23 funds. DOT&PF will oversee Title 23 funds and requirements under 23 CFR 200. DOT&PF will also provide geographic information systems (GIS) assistance as needed and coordinate with the MPOs to ensure NEVI projects are included in their transportation implementation plans.

Of note, the MOA places DOT&PF as responsible for:

- providing NEVI plan input and alignment with governor and State priorities
- ensuring alignment with the DOT&PF Transportation 'Family of Plans' and working to incorporate NEVI as a system with overarching strategy into other transportation plans
- sharing information on laws,

AEA-funded EV charging stations in Seward
Photo courtesy of AEA

regulations, rules, and guidelines that may come to bear on the process and connecting AEA with appropriate resources managing federal contractual agreements with FHWA

- creating a DOT&PF NEVI planning support program that includes funding in the Statewide Transportation Improvement Program (STIP)
- provide funding notices to AEA annually based on federal formula and MOA agreements
- implementing NEVI as appropriate on state infrastructure in coordination with the Plan
- ensuring NEVI aligns with the overall strategy of DOT&PF's Sustainable Transportation Program
- managing federal contractual agreement with FHWA

Future roles and responsibilities for DOT&PF and AEA related to the design, construction, and operation and maintenance of the charging sites will be defined in individual project agreements after sites are selected. The site-specific project agreements are currently under development, and will receive input from AEA, DOT&PF, and the grantees. These project agreements are expected to go into effect in the fall of 2023. The current MOA for planning and development governs the planning work and will not govern the project-specific work.

The Plan is a product of close coordination between DOT&PF and AEA. An internal advisory group composed of subject matter experts within DOT&PF, AEA, and FHWA was formed in April 2022 to coordinate implementation planning and development efforts. The purpose of the advisory group is to develop the state strategy for implementing the NEVI program and ensure the Plan adheres to FHWA requirements. The advisory group meets and provides updates to agency directors and commissioners every two weeks.

AEA, DOT&PF, and FHWA have continued to meet on a biweekly, virtual basis throughout calendar years 2022, 2023, and 2024 to discuss NEVI program development, outreach and engagement, and other topics relevant to the delivery of the NEVI program objectives. In addition, AEA and DOT&PF meet in-person quarterly to develop process strategies for carrying out the NEVI program. AEA and DOT&PF have worked collaboratively to develop the state's approach to the incorporation of NEVI projects into the Statewide Transportation Improvement Program (STIP), environmental review and National Environmental Policy Act (NEPA) compliance, federal project agreement negotiation and process, and project agreements with the State and selected project site hosts.

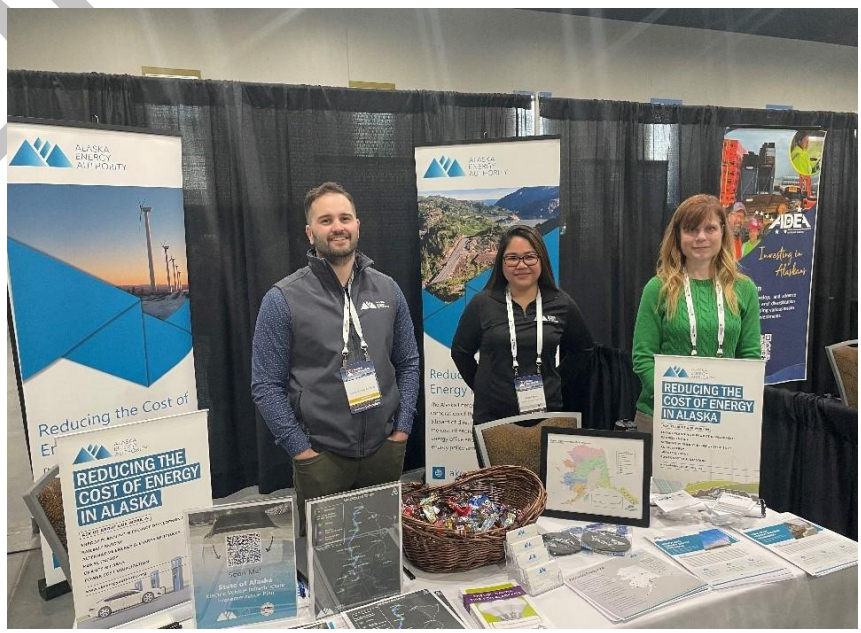
AEA and DOT&PF will comply with the Buy America requirements issued for the NEVI program, and utilize US-produced parts, materials, and EVSE. The agencies recognize that the FHWA interprets and applies Buy America requirements on a 100% domestic content and assembly threshold for iron, steel, and protective coatings. AEA and DOT&PF will also comply with the Waiver of Buy America Requirements for Electric Vehicle Chargers (88 FR 10619) as effective March 23, 2023, that applies to:

- EV chargers manufactured by July 1, 2024, whose final assembly occurs in the United States, and whose installation has begun by October 1, 2024.
- EV chargers manufactured on or after July 1, 2024 whose final assembly occurs in the United States, and for which the cost of components manufactured in the United States is at least 55 percent of the cost of all components.

Public Engagement

AEA and DOT&PF will partner to deliver timely and continuous public involvement opportunities consistent with 23 CFR 450.210. As part of developing Alaska's NEVI Plan, AEA and DOT&PF began conducting public outreach, which utilized various platforms and outreach tools. The public involvement objective is to ***increase Alaskans' awareness of the NEVI formula funding and gather public input on the plan development and EVSE siting***. Public involvement will provide transparency in implementation of the NEVI formula program and increase understanding of and enthusiasm for EVs, as well as break down barriers to EV adoption.

AEA hosts the AKEVWG, which meets quarterly and is composed of EV owners, researchers, utilities, municipalities, site hosts, EV vendors, charging station site hosts and many other stakeholders. This group helps inform AEA of Alaska-specific EV considerations, including EVSE needs and trends, and provides input on how to best identify sites for charging stations. The working group has



AEA conducts public outreach at the Governor's Sustainable Energy Conference in 2023. Photo courtesy of AEA

several hundred email subscribers that are regularly engaged and provides an opportunity for Alaskans to stay up-to-date on the changing EV landscape and opportunities in the state.

AEA maintains an EV subpage on the AEA domain that includes information about upcoming public outreach events, AKEVWG meeting minutes, and information regarding cost of EV ownership compared to internal combustion engine (ICE) vehicles, as well as costs and potential benefits to owning a DCFC site.1 The website also links news articles and television clips in which AEA is featured. AEA's outreach team is continuing to improve and direct traffic to the website. The vision of the website is to be the go-to source for Alaska's EV enthusiasts. The website will include the latest iterations and updates of the Plan and provide opportunities for public comment. As the Plan is implemented, the website will include a map with site locations and construction progress.

Stakeholders Involved in Plan Development

The list of organizations that have been engaged and future stakeholders as the plan was developed and evolves are identified in Table 1 and 2, respectively. An asterisk identifies a stakeholder or community that is found within a Justice40 area identified by the USDOT[2].

Current Stakeholders

Table 1: Current Plan Development Stakeholders

Communities & Local Governments		
Akutan*	City of Houston*	Old Harbor*
Municipality of Anchorage	Hydaburg*	Ouzinkie*
City of Anderson	City and Borough of Juneau	City of Palmer*
City of Angoon*	Kachemak*	Pelican
Coffman Cove	Kake*	Petersburg Borough
Cold Bay	Kasaan*	Port Lions*
Cordova	Kenai*	Saxman*
Craig*	Kenai Peninsula Borough*	Seldovia*
Delta Junction	City of Ketchikan*	Seward
Denali Borough	Ketchikan Gateway Borough	City and Borough of Sitka*
Eagle	King Cove*	Municipality of Skagway Borough*
City of Fairbanks	Klawok*	Soldotna*
Fairbanks North Star Borough	City of Kodiak	Tenakee Springs
False Pass*	Kodiak Island Borough*	Unalaska*
Gustavus	Matanuska-Susitna Borough*	City of Valdez
Haines Borough	City of Nenana*	Wasilla*
Homer*	North Pole	Whittier
City of Hoonah*	North Slope Borough	Yakutat

*Indicates stakeholder or community that is found within a Justice40 area identified by the USDOT

1 *https://www.akenergyauthority.org/What-We-Do/Alternative-Energy-and-Energy-Efficiency-Programs/Electric-Vehicles*
2 *https://www.transportation.gov/equity-Justice40*

Native Organizations		
Ahtna, Inc.*	Cook Inlet Regional Corp*	Metlakatla Indian Community*
Chickaloon Native Village*	Doyon*	
Chugach Corp*	Kodiak Area Native Association*	
Utilities		
Alaska Electric Light & Power Co.	Cordova Electric	Kotzebue Electric Association
Alaska Power & Telephone	Enstar Natural Gas	Matanuska Electric Association
Alaska Power Association	Golden Valley Electric Association	Southeast Alaska Power Agency, Ketchikan
Chugach Electric	Homer Electric Association	Juneau Hydropower
Copper Valley Electric	Kodiak Electric Association	Ketchikan Public Utilities/Electric
Agencies		
Alaska DOT&PF	Bureau of Land Management	US Department of Energy
Alaska Energy Authority	Federal Highway Administration	
Alaska Housing Finance Corporation	Regulatory Commission of Alaska	
Businesses		
Adventure Denali	Loopy Lupine	Denali Chamber of Commerce
	Sheep Creek Lodge	Willow Chamber of Commerce
Dimond Center	Chugiak Eagle River Chamber	Three Bears Alaska
Jack River Inn	Whistle Hill	Major Marine Tours
Alaska Sea Life Center		
Local Organizations		
Alaska Municipal League	Easy Park	Pacific Northwest Economic Region
Alaska Center	Fairbanks Economic Development Corporation	Prince William Sound Economic Development District
Alaska Electric Vehicle Association (AKEVA)	Fairbanks Area Surface Transportation (FAST) Planning MPO	Prince William Sound Science Center
Alaska Public Interest Research Group	Haines Economic Development Corporation	ReCharge Alaska
Alaska Trails	Juneau EVA	Renewable Energy Alaska Project
Anchorage Economic Development Corporation	Kenai Peninsula Economic Development District	Sitka Conservation Society
Anchorage Metropolitan Area Transportation Solutions (AMATS)	Launch Alaska	Southeast Conference*
Bering Strait Development Council	Norton Sound Health Corporation	Southwest Alaska Municipal Conference*
Copper Valley Development Association		Transition Sitka
Education		
University of Alaska Anchorage	University of Alaska Fairbanks	
	Private Companies or Vendors	
Compucom	FLO	Tesla
eCAMION	ChargePoint	

*Indicates stakeholder or community that is found within a Justice40 area identified by the USDOT

Potential Future Stakeholders

Table 2: Current Plan Development Potential Future Stakeholders

Alaska Dept. of Environmental Conservation, Air Quality Division	Calista Corporation*	Laborers' Local 341
Alaska Federation of Natives*	CCI Electrical Services, LLC	Laborers' Local 942
Alaska Inter-Tribal Council*	Chugach Native Association*	Maniilaq*
Alaska Native Tribal Health Consortium*	Cook Inlet Tribal Council*	McKinley Private Investment
Alcan Electrical & Engineering, Inc.	Copper River Native Association*	NANA Regional Corporation*
Aleut Corporation*	Fairbanks Native Association*	National Park Service
Aleutian Pribilof Island Association*	Fullford Electric, Inc.	Northern Alaska Environmental Center
Alyeska Resort	Greater Fairbanks Chamber of Commerce	Sealaska Corporation*
Arctic Slope Regional Corporation	Kawerak	Tanana Chiefs Conference*
Association of Village Council Presidents	Knik Tribe*	Telecommunications/Internet Entities
Bering Straights Native Corporation*	Kodiak Area Native Association*	Tok Transportation
Bristol Bay Native Corporation*	Koniag, Incorporated*	University of Alaska Fairbanks
Sheep Mountain Lodge	Eureka Lodge	Gunsight Mountain Lodge
Grow Ketchikan	EVGateway	

*Indicates stakeholder or community that is found within a Justice40 area identified by the USDOT

Tribal Engagement

AEA hosted a booth at the Alaska Federation of Natives (AFN) annual conference in Anchorage in October 2023. AFN is the largest statewide Native organization in Alaska and represents more than 140,000 Native peoples—about one out of every five Alaskans. Formed in 1966 to settle land claims, AFN continues to be the principal forum and voice of Alaska Natives in addressing critical issues of public policy and government. The booth at the AFN conference provided numerous resources related to the NEVI program and the state's EV strategy. Project managers were available at the booth to discuss the program in greater detail with interested stakeholders.

In addition to AEA's involvement at the AFN event, staff attended and presented at the Alaska Municipal League (AML) annual conference in October 2023 in Anchorage. AML is a nonprofit statewide organization of 165 cities, boroughs, and unified municipalities. Attendees at the conference included organizations from across the state, specifically from rural Alaska. AEA presented on the NEVI program to five groups from the Arctic, Southeast, Interior, Southwestern, and Southcentral regions. In April 2024 AEA presented at the 4th Annual Infrastructure Development Symposium which is put on by AML in coordination with the Governor's Office of Infrastructure and AFN. The goal of the symposium is to work toward and review progress on federal infrastructure investments.

The primary focus of the Alaska NEVI program has been on the buildout of the AFC, which is largely urbanized when compared with the rest of the state. The focus of the NEVI program will shift to rural and tribal infrastructure deployment after the buildout of the AFC is complete. However, engagement

with tribal entities is a core tenant of AEA's mission. As such, AEA's primary focus for competitive funding opportunities has been on tribal and rural community EVSE deployment.

AEA applied for a grant through DOE's Vehicle Technologies Office titled "Alaska Rural EVSE Deployment (ARED) project" and was recommended for funding. The Alaska Rural EVSE Deployment (ARED) project aims to facilitate EV adoption in remote Alaskan communities across multiple energy regions. This project involves identifying communities based on multiple criteria including their electrical grid infrastructure and local interest in EV adoption. The project aims to install EVSE in up to nine rural communities. AEA has partnered with the Alaska Center for Energy and Power (ACEP), Alaska Department of Transportation & Public Facilities (AK DOT&PF), Alaska Municipal League (AML), Launch Alaska, and Yellowstone-Teton Clean Cities Coalition (YTCC) to deliver this project.

Utility Engagement

The Railbelt Utilities, those that serve the AFC territory, regularly attend the AKEVWG meetings, both quarterly and technical sessions. During these meetings, the utilities identify upcoming initiatives they have as well as any concerns with provisioning electricity for EVs. AEA also engaged the utilities to develop a form for the solicitation of the EV charging stations along the AFC so that utilities were aware of potential installations and so applicants could determine if their site was feasible and how much it would cost to provide new or upgraded service. The involvement of the utilities has been crucial to the program moving forward expeditiously to reduce review times following site selection and avoid miscalculations in project cost estimates.

Public Outreach

AEA's EV team hosted five informational sessions to inform stakeholders on the plan and solicit feedback in May of 2024. AEA staff traveled to several communities to present in-person on the program. AEA utilized regularly recurring meetings to increase attendance and sent emails, flyers, and calendar events informing stakeholders on the presentations to the working group members, 166 municipal league members, and 242 people on our active NEVI stakeholder registry.

AEA published Public Notices on the State of Alaska website regarding all outreach events. AEA has been monitoring the open and click-through rates for the digital mailings; the open rate is trending about 77% higher than industry average.

AEA continues to facilitate quarterly working group meetings, publish monthly newsletters , attend conferences to provide information on the program, and offer virtual presentations on program updates and progress . Each annual update will receive a public comment period of 30 days as well as a virtual and several workshop sessions for public comment and input.

AEA, in coordination Michael Baker, has also created an outreach and education plan outlining outreach goals, activities, and resources for the Plan. This outreach plan can be found in Appendix A.

Community Engagement Outcomes Report

Plan Outreach

Prior to submission of the FY25 Plan, the Authority held targeted workshops in May 2024. All outreach events were advertised through the Authority's Listserv distribution, which contains 242 contacts. Event-specific graphics were created (see Figure 1) and advertised via AEA social media accounts on Facebook and LinkedIn.

A NEVI Plan specific page was created on the Authority's website to host the Plan, AKEVWG meeting information, information on the NEVI formula program, AFC map gallery, and FAQs as relating to the Plan. AEA continues to hold quarterly working group meetings and a technical session every six weeks. Additionally, AEA hosts booths at community events as they arise. These include, but not limited to, the Alaska State Fair, the Infrastructure Development Symposium, and Anchorage and Mat-su Transportation Fairs.

Targeted Workshops

NEVI Plan workshops were held throughout the state by request or on an as-needed basis. AEA hosted in-person meetings with local stakeholders to discuss The Plan and continuously solicit feedback. NEVI Plan workshops were useful tools to implement in areas where the Plan had been met with doubt, hesitation, or concern, as AEA was able to meet directly with the affected parties and work to understand the local concerns as well as educate on the Plan. NEVI Plan workshops were also beneficial to hold in areas with strong EV support given that local stakeholders were already engaged and looking for more resources and guidance moving forward.

Figure 1. Example NEVI Outreach Advertising Materials

Table 3: Targeted Workshops

Location	Date	Topic	Agencies Represented
Fairbanks, Alaska	September 20, 2022	NEVI Overview Alaska EV Infrastructure Implementation Plan Overview	FAST Planning, DOT&PF
Juneau, Alaska	November 03, 2022	NEVI Overview Alaska EV Infrastructure Implementation Plan Overview	City of Sitka, City of Ketchikan, City of Petersburg, City of Kodiak, UAF
Kenai, Alaska	February 09, 2023	NEVI Overview Alaska EV Infrastructure Implementation Plan Overview	HEA, MTA, GVEA, City of Soldotna, City of Kenai
Matanuska Susitna Valley, Alaska	April 17, 2023	NEVI Overview Alaska EV Infrastructure Implementation Plan Overview	City of Palmer, MEA
Ketchikan, Alaska	May 10, 2024	FY25 Alaska EV Infrastructure Implementation Plan Update and Phase 2 Approach	Metlakatla Indian Community, Southeast Conference, Ketchikan Public Utilities/Electric, Grow Ketchikan/Ketchikan Community Land Trust, Southeast Alaska Power Agency; Ketchikan, Ketchikan Gateway Borough, EVGateway
Glennallen, Alaska	May 14, 2024	FY25 Alaska EV Infrastructure Implementation Plan Update and Phase 2 Approach	Ahtna, Inc., Alaska DOT&PF, Copper River Native Association
Homer, Alaska	May 15, 2024	FY25 Alaska EV Infrastructure Implementation Plan Update and Phase 2 Approach	Whistle Hill, Homer Electric Association
Seward, Alaska	May 16, 2024	FY25 Alaska EV Infrastructure Implementation Plan Update and Phase 2 Approach	City of Seward, Alaska Sealife Center, Major Marine Tours, EVGateway
Anchorage, Alaska	May 20, 2024	FY25 Alaska EV Infrastructure Implementation Plan Update and Phase 2 Approach	ReCharge Alaska, Alaska DOT&PF, Chugach Electric Association

Alaska EV Working Group

The AKEVWG met quarterly to discuss EVs and charging infrastructure in Alaska. The goal of the Working Group is to minimize barriers to the adoption of electric transportation in Alaska and to create a vibrant and enduring ecosystem for EVs and other modes of electric transport through strong local and regional partnerships. The Working Group has members from across the state.

Members of the AKEVWG include the Alaska Electric Vehicle Association (AKEVA), Alaska DOT&PF, electric utilities, EV owners, EVSE vendors, municipalities, prospective charging sites, site hosts, universities, other stakeholders, and interested members of the public. Working Group meetings provided an opportunity for the group to gather and hear any high-level updates from AEA as well as serving as a venue for group members to share updates about ongoing work. All Working Group meetings were hybrid-style meetings to help facilitate attendance from people across the state, even if they were located outside of one of the urban hubs in which the in-person meetings were held. Meeting agendas, presentations, recordings, and transcribed Q&A were posted to the AEA website after the meetings.

Table 4: Working Group Meetings

Location	Date	Topic	Agencies Represented
Virtual & in person: Anchorage, Alaska	July 13, 2022 ***Morning Session***	NEVI Overview Alaska EV Infrastructure Implementation Plan Overview	MEA, City of Soldotna, Chugach Electric, City of Petersburg, MOA, UAA
Virtual & in person: Anchorage, Alaska	July 13, 2022 ***Afternoon Session***	NEVI Overview Alaska EV Infrastructure Implementation Plan Overview	MOA, CIRI, Alaska Power Assoc., AGC
Virtual & in person: Anchorage, Alaska	October 13, 2022	Alaska Electric Vehicle Infrastructure Implementation Plan Update Electrification Coalition Group Updates	MEA, CEA, FAST Planning, GVEA, UAF, HEA, FNSB, DOT&PF
Virtual & in person: Anchorage, Alaska	January 19, 2023	NEVI Program Site Host Request for Applications (RFA) Update on Existing EV Charging Stations in AK	Chugach Electric, MEA, ReCharge AK, MOA, AHFC, MTA, City of Juneau, FAST Planning, UAA, GVEA, City of Valdez, UAF
Virtual & in person: Anchorage, Alaska	May 22, 2023	Post-selection process for NEVI funding recipients	USDOT, GVEA, Chugach Electric
Virtual & in person: Anchorage, Alaska	August 15, 2023	Rural Reimagined Project	MEA, UAF, Tennessee Tech University
Virtual & in person: Anchorage, Alaska	October 26, 2023	Site Host Selection, Schedule, and Path Forward	Chugach Electric, MEA, Tesla, DOT&PF, Kia, Jule, HAP, Donlin Gold, AKEVA, GVEA, MEA, Flo, Launch Alaska
Virtual & in person: Anchorage, Alaska	March 22, 2024	Microtrends and Winter vs. Summer Performance	MEA, Chugach Electric, UAF, Launch Alaska, ReCharge AK, Southeast Conference

Alaska EV Working Group Technical Sessions

Technical sessions were held as a subset of the AKEVWG and the topics were more targeted and focused as compared to the quarterly Working Group meetings. AEA invited experts to join panel discussions on various topics related to EVs and the deployment of EV chargers throughout the state. A meeting facilitator researched the session topic before each meeting and drafted questions to help guide the discussion. Invites were sent out to targeted groups that AEA believed would have special interest in the topic; however, the sessions were always open to anyone who wished to join. Meeting participants were encouraged to ask the panel members questions as well as interact with each other. Panel members and participants discussed challenges and brainstormed ideas on best practices to consider while moving forward. Technical sessions were held as hybrid-style meetings to ensure that participants and panel members could join from wherever they were located, even if they were close to the in-person meeting location. Meeting recordings and notes were posted to the AEA website after the Technical Session.

Information showing the locations of the technical sessions and AKEVWG quarterly meetings as well as participant locations can be found in figure 2.

Table 5: AKEVWG Technical Sessions

Location	Date	Topic	Agencies Represented
Virtual via ZOOM	September 27, 2022	Workforce panel discussion on construction and maintenance workforce, EVITP certification process and training	UAA, AKEVA, Kotzebue Electric Association
Virtual via ZOOM	November 03, 2022	Electric utility panel discussion on challenges faced during EVSE deployment	AVEC, REAP, MTA, City of Ketchikan, GVEA, MEA, City of Petersburg, HEA, Chugach Electric Association, City of Sitka, MOA
Virtual & in person: Anchorage, Alaska	January 19, 2023	NEVI Program Site Host Request for Applications (RFA) Update on Existing EV Charging Stations in AK	Chugach Electric, MEA, ReCharge Ak, MOA, AHFC, MTA, City of Juneau, FAST Planning, UAA, GVEA, City of Valdez, UAF, Launch Alaska
Virtual & in person: Anchorage, Alaska	March 10, 2023	NEVI Uptime Requirements	City of Juneau, UAA, City of Wasilla, MEA, Chugach Electric Association, USDOT
Virtual & in person: Anchorage, Alaska	April 03, 2023	The Charging and Fueling Infrastructure Discretionary Grant Program	MEA, Chugach Electric Assoc., USDOT, UAF, GVEA
Virtual & in person: Anchorage, Alaska	July 12, 2023	Justice40 Benefits	GVEA, DOT&PF, MEA, AKEVA, UAF
Virtual & in person: Anchorage, Alaska	October 26, 2023	Site Host Selection, Schedule, and Path Forward	Chugach Electric, MEA, Tesla, DOT&PF, Kia, Jule, HAP, Donlin Gold, AKEVA, GVEA, MEA, Flo, Launch Alaska
Virtual via ZOOM	December 14, 2023	Car Dealership Panel Discussion	Chugach Electric, MEA, Flo, Launch Alaska, UAF
Virtual via ZOOM	January 18, 2024	DriveOhio Infrastructure Deployment Update	UAF, Launch Alaska, GVEA, Chugach Electric, AKEVA
Virtual & in person: Anchorage, Alaska	March 22, 2024	Microtrends and Winter vs. Summer Performance	MEA, Chugach Electric, UAF, Launch Alaska, ReCharge AK, Southeast Conference

Monthly Newsletter

AEA wrote a monthly newsletter that was distributed to the listserv and posted to the website. Newsletters typically contained an educational section, for example an explanation of EV tax credits, as well as updates on EV current events, like news on road rallies, either in Alaska or throughout the rest of the United States. The newsletters also served as an opportunity to advertise upcoming events, such as Technical Sessions, Working Group Meetings, or Workshops, and were a method to share links that readers could use to do further research on the topic at hand.

Alaska Electric Vehicle Working Group 2022-24 Email Newsletter Stats

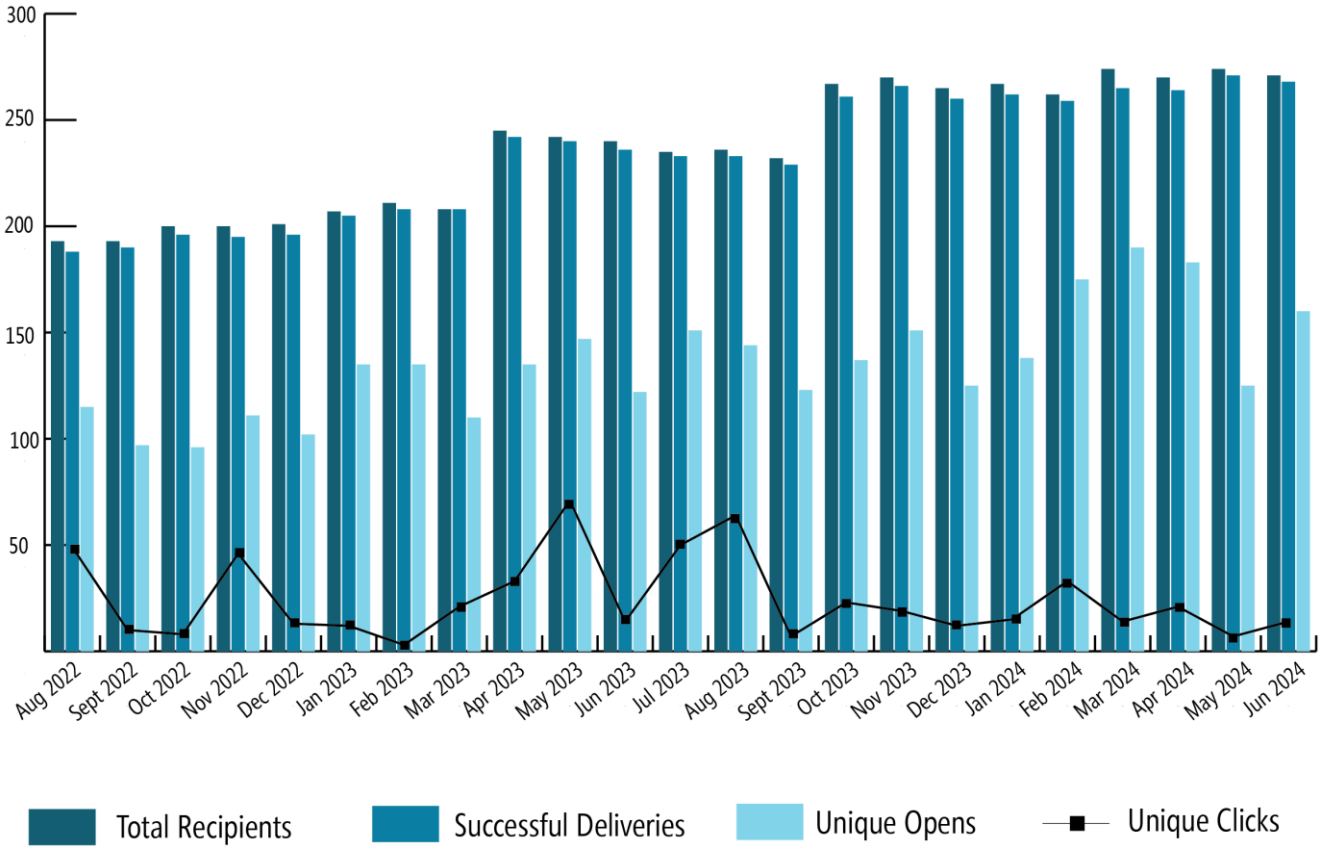


Table 6: AEA Newsletters

Date	Topic
August 04, 2022	AEA Submits The Plan to Joint Office
August 11, 2022	Plan Spotlight: What is an AFC and why is the first round of funding going there?
September 08, 2022	Arctic Road Rally Recap
October 13, 2022	The Plan is approved! DE-FOA-0002611 Grant Concept Paper Accepted. Building Alaska's EV Workforce
November 09, 2022	Charging EVs with electricity harnessed from fossil fuels: Worth It?
December 09, 2022	Updates on the electrification of fleets, buses, and airplanes in Alaska NEVI Site Host Application Update
January 12, 2023	NEVI RFA Update and Timeline
February 9, 2023	Clean Vehicle Tax Credit. Electric Buses in Metlakatla and Ketchikan
March 9, 2023	NEVI Minimum Standards and Requirements. Build America, Buy America Act Waiver
April 13, 2023	The Charging and Fueling Infrastructure Discretionary Grant Program
May 12, 2023	Updated EPA Vehicle Pollutant Standards. Updates on the Clean Vehicle Tax Credit. VW 1D.4 Alaska Tour. GVEA kWh Rate Change for DC Fast Chargers
June 8, 2023	AEA Intent to Negotiate for DE-FOA-0002611. Ford Adopts NACS
July 13, 2023	EV Charging Ports, NEVI Plan Comments Due Monday, and What We're Reading
August 10, 2023	Justice40 Initiative Survey, August 15 Technical Session, and EV Resources
September 14, 2023	EV batteries — composition, recycling incentives, and future solutions
November 9, 2023	FHWA Approves FY24 Alaska NEVI Plan, NACS Update, and Local EV News
December 14, 2023	Clean Vehicle Tax Credit Updates, Alaska's Latest EV Count, and What We're Reading
January 11, 2024	NEVI Plan Spotlight, Funding Opportunity, Technical Session Recap, and January Events
February 8. 2024	NEVI Plan Spotlight, EV Sales, and Upcoming Events
March 7, 2024	NEVI Plan Spotlight, EV Signs, Funding Opportunities, and Upcoming Events
April 11, 2024	Plan Spotlight, Share Your EV Data, and Fairbanks and North Pole EV Survey
May 6, 2024	NEVI Workshop Series, Plan Spotlight: Existing & Future Conditions Analysis, and What's in a sign?
June 14, 2024	EVSE Funding Opportunity, Plan Spotlight: EV Charging Infrastructure Deployment, and an Update on the FY25 Draft NEVI Plan

Community Surveys

Community surveys were used to extend stakeholder outreach into rural areas of Alaska to ensure that disadvantaged communities were given opportunities to comment on the NEVI Plan. Paper and electronic surveys were distributed at the following events where AEA either held an informational booth or presented on the NEVI Plan.

The survey locations of the survey respondents combined with the Alaska Municipal League outreach can be found in figure 4 overlaid with Justice40 boundaries.

Table 7: Community Surveys

Date	Event	Website
December 2022	Alaska Municipal League Annual Local Government Conference	https://amlannual.org/
January 2023	Anchorage Transportation Fair	www.anchorage-transportation-fair.com
February 2023	Alaska Forum on the Environment	https://akforum.org/

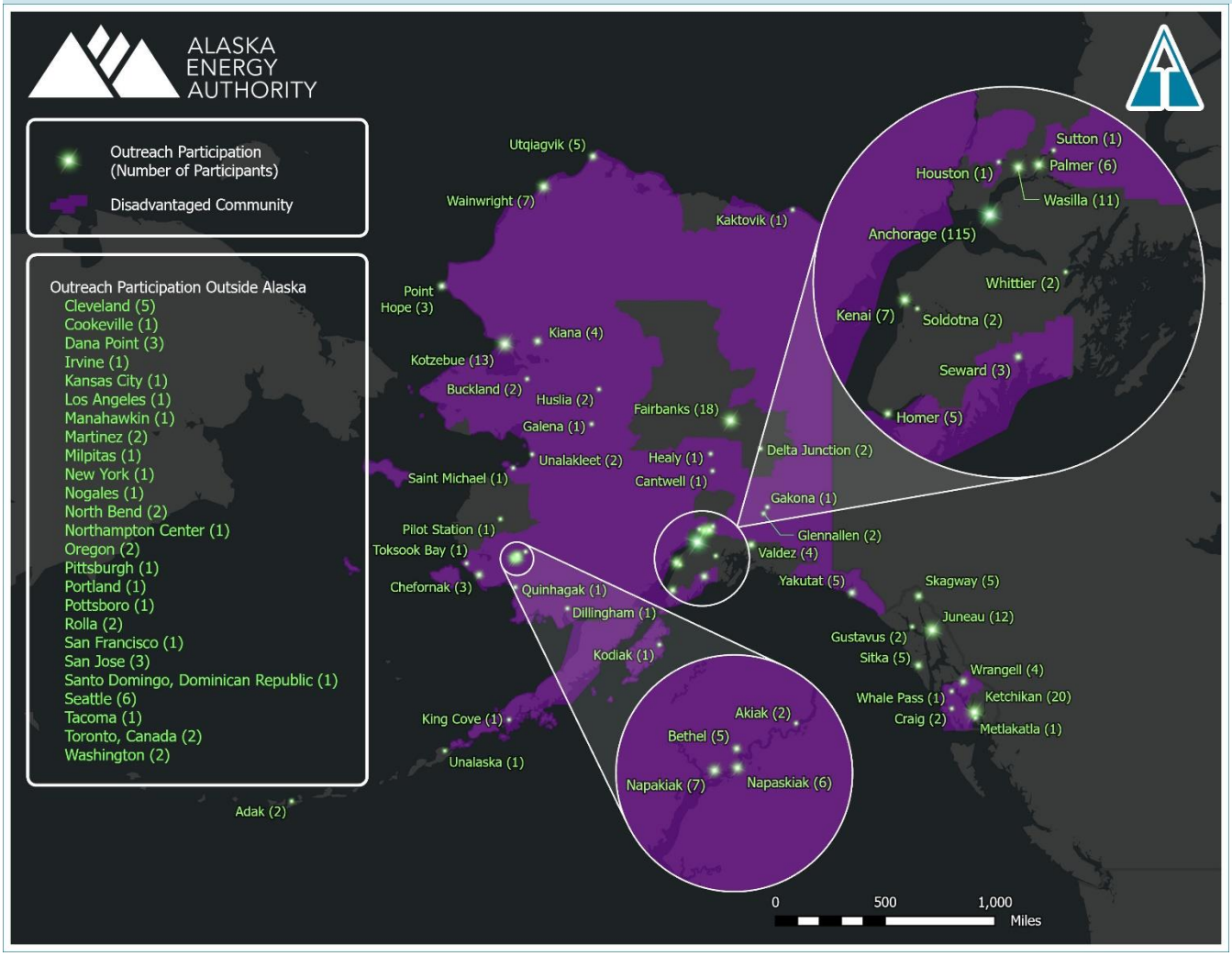


Figure 4. Location of Outreach Attendees and Survey Responses

Justice40 Survey Results

There were 21 participants that responded to our online and paper Justice40 Benefits Survey. They rated each proposed benefit on a scale of 1-5, with 5 being the most favorable. The survey results below show the average rating of the responses to each proposed benefit.

KEY: Yes (5) Probably Yes (4) Maybe (3) Probably Not (2) No (1)

PROPOSED BENEFIT: Improve access to clean transportation through installation of local chargers.

4.4	4.4	3.9
Would the installation of local chargers benefit J40 communities?	Is the goal of 40% investment in J40 communities appropriate?	Is tracking by location of program expenditures appropriate?

PROPOSED BENEFIT: Decrease transportation costs through access to affordable EV charging.

4.7	3.8	3.9
Is the goal to reduce transportation costs appropriate?	Would access to affordable EV charging reduce transportation costs in J40 communities?	Is tracking EV registration in J40 communities a good way to measure this?

PROPOSED BENEFIT: Reduce exposure to transportation emissions.

4.6	4.3	4
Is the goal to reduce emissions in J40 communities appropriate?	Would access to EV chargers reduce exposure to emissions in J40 communities?	Is tracking changes in air quality in J40 communities a good way to measure this?

PROPOSED BENEFIT: Increase jobs and business opportunities related to EVs.

3.4	4	3.5
Do you think job training and certification programs will benefit J40 communities?	Is the goal of increasing the number of certified contractors and EV-related jobs in J40 communities appropriate?	Is tracking this information by survey a good way to measure this?

Justice40 Survey Results Cont.

KEY: Yes (5) Probably Yes (4) Maybe (3) Probably Not (2) No (1)

PROPOSED BENEFIT: Increase in local business while patrons charge EVs.

4.5	4.3	4.2
Do you think installing EV chargers in J40 communities will benefit local business?	Is the goal of a positive economic benefit from increased EV charging appropriate?	Is tracking economic benefit by survey a good way to measure this?

PROPOSED BENEFIT: Knowledge-sharing and program awareness.

4.4	4.5	3.9
Is learning about and engaging with the NEVI program a benefit to J40 communities?	Is the goal to increase engagement with J40 communities appropriate?	Is tracking educational and listening sessions in J40 communities, and the cost to produce them, a good way to measure this?

Upcoming Engagement

AEA will host quarterly Alaska Electric Vehicle Working Group meetings in the third and fourth quarters of 2024, as well as the first and second quarters of 2025 to engage the EV community on the progress of the NEVI program and other EV-related topics. These dates and topics are still to be determined. Further, Working Group Technical Sessions will be held monthly over the next year to continue to provide opportunities for knowledge sharing.

To continue to refine the Phase 2 approach for NEVI deployment, workshops will be held in additional communities as identified below:

- Tok
- Delta Junction
- Valdez
- Cordova
- Skagway
- Sitka
- Kake
- Kodiak
- Unalaska

AEA expects this engagement to occur late September/early October 2024. Upon completion of the community workshops, AEA will disseminate a targeted survey to the municipal governments, utilities, and tribal governments in priority communities to provide a final refinement of the make-up of sites (i.e. number of ports, speed of charging) that can be used in a solicitation for Phase 2.

Site Specific Public Engagement

At this time, no site-specific public engagement activities have been scheduled. However, AEA did recommend that selected sites engage with the public and responders in the communities where the EV charging stations will be installed, so this section will be updated in the future as those activities occur.

Plan Vision & Goals

Plan Vision

Alaska's NEVI Vision:

> ***Adapting Alaska's unique infrastructure system to support reliable, equitable, and sustainable electric transportation while meeting community and economic needs.***

The primary mission of AEA is to lower the cost of energy in Alaska. AEA has a goal to reduce the barriers to EV adoption. Alaska's Electric Vehicle Infrastructure Implementation Plan is a framework for utilizing NEVI formula funds to deliver EV charging infrastructure and enable passenger EV travel throughout the state. The charging network will provide EV drivers with confidence when traveling for work, recreation, and tourism.

The primary mission of the DOT&PF is to 'Keep Alaska Moving through Service and Infrastructure'. The AEA mission and the Alaska NEVI Plan are a component to the DOT&PF 'Family of Plans' and will both inform other transportation plans, as well as be informed by the State's LRTP. In this spirit of partnership, Alaska and the public at large will be able to realize the promise of the BIL in general, and the NEVI program in particular. Key strategic themes of the LRTP include safety, state of good repair, economic vitality, resiliency, sustainability, and mobility. Of particular relevance is DOT&PF's Sustainable Transportation program, the goal of which is to help communities thrive through transportation investments that promote independence, efficiency, a healthy environment, and low-cost transportation. Implementation is supported through the formation of interdisciplinary and multiagency partnerships for cohesive and integrated deployment. NEVI is a core component of the Sustainable Transportation program's portfolio.

As required in the NEVI Standards and Requirements related to the use of the NEVI formula funds, charging stations will be available 24 hours a day, 7 days a week, and 365 days a year, with a minimum of 97% uptime. In addition, each site will be required to deliver ongoing operations and maintenance activities during and after the period of the award. This will necessitate contractual requirements for each charging location to facilitate measurable data collection and evaluation. Project partners will support this program goal with data collection to inform stakeholders of the performance of EVs and efficacy of vehicle electrification in Alaska.

This program will increase access to EV charging stations for all Alaskans, including those historically underrepresented, specifically indigenous and disadvantaged populations. The Plan aims to ensure that community members are included and consulted in program decision-making and Plan development. Alaska will administer the NEVI funds in a way that supports the Justice40 initiative, where at least 40% of the benefits of the program investments will be distributed to disadvantaged communities. In addition to providing an EV fast-charging network along the state's road and marine highway systems (AMHS), this program will serve locations comprising Alaska Natives, residents of multiunit housing, and low-income, rural, and disadvantaged communities to ensure equitable access to EV charging infrastructure.

Alaska suffers from some of the highest fuel costs in the nation, especially in rural Alaska. Making EV charging infrastructure more accessible and equitable will ensure that Alaskans can transition to EVs, which typically have a lower total cost of ownership.

The implementation of transportation electrification will help to lower the cost of transportation energy for all Alaskans. Alaska suffers from some of the highest fuel costs in the nation, especially in rural Alaska. High energy burdens threaten some households' abilities to pay for energy and transportation expenses. Consequently, this forces difficult choices between paying for electricity, transportation, heating oil, food, medicine, and other essential items. High energy burdens paired with the high cost of goods in communities create challenging living conditions and, in some cases, food justice issues. Making EV charging infrastructure more accessible and equitable will ensure that Alaskans can more comfortably transition to EVs, which typically have a lower total cost of ownership.

Renewable energy generation in Alaska has been on the rise for several years, with support from state and local governments. In 2010, the Alaska Legislature enacted a goal for 50% of the state's electricity to be generated from renewable energy sources by 2025. n 2020, Alaska generated about 28% of its electricity from renewable energy sources. Alaska's Railbelt grid is currently composed of 15% renewable generation, and most of Kodiak and Southeast Alaska's energy is generated by hydropower (95%–98%).

NEVI charging stations will ensure renewable energy can power vehicles and reduce energy costs for families. Increasing access to charging stations and EVs will accelerate EV adoption throughout the state and improve air quality by reducing emissions associated with ICE vehicles. This is especially important in communities with poor air quality, like the portion of the Fairbanks North Star Borough that has been designated as a nonattainment area by the US Environmental Protection Agency due to particulate pollution during strong temperature inversions in the winter.

AEA will work closely with partners to maximize the public benefit by providing resources for EVSE site selection and development to partners. AEA will continue to work closely with DOT&PF to ensure site selection does not conflict with DOT&PF infrastructure improvement projects and long-term goals.

High-Level Program Goals

1. **Deploy EV charging stations that are reliable and accessible for work, recreation, and tourism to inspire driver confidence.** Providing infrastructure that is visible on traveled routes can greatly reduce range anxiety. DCFC stations will be located approximately 50 miles apart along the AFC and along the road system and marine highways. The plan intends to provide EV drivers with multiple options for EV charging along their travel route. Each location will be situated conveniently, no more than one mile from the AFC. The sites will provide at least four units and give consideration to pull-through spaces for vehicles pulling trailers and recreational or passenger vehicles. Locations will be easily identifiable through third-party charging station locator applications. All charging stations shall be available 24 hours a day, 7 days a week, and 365 days a year. Program partners will be required to enter into a five-year operations and maintenance contract to ensure the station complies with the federal NEVI requirements. The Authority will monitor station uptime and other key metrics through vendor- reported usage data on a quarterly basis at minimum, with a goal of 97% uptime provided to drivers.
2. **Ensure the benefits are distributed and applied equitably for all Alaskans.** Alaska is planning for equitable EV charging capabilities throughout the state. At least 40% of the benefits of the program investments will be distributed to Justice40 communities. Justice40 communities are shown in Figure 24, as defined by the FHWA. Phases 2 and 3 of the Implementation Plan will develop charging infrastructure in communities along the AMHS and in hub communities as funding allows.
3. **Support the existing and future demand for electrified transportation.** AEA aims to support the existing EVs on the road today and prepare the state for future scenarios with increased EV adoption as well as the potential for medium- and heavy-duty freight and transit electrification.
4. **Implement an outreach and education program to train, retain, and diversify the workforce in support of the electric transportation system.** AEA aims to increase knowledge and education about EVs, infrastructure, and the benefits to adoption. This program can help address frequently asked

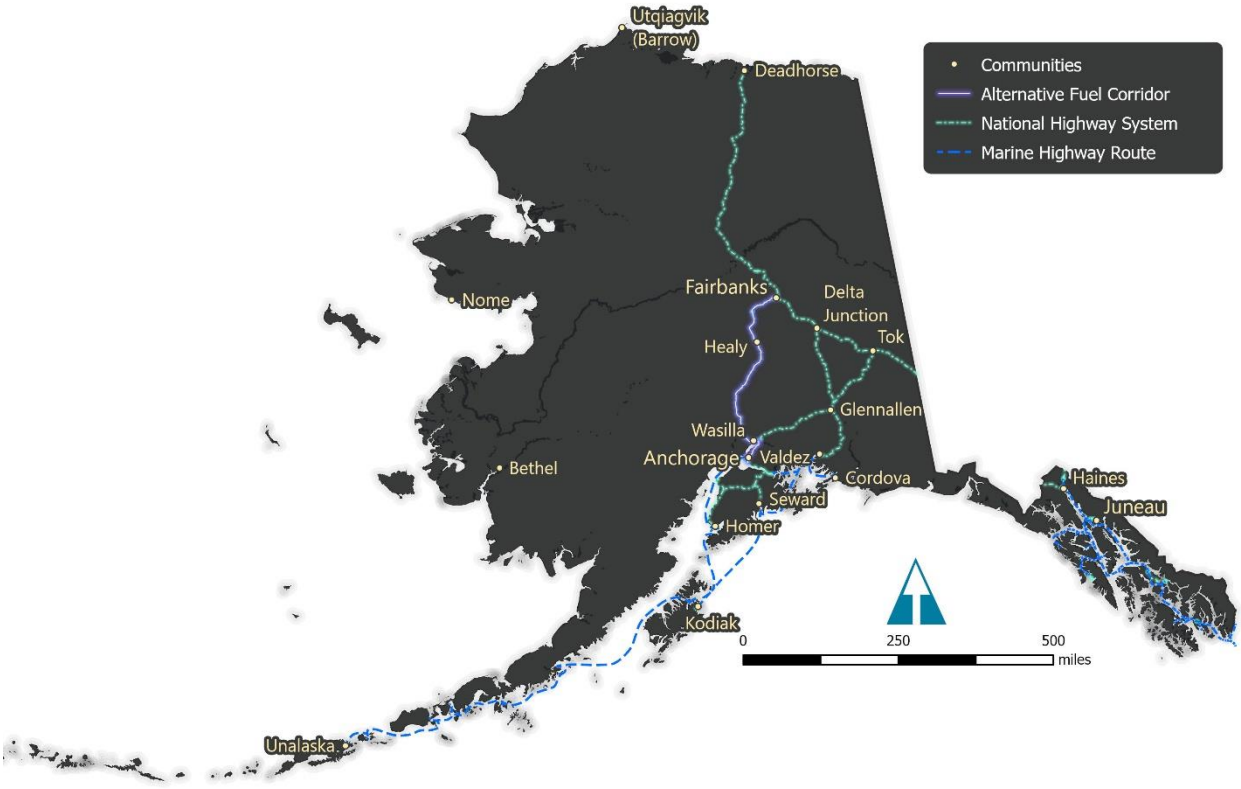


Figure 5. Alaska's Highway System

questions and common misconceptions, and act as a resource. The program will evolve to support workforce development to enhance the skills of Alaskan workers for the mobility of tomorrow.

5. **Collect data to measure program performance and make informed deployment decisions.** Project partners will support this program goal with data collection and analysis to inform participants of the performance and usage of EVs and EVSE and changes in adoption, and publish charging usage and efficacy of vehicle electrification in Alaska. The data will be analyzed for the out-year deployments to aid in selecting optimal locations for EV charging deployment.

6. **Invest strategically to make Alaska's infrastructure more resilient and independent.** The deployment of charging stations that are supported by renewable energy sources, where available, will be encouraged to reduce dependence on foreign oil and gas. Collaboration with the utility companies will occur in support of this effort.

7. **Work with international partners to connect to the continental network.** Recognizing that Alaska is removed from the lower 48 states, the movement of goods and people along the highway network crosses international borders. AEA will coordinate deployments with international partners to support logistics and mobility.

EV performance in cold weather is currently a barrier to EV adoption for many Alaskans. Photo courtesy of Mark Kelliher

Outlook for 5-year Program

The Plan will deliver a reliable, grid-connected DCFC infrastructure network from the south end of the Alaska AFC in Anchorage and 355 miles north to Fairbanks within the first three years. During this same time frame, AEA will be conducting extensive EVSE and EV infrastructure public outreach, continuously gathering stakeholder feedback and lessons learned. Future iterations of the plan will incorporate these findings.

Phase One, Build Out Alaska's Alternative Fuel Corridor

- Phase one will focus on building out Alaska's AFC to meet FHWA guidance, where practically feasible, along the AFC from Anchorage to Fairbanks.
- Plan activities will include site selection, public outreach, and meetings with Alaska boroughs, Alaska Native corporations and tribes, and other private landholders, city planners, small Alaskan

communities, and all other key stakeholders identified in Section 3 – Public Engagement & Outreach.

- Outreach and coordination will continue with DOT&PF, Alaska Department of Natural Resources, Department of Environmental Conservation, the Regulatory Commission of Alaska (RCA), and electrical utilities that provide power to the communities to be served by the NEVI-funded stations.
- Due to the seasonality of Alaska's climate, public and private contracting for initial design and construction projects is expected to extend over two construction seasons.
- Several 50 kW DCFC locations have been recently commissioned or are under construction along the AFC. These stations were funded with VW settlement grants in the summer of 2021. These stations do not meet the NEVI requirements as currently designed.

Phase Two, Build Out Alaska's Highway and Marine Highway System

- AEA and DOT&PF will coordinate to develop DCFC infrastructure along Alaska's non-AFC highways and the AMHS to enable passenger EV travel throughout the state. This phase of the program will focus on connecting small urban areas, rural communities on the road system, Alaska's road system to Canada, and coastal communities located on the AMHS.
- A review of communities and travel patterns along the Seward Highway, Glenn Highway, Sterling Highway, and Richardson Highway will be completed prior to completion of Phase 1 to determine potential locations for DCFC in support of long-distance mobility within the state in Phase 2.
- The communities along the AMHS will be key stakeholders to identify where charging locations would suit mobility that is paired with the ferry system. Early coordination with communities such as Juneau, Cordova, Ketchikan, Sitka, and Valdez will indicate opportunities for community partnerships to deploy infrastructure.
- Engagement with stakeholders and communities along the AMHS will further refine the locations, phased deployment and site composition, balancing preferences between fast charging and Level 2 charging.
- Some isolated communities may not require or have the generation infrastructure to support 150 kW charging or four charging ports. In such cases, providing lower-speed charging or utilizing distributed energy resources may be essential for successfully deploying EV infrastructure in the more remote regions of Alaska.

Phase Three, Install Charging Stations in Hub Communities, as funding allows

- Install community-based charging stations in EV-ready communities throughout regional hubs in rural Alaska.
- Rural communities are generally not connected by road or transmission. Each community self-generates its power through a small local utility. Average loads in rural communities range from 100 kW to 1 MW. In many communities, NEVI-compliant DCFC equipment may not be feasible; therefore, Level 2 charging stations are preferred. This will be evaluated against community needs.
- Early engagement has occurred with Nome and Kotzebue and site options for this phase of engagement have been compiled.
- Beyond the NEVI formula funding, AEA intends to coordinate with DOT&PF to apply for competitive and discretionary grants for rural Alaska.

Phase Four, Urban and "Destination" Locations, as funding allows

- AEA and DOT&PF will identify and develop strategic charging sites in urban and "destination" locations. These charging sites will utilize a combination of DCFC and Level 2 charging infrastructure and will provide a reliable charging safety net for unexpected charging needs and provide

"destination charging" for overnight trips.

Developing Alaska's Phase 2 Approach

With the selection of nine sites along the AFC, AEA and DOT&PF are preparing to move into Phase 2 of the overall plan which includes EV charging infrastructure deployment along the other Alaska Highways and the Marine Highway System. The update of the FY25 Plan begins this process with a detailed approach and process to identify priority sites for procurement once Alaska receives the approval to do so.

To begin the process, AEA developed an outreach plan to inform the public about the FY25 plan and solicit input into its development. While large portions of the Alaska Electric Vehicle Infrastructure Implementation Plan remain the same as previous versions, this update presents a unique opportunity that had not been afforded to the state in the past: working to identify sites outside of the AFC. The Phase 2 approach was Informed by workshops held virtually and in-person in:

- Ketchikan (Marine Highway) – May 10, 2024
- Glennallen (Highway) – May 14, 2024
- Homer (Highway and Marine Highway) – May 15, 2024
- Seward (Highway) – May 16, 2024
- Anchorage (statewide) (Highway) – May 20, 2024

While Phase 1 (AFC) prioritized locations based on a gap analysis along the AFC and solicited public input for ideal locations, Phase 2 needs to leverage public input to prioritize community locations for EV charging. These community inputs will not only assist in identifying the needs of the community and potential limitations (like grid infrastructure), but it will also help prioritize selections during future Requests for Applications. These inputs are expected to include Disadvantaged Community status, distance between sites, number of EVs in the community, adjacent roadway volumes, presence of existing stations, existing EVSE utilization, known planned EVSE, expected cost of the site, and power availability or capacity of utility infrastructure,

Of the $52.4 million coming to Alaska in NEVI formula funds, $6.4 million was allocated in Round 1 for sites along the AFC. With approval of FY25 plan, AK will have received $41.25 million from FHWA, leaving approximately $31.85 million in current available funds to begin Phase 2 after administrative costs have been removed. The FY25 Plan does not allocate the $11.2 million In FY26 funding, as that may be part of Phase 2 or another phase in the future.

It is also imperative to determine an appropriate split of funding between Highway and Marine Highway for funding. The impetus behind this is to ensure that there is adequate distribution of funding and sites among the two focus highway systems. AEA intends to provide infrastructure along both systems, so setting a minimum funding amount or percentage during the procurement phase will be important to align with stakeholder input on the needs of the communities. This split is still being determined through on-going collaboration with those in these communities.

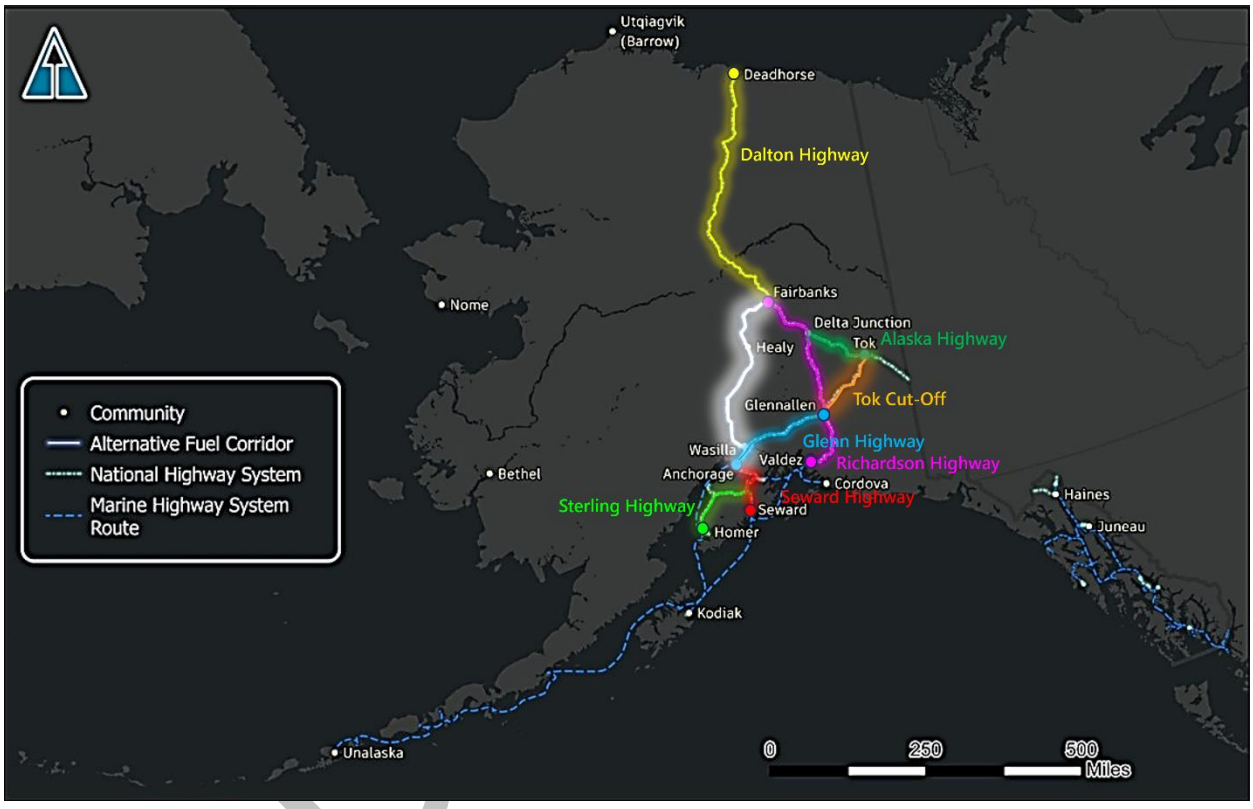
Site Design

Based on average site costs of Phase 1 awards, Alaska could install approximately 45 additional NEVI creditable stations throughout the state if the requirements for the sites were 4 DCFC ports at 150 kW each. However, moving off of the AFC affords additional flexibility in the type of charging (DCFC vs. Level 2) and speed of charging. The NEVI Standards and Requirements (23 CFR 680) sets the standard for each site to be four ports, but if the site is not along an AFC, the makeup of those ports could be DCFC, Level 2, or a combination of DCFC and Level 2. Further, the 150 kW minimum requirement per DCFC port applies only to the AFC, so consideration could

be given to a different power requirement for the sites based on more localized characteristics, such as the capacity of the grid. A minimum of 6 kW is applied in the NEVI Standards and Requirements for Level 2 charging.

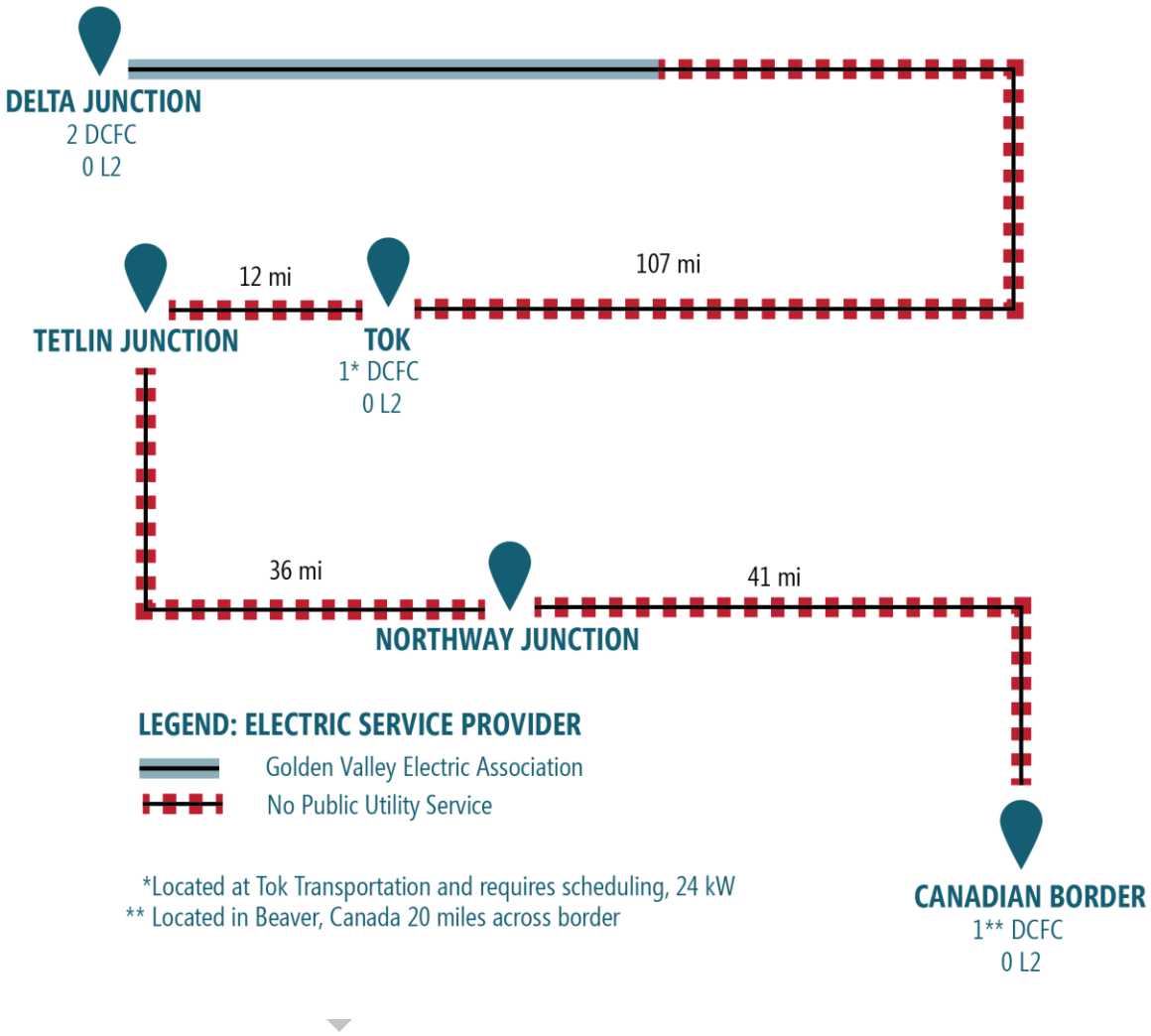
The Alaska Highway System (AHS)

The Alaska Highway System (AHS) is a network of roads and highways that facilitate transportation across Alaska. While the Alternative Fuel Corridor (AFC) focuses on providing infrastructure for electric vehicles, the AHS extends beyond this to encompass a broader range of transportation needs. As Alaska continues to develop its alternative fuel infrastructure, the AHS will play a crucial role in supporting the transition to more sustainable transportation options.

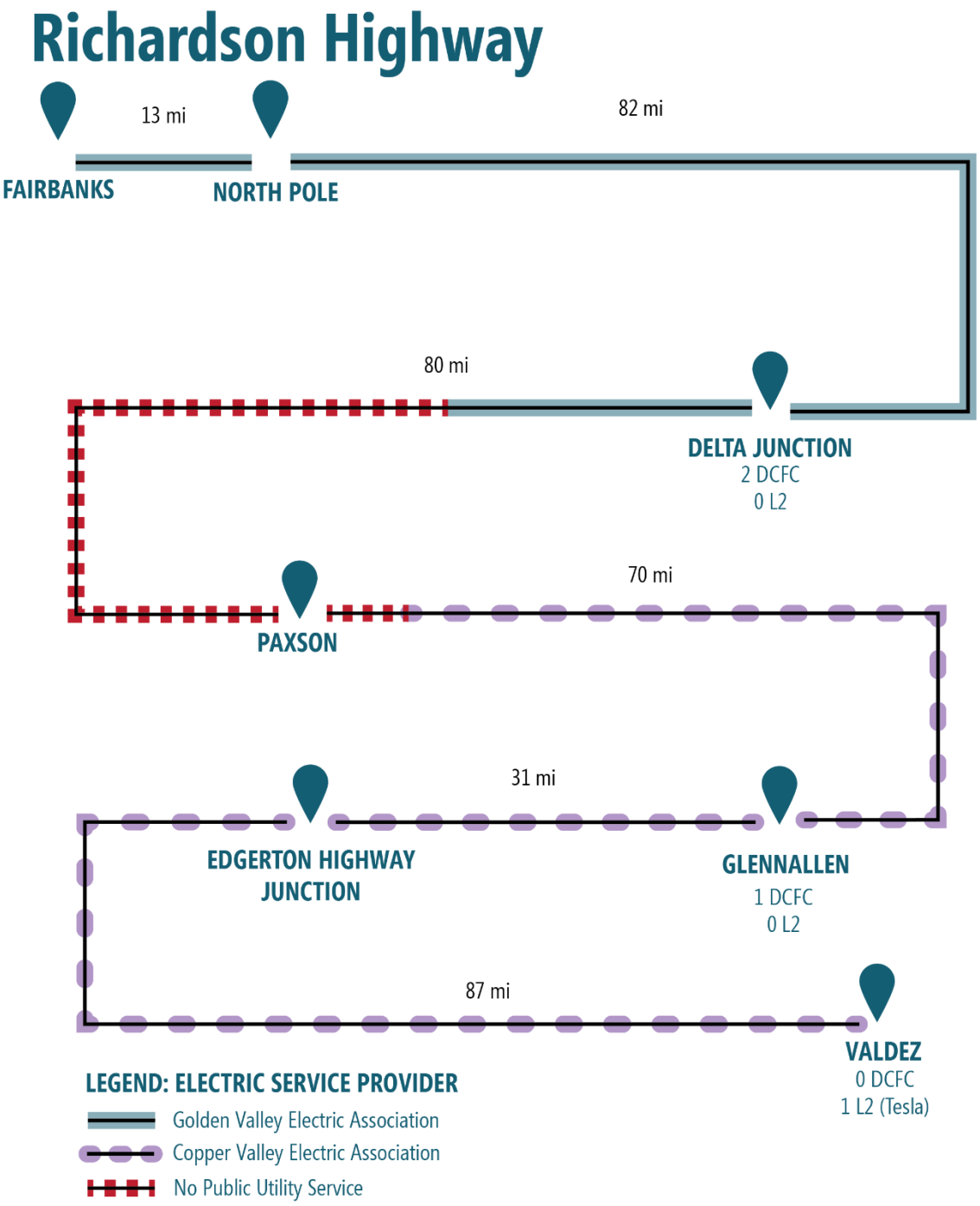


Outside of the AFC, the AHS serves remote communities and areas where EV charging infrastructure is not yet established. In these regions, the provision of services such as fuel stations, rest areas, and emergency services are spread out and infrequent, but are critical for the safety and convenience of travelers. The AHS includes major highways such as the Alaska Highway (also known as the Alcan Highway), which runs from Dawson Creek in British Columbia, Canada, through the Yukon Territory, and into Alaska at Delta Junction. It then connects to the Richardson Highway, which continues to Fairbanks. This historic route was originally constructed during World War II for military purposes but has since become a vital commercial and recreational artery.

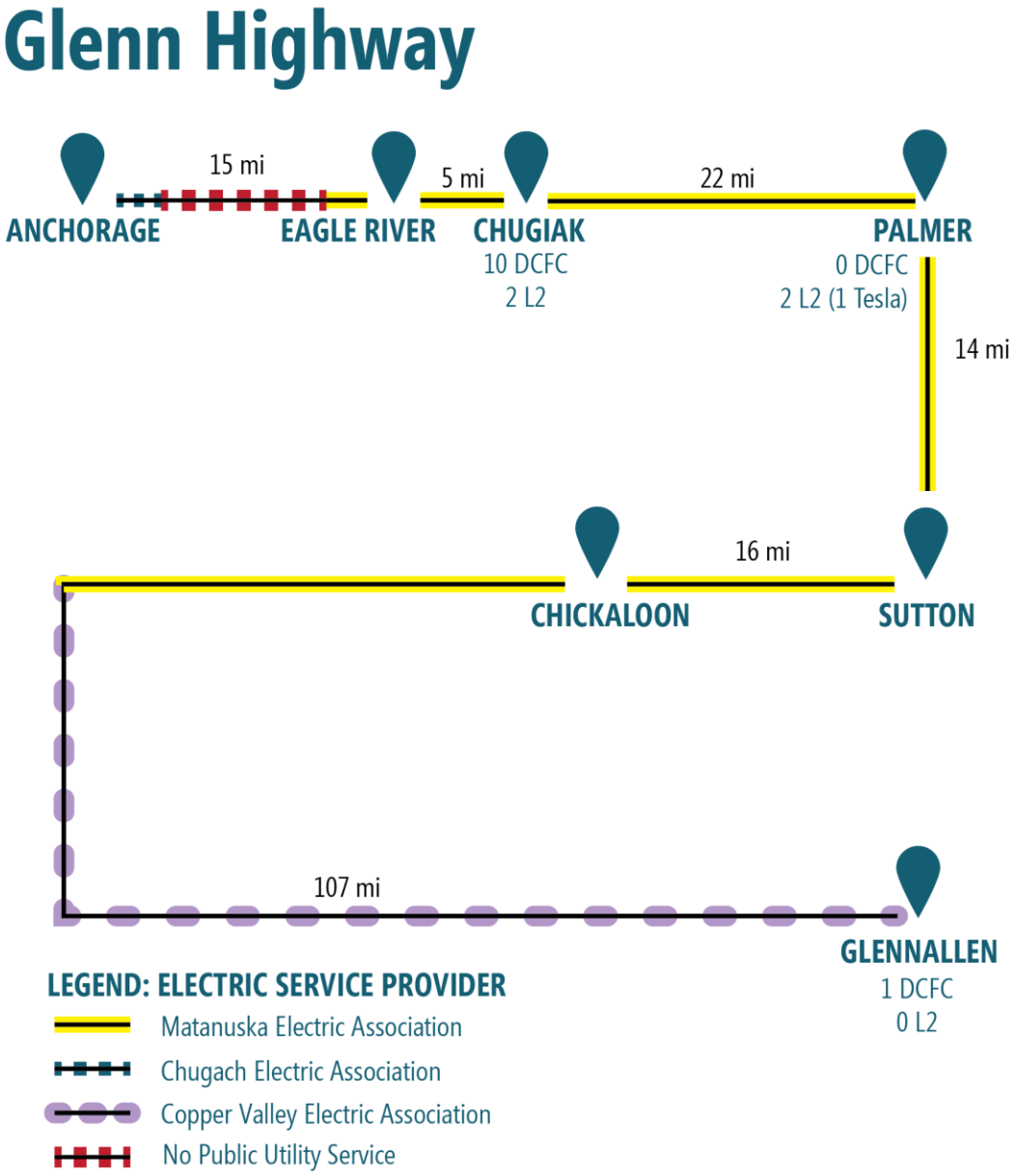
Alaska Highway (east of Delta Junction)



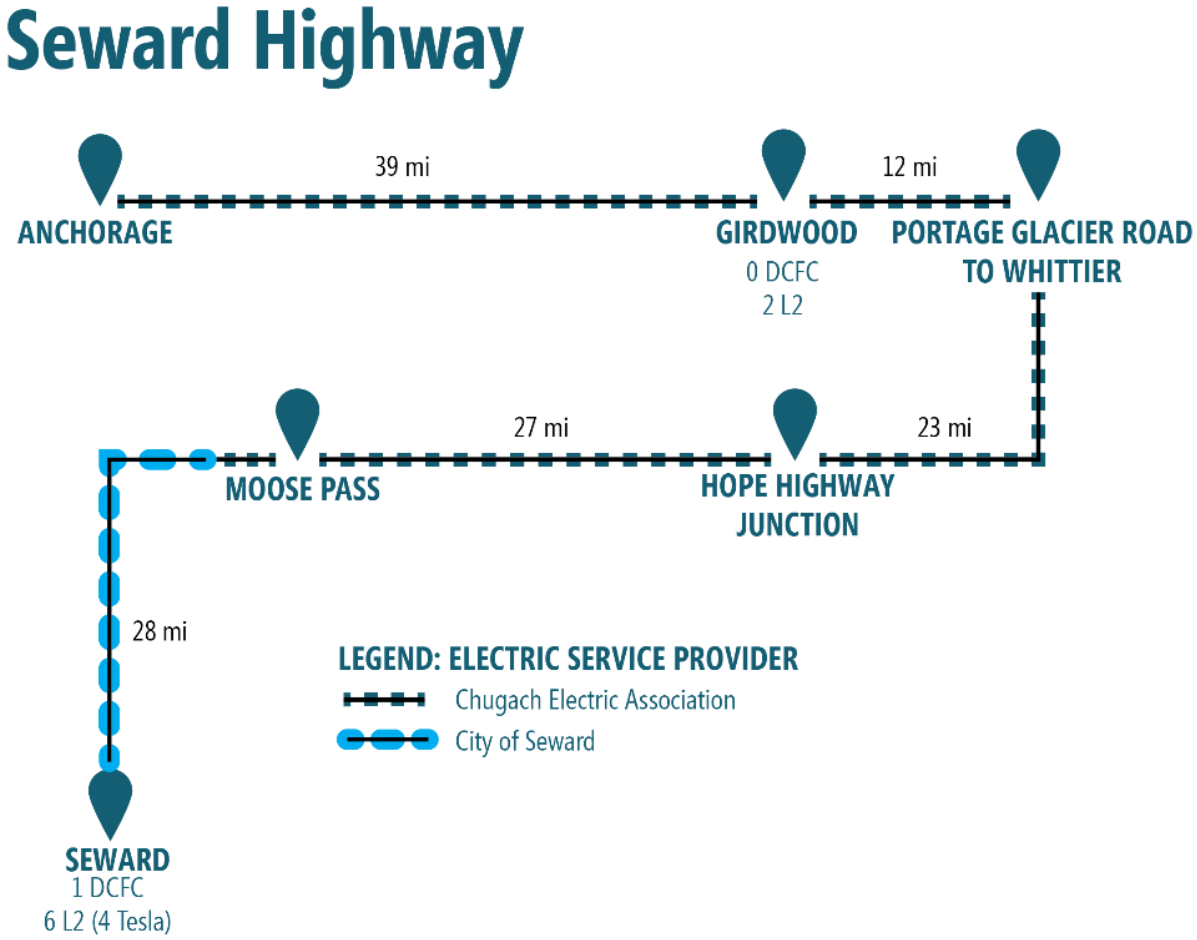
Richardson Highway: As a major inland route, the 368-mile Richardson Highway connects Fairbanks to Valdez, traversing regions such as the Copper River Basin and the Alaska Range. While Fairbanks serves as the northern terminus of the AFC, substantial portions of this highway lack charging infrastructure. The extreme temperatures, heavy snowfall, and extensive distances between communities such as Glennallen and Paxson present significant challenges for reliable EV charging deployment and maintenance. Additionally, limited electrical capacity and considerable gaps in the electric grid further complicate deployment efforts.



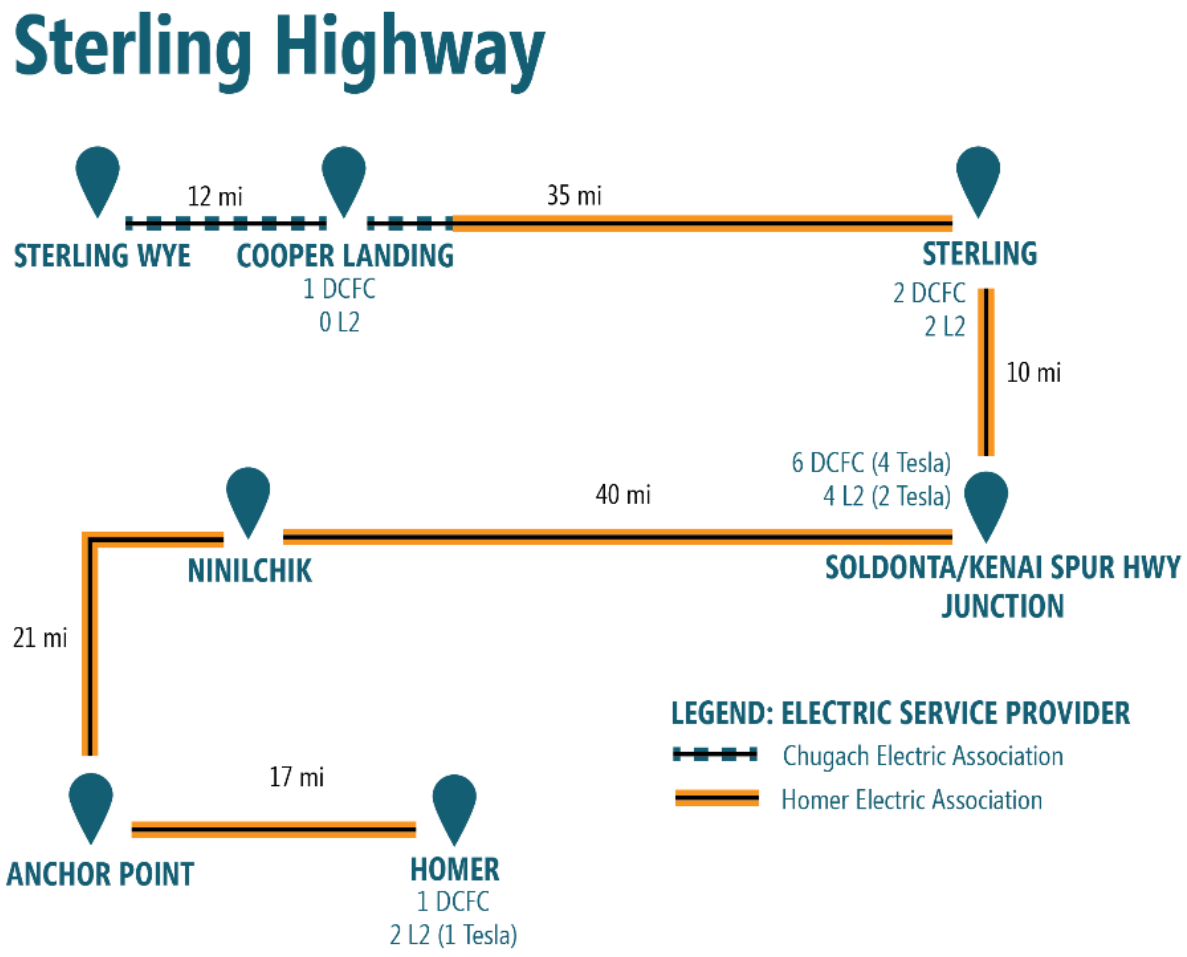
Glenn Highway: This 189-mile highway runs between Anchorage and the Tok Cut-Off, connecting to the Alaska Highway near Tok. Significant portions of the Glenn Highway traverse remote areas outside the AFC, such as the Matanuska-Susitna Valley and the Copper River Basin. Implementing EV charging along these stretches faces challenges like limited grid connectivity, harsh winters, and vast distances between communities like Glennallen and Chickaloon.



Seward Highway: Another notable highway is the Seward Highway, a 127-mile scenic byway that winds along the Kenai Peninsula's rugged coastline. The Seward Highway stretches from Seward on the Kenai Peninsula to Anchorage and the Parks Highway, which connects Anchorage to Fairbanks. This highway traverses through some of Alaska's most scenic areas, offering access to national parks, wildlife reserves, and outdoor recreational activities. The coastal environment, mountainous terrain, and lack of existing infrastructure present challenges for deploying and maintaining reliable EV charging solutions.



Sterling Highway: The Sterling Highway, spanning 138 miles from Sterling to Homer, serves as a gateway to the Kenai Peninsula's communities and outdoor recreation areas. Outside of the AFC between Anchorage and Fairbanks, this route may become the most EV-friendly segment of the AHS system upon completion. However, the harsh maritime climate and the isolation of many communities along this route pose significant challenges for implementing reliable charging networks and expanding to meet the demand for EV charging.



Other highways: Beyond these major routes, Alaska's highway system is comprised of numerous smaller roads and routes that crisscross the state's, serving remote communities, resource extraction sites, and recreational areas. One such route is the Dalton Highway, 414-miles from Livengood to Deadhorse, near the Arctic Ocean and the Prudhoe Bay Oil Fields. This drive crosses the Arctic Circle and the Brooks Range. However, with limited services and road maintenance, and extreme weather conditions, implementing EV charging infrastructure along this remote highway would require innovative solutions and robust planning. The Dalton Highway is not currently a focus of Alaska's NEVI program.

There are some other roads included in Alaska Highway system which extend far beyond these major highways, traversing some of the most remote areas of Alaska. These highways serve as vital transportation arteries, connecting isolated communities, supporting resource extraction industries, and enabling recreational access.

One notable highway is the Denali Highway, a 135-mile stretch running between Paxson and Cantwell. This scenic route provides access to the recreational and hunting areas in the interior of Alaska. .

The Taylor Highway, stretching 164 miles from the Alaska Highway near Tok to Eagle, is another crucial route beyond the AFC. This highway traverses the Fortymile country, a region rich in history and natural resources, serving as a link for mining, hunting, and other economic activities.

The Steese Highway, a 162-mile route connecting Fairbanks to the Yukon River, is another important artery outside of the AFC. This highway serves several communities, including Circle and Central, and provides access to remote areas for mining, hunting, and recreation.

In addition to these major routes, Alaska's highway system comprises numerous smaller roads and routes that crisscross the state's vast expanses, serving remote communities, resource extraction sites, and recreational areas.

The Alaska Marine Highway System (AMHS)

Phase two of Alaska's NEVI deployment will also provide a direct connection to the country's largest public transit network by locating EV charging stations at AMHS ferry port communities. The AMHS is a state-operated ferry service that provides a transportation link for many communities along Alaska's coastline. Established in 1963, the AMHS covers a route of approximately 3,500 miles, stretching from Bellingham, Washington, to the Aleutian Islands in Alaska. It serves over 30 coastal communities, many of which are not connected to the North American road network, making the ferry system an essential part of Alaska's infrastructure.

This service helps meet the social, educational, health and economic needs of Alaskans. AMHS provides year-round scheduled ferry service throughout Southeast and Southwest Alaska, extending south to Prince Rupert, British Columbia and Bellingham Washington. The system connects communities with each other, regional centers, and the continental road system. It is an integral part of Alaska's highway system, reaching many communities that would otherwise be cut off from the rest of the state and nation. AMHS also provides a coastal transportation alternative between Anchorage and the Lower 48 states versus driving the Alaska Highway.

AMHS is designed to provide basic transportation services to communities; transportation that allows community access to health services, commodities, legal services, government services, and social services; transportation that meets the social needs of isolated communities; and transportation that provides a base for economic development. AMHS services are divided into two major systems: the Southeast System (from Bellingham north to Yakutat) and the Southwest system (from Cordova west to Unalaska). The AMHS fleet consists of nine vessels; six operate in the Southeast System, and three operate in the Southwest System. All nine vessels are designed to carry passengers and vehicles ranging in size from motorcycles to large freight container vans. Trips can last several hours or several days.

Some of the key segments and routes include:

Inside Passage Route

- Bellingham, WA to Ketchikan
- Ketchikan to Wrangell
- Wrangell to Petersburg
- Petersburg to Juneau
- Juneau to Haines/Skagway

Cross-Gulf Routes

- Kodiak to Port Lions on Kodiak Island
- Homer to Seldovia on the Kenai Peninsula
- Whittier across Prince William Sound to Chenega, Tatitlek, and Cordova

Southwest Routes

- From Kodiak, ferries sail to communities in the Aleutian Islands like Akutan, Chignik, False Pass, King Cove, Sand Point, and terminating in Unalaska/Dutch Harbor.

The Alaska Marine Highway also connects to road systems at terminus towns like Bellingham, WA, Prince Rupert, BC, and Haines where travelers can continue onwards by highway. All routes feature multiple stops to allow passengers to disembark and explore communities along the way. Major hubs like Juneau, Ketchikan, and Kodiak see frequent ferry arrivals and departures.

Summary of Phase 2

The approach to delivering Phase 2 will continue to evolve over the next year, following the finalization of the FY25 update to the Electric Vehicle Infrastructure Implementation Plan. Insights gained from outreach sessions focused on developing the Phase 2 approach revealed that each community has unique needs and preferences for EV charging infrastructure due to factors such as geography, community road miles, utility infrastructure and use cases. As a result, applying a standardized site design for the AHS and AMHS will not lead to successful deployment or utilization of NEVI funding.

Additionally, while cost was a significant scoring criterion for the site selection process for Phase 1 (AFC), it may present greater challenges in Phase 2 without clear guidelines on the specific EV charging infrastructure required at each site. A four-port DCFC site is not directly comparable to a four-port Level 2 site. Therefore, a more precise definition of the number and composition of ports needed in each community is essential. This will necessitate further engagement with communities beyond the submission of the FY25 Plan.

Contracting

Status of Contracting Process

Alaska's Request for Applications

AEA solicited competitive grant applications for the purpose of installing EVSE at up to 14 sites along Alaska's AFC. The scope of the projects include design, construction, installation of software and hardware, operations, maintenance, and data reporting. The RFA set out the purpose, instructions, requirements, evaluative criteria, and other information for submitting an application to AEA for grant funding. AEA and DOT&PF will jointly enter into a separate project grant agreement for each site chosen to satisfy a priority area.

AEA's goal for this RFA was to build out Phase One, which includes the AFC from Anchorage to Fairbanks. This section of roadway includes the state roads with the highest traffic volumes, connects Alaska's two largest cities, and provides access to many communities, parks, and other attractions. After the AFC is completely built out, AEA will move on to Phase Two, and conduct solicitations that include the remaining highway systems and AMHS.

All funds associated with the NEVI formula program and the Alaska NEVI RFA shall be administered as if apportioned under Chapter 1 of Title 23, United States Code (USC), which encompasses requirements for states to receive federal-aid funding. The procurement and contractual requirements must comply with federal and Alaska state laws and additional program requirements.

Applicants will be required to construct and maintain EVSE at the site, pursuant to federal program requirements defined in the NEVI Standards and Requirements. The equipment must also meet Buy America requirements as identified in the current and future Waiver of Buy America Requirements for Electric Vehicle Chargers.

Thirty-four grant applications for the first round of applications for 14 locations along Alaska's AFC were received and were reviewed for recommendations of award. The following solicitation steps encompass Phase 1 of Alaska's NEVI program:

1. **Advertised RFA:** AEA advertised the grant opportunity throughout the state. EV charging companies or site host property owners who self-manage or partner with other entities prepared the grant applications to apply for NEVI funding to install, own, and operate compliant EV chargers. The contracts awarded are designed to be design-build-operate-maintain as the state will not own or operate any of the charging equipment.
2. **Prepared Applications:** Applicants identified sites for EVSE installation within priority areas identified by AEA. Applicants prepared their application and coordinated with local utilities to understand site readiness for EVSE installation. Utilities provided infrastructure upgrade plans to the applicant, including cost estimates to be included in the final pricing application.
3. **Reviewed Applications:** AEA and DOT&PF evaluated the administrative, technical, and pricing applications based on the evaluation criteria and process as defined in the RFA package. The ranking and prioritization of projects were determined for each priority site. The selection committee members awarded competitive points to each application against the application criteria and weight outlined in the RFA and the applicant with the highest overall score within each priority site group was selected for award. AEA developed a final prioritized list of projects, taking into consideration the amount of funding that is available and the distribution of projects along the AFC.
4. **Incorporate Projects into the Statewide Transportation Improvement Program (STIP):** After the selection committee has confirmed recommended projects, DOT&PF will incorporate the project by line item addition based on budget, scope, and schedule values for all incorporated projects.

We are here!

5. **Federal Project Agreements and Authorization to Proceed:** AEA and DOT&PF provide project information to the FHWA for Authorization to Proceed.
6. **State Project Agreements:** AEA and DOT&PF will enter into project agreements with each site host. These project agreements will include information related to reimbursement and billing methods between parties, and program regulations and requirements related to the NEVI program. These include but are not limited to NEPA, Title 23, Chapter 1 of the CFR, Build America and Buy America Requirements, property interest agreements, Uniform Act, and the Clean Air Act. The project agreement will be executed upon agreement of the signing parties.
7. **Design and Construction of EVSE:** DOT&PF will conduct NEPA compliance work during the preliminary design phase. The grantee will perform the final design and permitting, site work, equipment installation, and connection to power service, and commission the EVSE. AEA and DOT&PF will oversee the project activities and review for compliance with Title 23 and other program requirements. Payments will be made to the grantee on a monthly or quarterly reimbursement schedule as associated with specific project milestones and deliverables.
8. **Operation and Maintenance of EVSE:** The project agreement will include operations and maintenance service for up to five years. The grantee will provide specific data from the RFA attachments for program monitoring and compliance.

Figure 6. Number of Applications Received by Priority Site Location.

The applications received were primarily from EVSE vendors who partnered with site hosts. Most site categories received were from hotels and convenience stores. Figure 7 summarizes the site applications by applicant and site category.

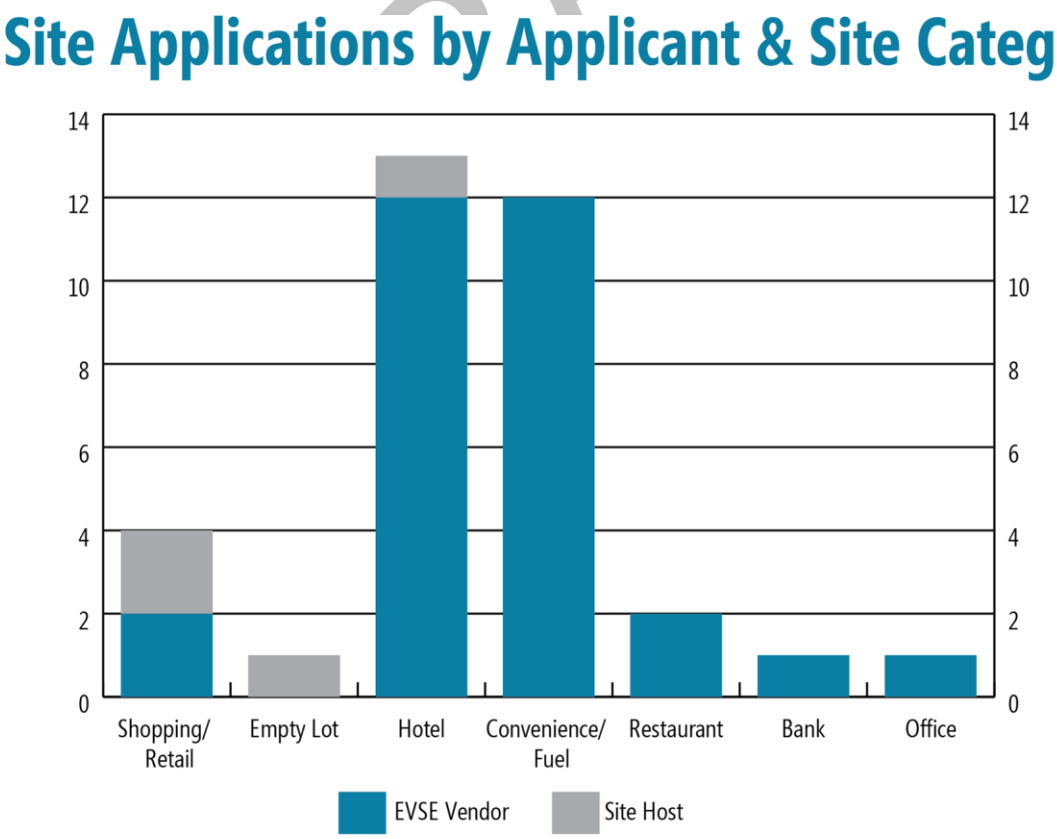


Figure 7. Site Applications by Applicant and Site Category.

Status of Contracting Process

Round of Contracting (example: 1st Round of Three)	Number of Proposals or Applications received	Contract Type (design-build-operate-maintain, design-build, or others)	Date Solicitation Released	Date Solicitation Closed	Date of Intent to Award
Phase 1 RFA – Round 1 of 1	34	DBOM	March 1, 2023	May 15, 2023	September 22, 2023

Awarded Sites

AEA is requesting acknowledgment of Corridor Ready status following commissioning of the selected Priority Sites for the state's sole AFC. No additional Discretionary Exceptions are included in this plan submission as FHWA has previously approved the three Discretionary Exceptions submitted in the FY22/FY23 and FY24 plans. Three gaps along the corridor exceed the 50-mile maximum, but none of them exceed 80 miles, the distance granted an exception in the initial plan. It is AEA and DOT&PF's belief that the market response to the RFA was adequate and there will be no suitable responses to another RFA that seeks to solicit charging locations in Willow and Clear. The lack of development and potential sites in these two locations is limited, especially as identified in Clear with no applications submitted for the first round. The initially approved Discretionary Exception is requested again – albeit at 77 miles instead of 80 miles due to sites recommended for award – due to the lack of power grid within this gap on the AFC.

Based on the market response to the RFA, the remaining gaps, and the desire to maximize station viability of the awarded sites, DOT&PF and AEA do not need to go through another round of procurement to achieve Corridor Ready status.

Round of Contracting (example: 1st Round of Three)	Award Recipient	Contract Type (design-build-operate-maintain, design-build, or others)	Location of Charging Station	Award Amount	Estimated Date of Operation
Phase 1 RFA – Round 1 of 1	BDC Wasilla L.P.	DBOM	1875 E Parks Hwy, Wasilla, AK 99654	$952,950	Summer 2025
Phase 1 RFA – Round 1 of 1	North Anchorage Real Estate Investors, LLC.	DBOM	1200 N Muldoon Rd, Anchorage, AK 99504	$1,039,746	Summer 2025
Phase 1 RFA – Round 1 of 1	Tesla Inc.	DBOM	114.6 Parks Hwy, Trapper Creek, AK 99676	$451,989	Summer 2025
Phase 1 RFA – Round 1 of 1	Tesla Inc.	DBOM	209.9 Parks Hwy, Cantwell, AK 99729	$451,989	Summer 2025
Phase 1 RFA – Round 1 of 1	Tesla Inc.	DBOM	3755 Airport Way,	$451,989	Summer 2025

			Fairbanks, AK 99709		
Phase 1 RFA – Round 1 of 1	Tesla Inc.	DBOM	Main St & First St, Nenana, AK 99760	$451,987	Summer 2025
Phase 1 RFA – Round 1 of 1	eCAMION USA, inc.	DBOM	Mile 238.9, 238.9 Parks Hwy, Denali National Park and Preserve, AK 99755	$875,951	Summer 2025
Phase 1 RFA – Round 1 of 1	eCAMION USA, inc.	DBOM	813 Noble St, Fairbanks, AK 99701	$875,951	Summer 2025
Phase 1 RFA – Round 1 of 1	eCAMION USA, inc.	DBOM	133 Parks Hwy, Trapper Creek, AK 99683	$875,951	Summer 2025

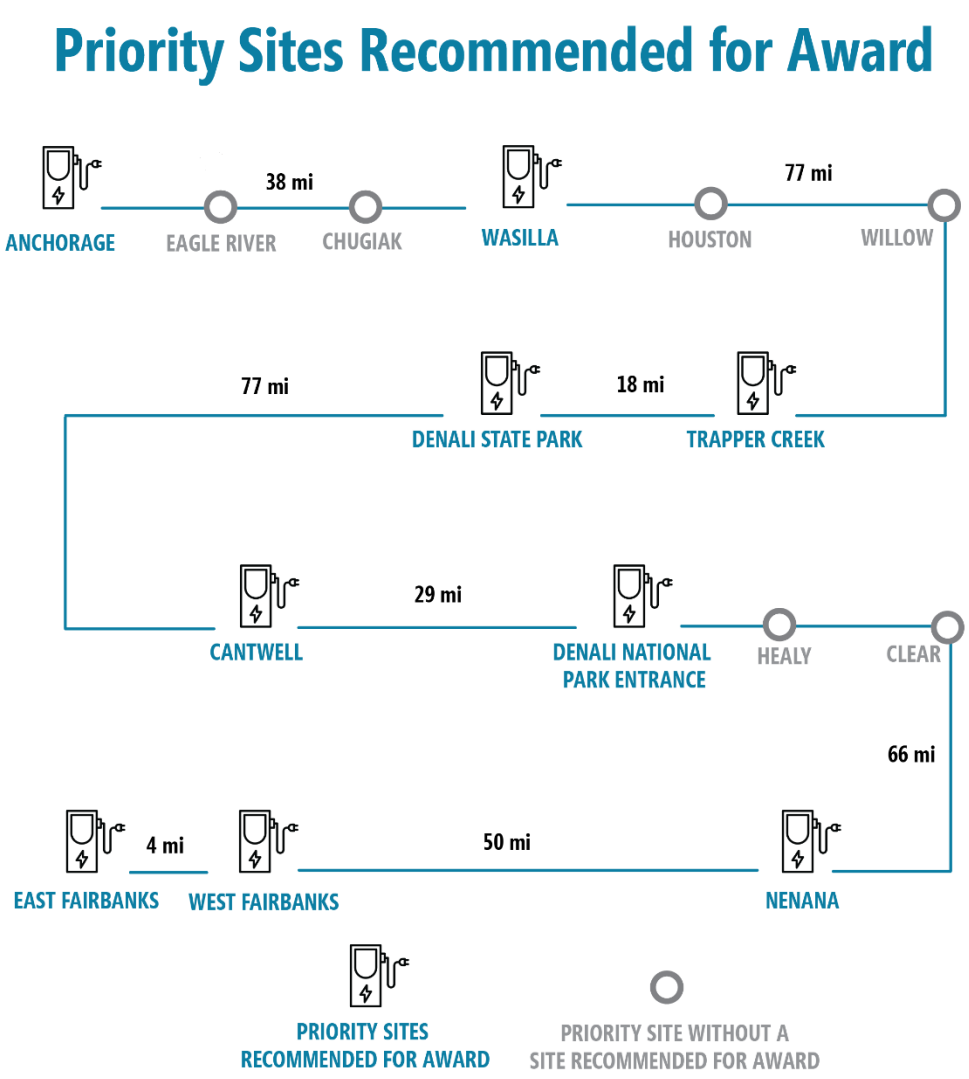


Figure 8. Priority Sites Recommended for Award.

Scoring Methodologies Utilized

Applications were reviewed in four stages by the application evaluation committee, which included AEA staff, DOT&PF staff, and the PM consultant from Michael Baker International.

- Stage 1: Completeness and Eligibility (Pass/Fail)
- Stage 2: Evaluation of Technical Application
- Stage 3: Evaluation of Pricing Application
- Stage 4: Ranking of Projects

All applications were reviewed to determine if they were responsive. Applications determined to be responsive were evaluated using the criteria that is described below. If an application was rejected, the applicant was notified in writing or via email that their application had been rejected and the basis for rejection. Appeals for rejected applications will be handled following the procedures outlined in 3 Alaska Administrative Code 107.650.

At any stage in the review process, AEA could request additional information and the applicant would have a specified amount of time to respond to the request for information. Failure to timely respond or timely provide adequate information would result in the application being rejected.

An evaluation may not be based on discrimination due to the race, religion, color, national origin, sex, age, marital status, pregnancy, parenthood, disability, or political affiliation of the applicant.

Stage 1: Completeness and Eligibility (Pass/Fail)

All applications received by the deadline were initially reviewed by AEA staff to assess application completeness. Stage 1 review included the following:

Administrative Application Review

- Applicant Information
- Signature Page/Authorized Signers

Overall Completeness of Entire Package

- Application is complete and information is sufficiently responsive to the RFA to allow AEA to consider the application in the next stage of evaluation.

Project and Applicant Eligibility

- Application is submitted by an eligible applicant that demonstrates that they will take ownership of the project; own, lease, or otherwise control the site upon which the project is located; and upon completion of the project operate and maintain it for its economic life for the benefit of the public.
- Included as documentation is a resolution or other formal authorization of the applicant that demonstrates the applicant's commitment to the project and that any proposed matching funds are available and in the applicant's control.

Stage 2: Evaluation of Technical Application

Each technical application was evaluated and scored as described in Table 8 (Technical Application Scoring Rubric).

Table 8: Technical Application Scoring Rubric

Technical Scoring Element	Max Points	Percent of Total
Understanding of Program and Project Methodology	100	10%
Management Plan, Schedule, Development and Operation	200	20%
Experience and Qualifications	200	20%
Site Proposal	300	30%
Maximum Technical Application Score	*800*	*80%*

Understanding of Program and Project Methodology (10%)

Applicants will be evaluated against the following questions:

- How well has the applicant demonstrated a thorough understanding of the purpose and scope of the project?
- How well has the applicant identified pertinent issues and potential problems related to the project?
- How well has the applicant proposed to manage and mitigate identified project risks?
- Has the applicant demonstrated an approach that depicts a logical approach to fulfilling the requirements of the NEVI formula program?
- Does the methodology interface with the schedule in the RFA?

Management Plan, Schedule, Development and Operation (20%)

Applicants will be evaluated against the following questions:

- How well does the management plan support the project requirements and logically lead to successful project completion as required in the RFA?
- How well is accountability defined?
- Is the organization of the applicant team clear?
- How well does the management plan illustrate the lines of authority and communication?
- Does the application cover all required staffing to deliver the project through all phases of the program?
- To what extent does the applicant already have the hardware, software, equipment, and licenses necessary to carry out the project?
- Has the applicant provided a reasonable schedule for the project work?
- Has the applicant provided a thorough plan for EVSE operations and maintenance that is consistent with the NEVI program requirements?
- Does the applicant sufficiently address their approach to meeting Buy America requirements under current waiver rules?
- Does the applicant present a sufficient approach to meeting the uptime requirements as described in the NEVI Standards and Requirements?

Experience and Qualifications (20%)

Applicants will be evaluated against the following questions:

- Has the applicant team demonstrated experience in the deployment and operation of EVSE?
- Are resumes complete and do they demonstrate capability of implementing EVSE?
- How extensive is the applicable education and experience of the personnel designated to work on the project?
- Does the proposed staff have applicable experience with Title 23 Federal-Aid projects? (Preferred)
- How well has the applicant team demonstrated experience in completing similar projects on time and within budget?

- Has the proposal demonstrated the ability of subcontractors to implement EVSE at selected sites?
- How successful is the general history of the applicant team regarding timely and successful completion of projects?

Site Proposal (30%)

Applicants will be evaluated against the following questions and criteria:

- Has the applicant demonstrated a clear understanding regarding the infrastructure needs and utility improvement costs for the site? (Attachment 4, Utility Service Site Information Form)
- Does the project schedule align with the demonstrated utility infrastructure and utility needs?

Table 9: Site Proposal Evaluation Criteria

Criterion	Max Points
Utility Service Site Information Form Evaluation Has the applicant demonstrated a clear understanding regarding the infrastructure needs and utility improvement costs for the site? Does the project schedule along with the demonstrated infrastructure and utility needs?	80
Site is located within 1 mile of the highway Within 1 mile: 60 points 1-3 miles: 30 points 3-5 miles 15 points Over 5 miles: 0 points	60
Site provides adequate lighting for security around the EVSE.	20
Site has amenities for users to access while charging their vehicle.	40
Site is located within a Justice40 boundary.	40
Site match contribution: 20%: 20 points 25%: 40 points 30%: 60 points	60
Total available base points	**300**
Bonus Considerations	**Max Points**
Site offers pull through charging access.	20
Site offers make-ready work for additional ports and increased speed (e.g. 350 kW in the future).	20
Site offers additional plug standards to be inclusive of other drivers (e.g. NACS and CHAdeMO)	10

Stage 3: Evaluation of Pricing Application

The applicants completed Attachment 5 (Pricing Application Form) and included a one-page pricing narrative for each proposed site. The site pricing applications had two components as shown in Table 10 – Pricing Application Scoring Rubric. Overall, a minimum of 20% of the total evaluation points were assigned to these components.

Table 10: Pricing Applications Scoring Rubric.

Pricing Scoring Element	Max Points	Percent of Total
Site Pricing Application Cost	100	10%
Site Pricing Application Narrative	100	10%
Maximum Site Pricing Application Score	*200*	*20%*

Site Pricing Application Cost (10%)
The applicant with the lowest site cost for each priority site was allocated the maximum points (100 points) for their pricing application. The remaining applicants for each site received a percentage of the points based upon the following formula:

Site Pricing Application Score = (Lowest Cost Application / Candidate's Cost Amount) X 100

Site Pricing Application Narrative (10%)
Applicants will be evaluated against the following questions:

- Has the pricing narrative demonstrated alignment with the technical application?
- Does the applicant demonstrate a clear understanding of costs related to the project?
- Does the applicant account for Alaska-specific cost considerations?
- Has the applicant sufficiently defined the assumptions used in the development of their estimate?
- Has the applicant provided an approach that supports successful EVSE implementation at the site?

Stage 4: Ranking and Prioritization of Projects

The ranking and prioritization of projects was determined for each priority site (1-14). The applicant with the highest overall score within the priority site group was selected for award. For each site application, the applicant's overall score was calculated as follows:

Applicant's Overall Score = Technical Application Score + Pricing Application Score

Individuals on the evaluation committee received a copy of each application along with the criteria that was used to score and rank the applications. Each member of the committee independently reviewed the applications and provided written comments related to each application. The committee members awarded competitive points to each application against the application criteria and weight outlined above.

The evaluation committee met to review the applications as a group, discussed the merits of each application, and finalized their own scores based upon insights gained through the group discussion. The evaluation committee outlined justifications for each of their conclusions. AEA developed a final prioritized list of all recommended projects, taking into consideration the amount of funding that is available and the distribution of projects along the AFC.

If, after entering the award process, the first-ranked applicant is unable to move forward with the project as proposed in their application, AEA reserves the right to cancel the agreement and move on to the second-ranked applicant.

Plan for Compliance with Federal Requirements

AEA is working closely with partners at DOT&PF to ensure program and project compliance with Title 23 requirements. AEA and DOT&PF are currently drafting project agreements, which will be signed by AEA, DOT&PF, and selected site hosts. The project agreements will include specific requirements including but not limited to NEPA, Title 23, Chapter 1, Part 680 of the CFR, Build America and Buy America Requirements, property interest agreements, Uniform Act, and the Clean Air Act. The project agreement will be executed upon agreement of the signing parties.

AEA is monitoring the rapid adoption of the NACS and requests the Joint Office to provide further guidance. If NACS is to become the ultimate standard, investments in infrastructure should consider the future viability of CCS. While there are numerous cars and trucks today equipped with CCS that can utilize the deployed infrastructure, consideration should be given to requiring NACS being included as well.

Operations and Maintenance

There are no restrictions to include operations and maintenance plans with the above allowable procurement methodologies. Guaranteed operations and maintenance through the life of the NEVI deployment period can be included in the upfront construction cost so it is accounted for in the deployment.

How Alaska Will Ensure Contractors Engage Communities

Every contract for the installation and hosting of charging station infrastructure will include a requirement to prominently display at least one sign on site that is visible to drivers from the roadway. The sign will clearly state that the site is an EV charging station. This is to supplement areas where cell phone coverage may not exist, so using navigation and other apps may be affected. Charging company vendors may be asked to provide materials, such as flyers and social media graphics, to site hosts and government agencies to increase community awareness about the charging station. Each contractor and site host will also be supported by the public engagement plan included in this document, which includes earning media coverage across the state, social media outreach, and participating in community events.

AEA and DOT&PF have a broad network of strong ties to the Alaska construction contracting community. DOT&PF's work with industry organizations, like the Associated General Contractors of Alaska (AGC) and Alaska Builders and Contractors (ABC) Inc., will ensure that contractors building Alaska's EV infrastructure engage in meaningful public involvement. Many of the large general contractors throughout the state have long working histories in Alaska and are already active participants in their respective regions and communities. AEA and DOT&PF will work with contractors and the trades unions to drive workforce participation and public investment in the development, construction, maintenance, and public use of the Alaska EV infrastructure.

Opportunities for Small Businesses

In accordance with Title 23 of USC 304, the Alaska Electric Vehicle Infrastructure Implementation Plan will provide contracting opportunities for small businesses in the implementation and deployment of EV infrastructure. In compliance with this code, Alaska NEVI planning efforts will consult with entities on small business contracting, including community-based organizations, environmental justice and environmental protection organizations, small business associations, chambers of commerce, labor organizations, and private entities.

Throughout Alaska, and especially in rural and disadvantaged areas of the state, small businesses are a nexus for opportunity. DOT&PF and AEA will work with business partners and community leadership to ensure that these vital small business entities participate in the Alaska NEVI process. Additional specific initiatives for small businesses are included in the Civil Rights and Equity Considerations chapters.

Many of the applications received were from local and small businesses. Further, applicants identified ways to engage Alaskan businesses and companies to be able to install and/or maintain the deployed equipment along the corridor. It is apparent that applicants understood AEA's goals with this effort to support small businesses and reacted accordingly.

Knowledge Sharing

AEA supported a knowledge sharing effort by the National Association of State Energy Officials (NASEO) and the American Association of State Highway and Transportation Officials (AASHTO) by conveying the RFA process and lessons learned for those states that haven't gone through the process. The NASEO/AASHTO effort was conducted

by Atlas Public Policy and highlighted to the path to building out the AFC[1].

[1] https://www.naseo.org/data/sites/1/documents/publications/Alaska%20Builds%20Out%20Alternative%20Fuel%20Corridor_v4.pdf

Civil Rights

The Alaska DOT&PF is a recipient of federal financial assistance. As a federal-aid recipient, DOT&PF will ensure full compliance with Title VI of the Civil Rights Act of 1964 and related federal statutes and regulations in all DOT&PF programs and activities, including:

- 49 CFR Part 21 (Department of Transportation Regulations for the Implementation of Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987 [P.L. 100.259])
- 23 CFR Part 200 (Title VI Program and Related Statutes – Implementation and Review Procedures)
- 23 CFR Part 680 (National Electric Vehicle Infrastructure Standards and Requirements)
- Federal-Aid Highway Act of 1973
- Section 504 of the Rehabilitation Act of 1973
- Age Discrimination Act of 1975
- Americans with Disabilities Act of 1990
- Executive Orders 12898 and 13166

Title VI

DOT&PF Title VI Non-Discrimination Policy Statement:

> *It is the policy of the Alaska Department of Transportation and Public Facilities (DOT&PF) that no one shall be subject to discrimination on the basis of race, color, national origin, sex, age, or disability.*

The Title VI Non-Discrimination policy is implemented by the Civil Rights Office Title VI program manager. Programs within Title VI are Environmental Justice, Limited English Proficiency, and Title VI (Non-Discrimination). To ensure DOT&PF is in compliance with these programs, the Title VI program manager conducts Title VI program reviews of each division within DOT&PF. If an area is found to be noncompliant, the program manager works with staff to bring the identified noncompliant area into compliance.

The policy also applies to subrecipients, so by AEA entering into an MOA with DOT&PF and leading the procurement, AEA accepts responsibility to include the Non-Discrimination language in all procurement documentation and contract agreements.

Americans with Disabilities Act (ADA)

DOT&PF ADA Policy Statement:

> *"It is the policy of the Alaska Department of Transportation & Public Facilities (ADOT&PF) that no qualified individual with a disability shall, solely on the basis of his or her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any of its programs, services, or activities as provided by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA). ADOT&PF further assures that every effort will be made to provide nondiscrimination in all of its programs and activities regardless of the funding source, including FTA, FAA, FHWA, and state funds."*

When addressing accessibility needs and requirements, DOT&PF is committed to making reasonable modifications to policies, practices, procedures, and programs that would otherwise deny equal access to individuals with disabilities unless a fundamental alteration in the program would result. Under chapter 5 of the U.S. Access Boards "Guide to the ADA Accessibility Standards" Electric Vehicle Charging Stations,[1] it is recommended: "Provide access to a reasonable number of spaces serving EV charging stations" or use the scoping table in§208.[2] to determine an appropriate number.[2] (The number of accessible spaces serving EV charging stations must be determined separately from the required number of car and van parking spaces.)"

AEA included Title VI language and required compliance with applicable civil rights regulations and accessibility standards in procurement documents and contracts with other entities such as consultants, contractors, and vendors. While the NEVI Standards and Requirements[3] suggested adherence to the U.S. Access Board's guide, AEA mandated adherence in the RFA requirements to ensure accessible design. AEA will also monitor for compliance and perform required reporting in accordance with USDOT regulations.

Diverse Business Participation

DOT&PF has strong civil rights programs that implement Title 49 Part 26 through the Alaska Unified Certification Program (AUCP). These programs ensure participation of Minority/Women/Disadvantaged Business Enterprise (M/W/DBE) small businesses. DOT&PF has a Disadvantaged Business Enterprise Program Plan approved by the FHWA (2019). The DOT&PF Civil Rights Office administers all DOT&PF DBE and On-the- Job Training Supportive Services Programs.[4] Firms certified as DBEs by the AUCP are also eligible for the DBE Business Development Program,[5] which gives DBE firms the opportunity to further assist in small business growth within and outside of the market for traditional DBE areas of work.

These programs have strong stakeholders and partners, including intergovernmental agencies, business, labor, and community groups. The Civil Rights Office has longstanding partnerships with the Small Business Administration, the Alaska Procurement Technical Assistance Center, Alaska Small Business Development Center, AGC, ABC, the Federation of Community Councils, the University of Alaska, Alaska Works Partnership (AWP), the Alaska Apprenticeship Training Coordinators Association (AATCA), various trades unions, and chambers of commerce throughout the state.

1 https://www.access-board.gov/ada/guides/chapter-5-parking/#electric-vehicle-charging-stations

2 https://www.access-board.gov/ada/guides/chapter-5-parking/#minimum-number-of-accessible-parking-spaces

3 23 CFR Part 680

4 23 USC 140(c) 23 CFR 230 Subpart B; 23 CFR § 230, Appendix A to Subpart A, 23 CFR § 230, Appendix B to Subpart B, 23 CFR § 230.111, 23 CFR § 230.113, and 23 USC 140(b)

5 23 CFR § 230, Appendix A to Subpart A, 23 CFR § 230, Appendix B to Subpart B, 23 CFR § 230.111, 23 CFR § 230.113, and 23 USC 140(b)

Existing & Future Conditions Analysis

To evaluate the statewide network and set a baseline for future evaluation, an inventory of traffic, EV registrations and adoption, existing infrastructure, and planned near-term installations must be inventoried.

State Geography, Terrain, Climate and Land Use Patterns

Spanning over 665,400 square miles, Alaska is the largest state in the country and represents about one-fifth the total size of the contiguous United States. In terms of size, Alaska stretches 2,000 miles from east to west and 1,100 miles north to south. This includes hundreds of islands that make up the Aleutian Island chain and over 1,000 islands that make up the Archipelago of Southeast Alaska. The sheer size of the state results in a wide range of temperatures and terrains. While Alaska is geographically large, the relatively small population of the state results in a low population density with clusters around the major urban areas of Anchorage, Fairbanks, and Juneau. Alaska is bordered by 6,640 miles of coastline, including coasts of the Pacific and Arctic Oceans, and 1,538 miles of international border with Canada.

Of the state's 17,690 centerline miles of road, 82% are considered rural and 65% are unpaved. The vast majority of the state's land is publicly held.

With the least-dense population in the country, many Alaskans reside along the state's road system and the remaining population resides in small, rural villages and towns accessible by water or air. The largest city, Anchorage, contains two-thirds of the state's population at just under 300,000 residents, followed by Juneau and Fairbanks, each with a population of about 30,000 residents.

Alaska's transportation network is relatively undeveloped compared to its national peers. Of the state's 17,690 centerline miles of road, 82% is considered rural and 65% is unpaved. The vast majority of the state's land is publicly held. Of the public lands, 65% is owned by the federal government and 25% by the state.

Despite its size, Alaska does not have any signed interstates. Alaska shares a border to the east with Canada and some travel routes across Alaska traverse Canada, adding complexity to supporting statewide EV movements that will require international coordination.

Alaska's terrain and ecosystem varies tremendously and includes the flat and treeless tundra of the North Slope, subarctic boreal forests, permafrost and marshlands, numerous mountain ranges including the highest peak in North America, and temperate coastal rainforest. Its climate is as diverse as its terrain with long, cold winters and cool summers in the far north and northwestern coast, extreme cold in winter and extreme heat in summer across the Interior, a warmer and snowier climate in Southcentral, and an even warmer and rainier climate in Southeast Alaska.

The state is renowned for its cold winters where temperatures frequently drop to -50°F without a wind chill and will regularly climb into the 90s during the summer. Based on the temperature and precipitation averages, Alaska is divided into five climate regions.

Alaska Climate Regions

The Arctic region consists of the area north of the Brooks Range to the Arctic Ocean and is entirely north of the Arctic Circle. Average temperatures here are well below freezing with long, cold, and dark winters. Precipitation in this area is light, falling mostly in the summertime. This region is situated above the tree line and consists of predominantly tundra, and high winds are typical in this area for most of the year.

The Interior region consists of the area between the Brooks Range to the north and the Alaska Range to the south. It comprises the largest area of the state and has high temperature variability. Summers are typically warm and sunny with an average temperature in the 60s, and winters are cold with average temperatures below zero. The north end of the AFC, Fairbanks, is located in the Interior region.

The Western region spans a wide area including the Aleutian Islands. The climate in this area is heavily impacted by the Pacific Ocean and experiences frequent storms during the winter and fall. This area extends hundreds of miles into the Bering Sea and has a maritime climate that is typically above freezing with less variability.

The Bristol Bay and Cook Inlet areas consist of Southcentral Alaska and are home to most of the state's population. This area is buffered by multiple mountain ranges, and the climate is not as extreme as the Aleutian chain. Southcentral has a more temperate climate with mild summers and winters relative to the climate zones to the north and west. Anchorage, the south end of the AFC, is located in this region.

The Southeast Alaska area borders the Gulf of Alaska and has a strong maritime influence. While the temperatures can be moderate, there is high annual precipitation in the form of snow and rain. The impact of the mountain terrain in the area contributes to weather conditions that can vary substantially. The AMHS is located in Southeast Alaska.

State Travel Patterns, Public Transportation Needs, Freight and Other Supply Chain Needs

The vast and diverse natural geography of Alaska makes it a challenging setting for transportation—natural barriers throughout the region create a unique environment for aviation and marine transportation. While most interstate travel can be achieved on the road network, Alaska has a unique set of challenges as many communities cannot be accessed by the road network. These communities are located off the road system and are only accessible by plane or through the AMHS. The AMHS extends across 3,500 miles of coastline and provides service to 35 communities. The DOT&PF maintains and operates 235 airports throughout Alaska to support 82% of communities that depend on aviation for year-round access.

According to the Transportation Assessment for the Alaska Moves 2050 LRTP, 251 communities in Alaska are served exclusively by air, with distances between some airports comparable to the distance between Minneapolis and Orlando. Ferries also support an important section of transportation in the state, with the AMHS serving over 3,500 miles of coastline and 35 communities, many of which rely on ferry for travel and goods.

Remoteness is the theme when discussing the travel patterns in Alaska. Not only is that reflected in the importance of the marine and aviation system, but on the connected road network as well. The two major cities on the road system are separated by over 300 miles of road. Smaller towns are dispersed along the road system, but many have reduced services. With few full-service locations spread out over a wide geographic area, the structure of Alaskan highways presents a challenge to widespread EV usage as it relates to the ability to charge vehicles. This would increase the need for fast-charging stations throughout the state to enable users the ability to reach their destination.

The State of Alaska has 17,690 total centerline miles. A vast section of the Alaska road network is unpaved; the breakdown of total miles by road surface type is 11,520 unpaved and 6,169 paved. All 1,080 miles of the functionally classified Interstate roads and 920 of the 939 miles of the Principal Arterial-Other roads are paved.

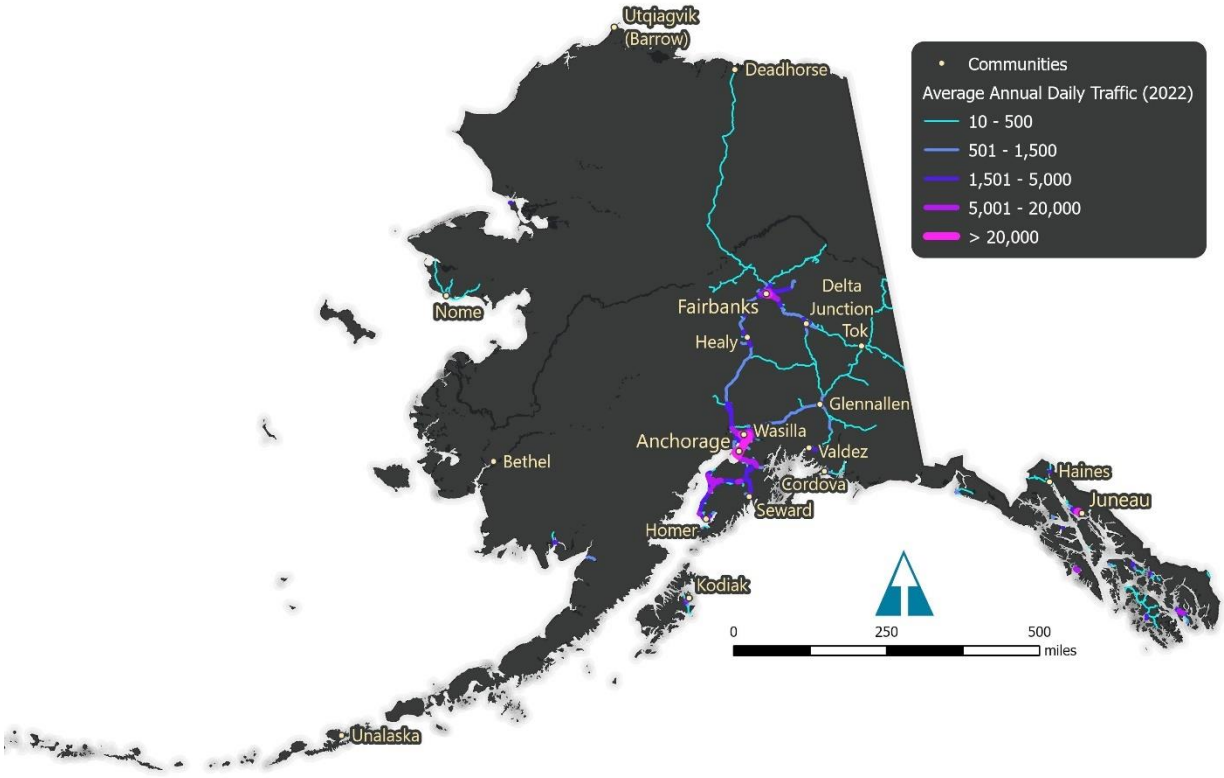


Figure 9. Alaska's Average Annual Daily Traffic

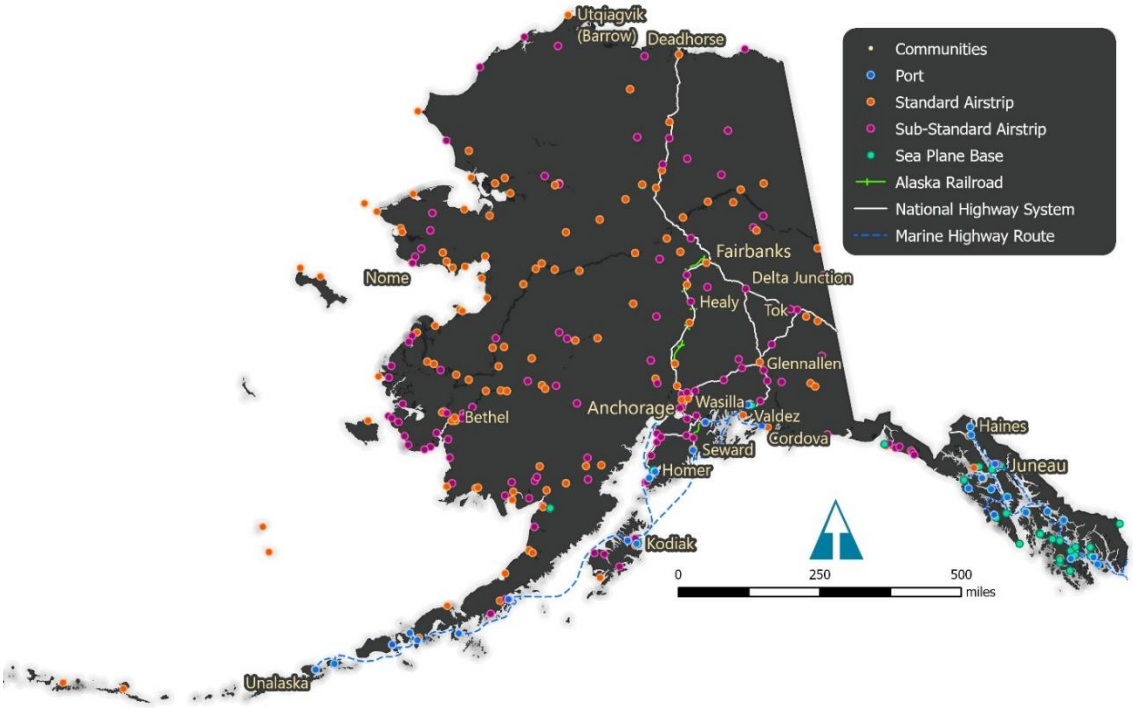


Figure 10. Alaska's Transportation Systems

Most vehicular travel occurs in the southcentral population centers along Alaska Routes A-1 from Anchorage to the Canadian border, A-2 from Tok to Fairbanks, A-3 from Soldotna to Anchorage, and A-4 from Gateway to Fairbanks. The Alaska National Highway System is unlike most in the continental United States. It includes
six-lane urban freeway segments with volumes of up to 68,000 a day (2019), and the Dalton Highway, which is 400 miles of mostly unpaved road with segments seeing as little traffic as 105 vehicles a day (2019).

Based on travel pattern data, key locations for automotive transportation occur in more populated areas including Anchorage, Fairbanks, Knik-Fairview, and Wasilla in the central region, and Juneau, Ketchikan, and Sitka in southeast Alaska.

Vehicular transportation is also limited in the State of Alaska by seasonal weather, with certain roads closed for a portion of the year due to snow cover and ice. In addition to more concentrated traffic and car ownership in these population corridors, transit plays a big role in connecting Alaskan businesses with their workforce across a range of industries. According to the American Community Survey Public Use Microdata Sample, approximately 5,600 workers in Alaska use transit to get to work, collectively earning $203 million in wages annually.[1] Key cities with federally funded public transportation programs include:

- Anchorage – People Mover and AnchorRIDES
- Bethel Transit Bus System
- Central Kenai Peninsula – Central Area Rural Transit (CARTS)
- Fairbanks – Metropolitan Area Commuter System (MACS) and Van Tran
- Girdwood – Glacier Valley Transit (GVT)
- Gulkana – Soaring Eagle Transit (SET)
- Hollis – The Inter-Island Ferry Authority (IFA)

1 https://dot.alaska.gov/stwdplng/transit/pub/AKEconomicStudy_EBP_05262022_2.pdf

- Juneau – Capital Transit
- Ketchikan – Ketchikan Gateway Borough Transit (The Bus)
- Kodiak – Kodiak Area Transit System (KATS)
- Wasilla – Valley Transit
- Sitka – The Ride
- Talkeetna – Sunshine Transit
- Tok – Interior Alaska Bus Line (IABL)

Access to more remote areas of the state occurs most frequently by aviation and ferries (along the southern coast). Approximately $1 billion of funding from the Infrastructure Investment and Jobs Act is dedicated to the AMHS to establish an essential ferry service supporting rural communities.

Aviation is also a vital component of the regional transportation system, connecting all communities to the rest of the state and beyond. The aviation system in Alaska not only serves the transportation needs of residents, but also supports the movement of material goods and critical medical services as well as the regional economy. According to the Alaska DOT&PF, nearly 82% of Alaska communities are inaccessible by road, making airstrips and airports essential to Alaskan communities.

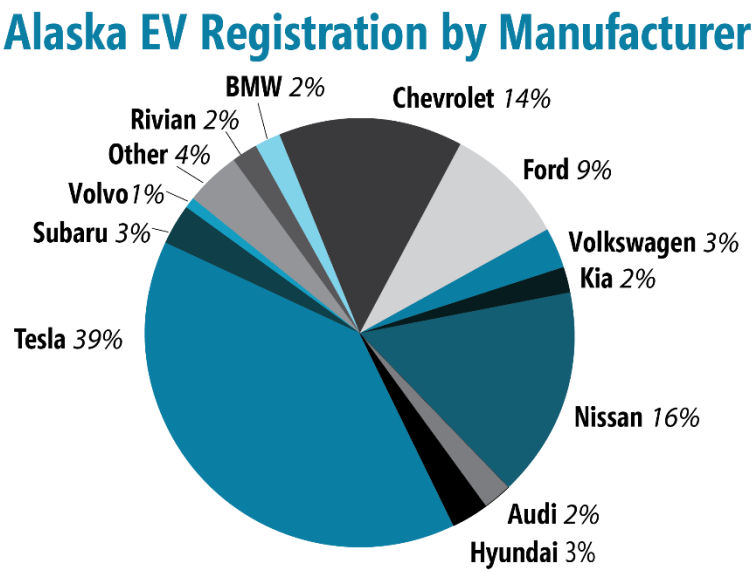


Figure 11. EV Registrations in Alaska by Manufacturer

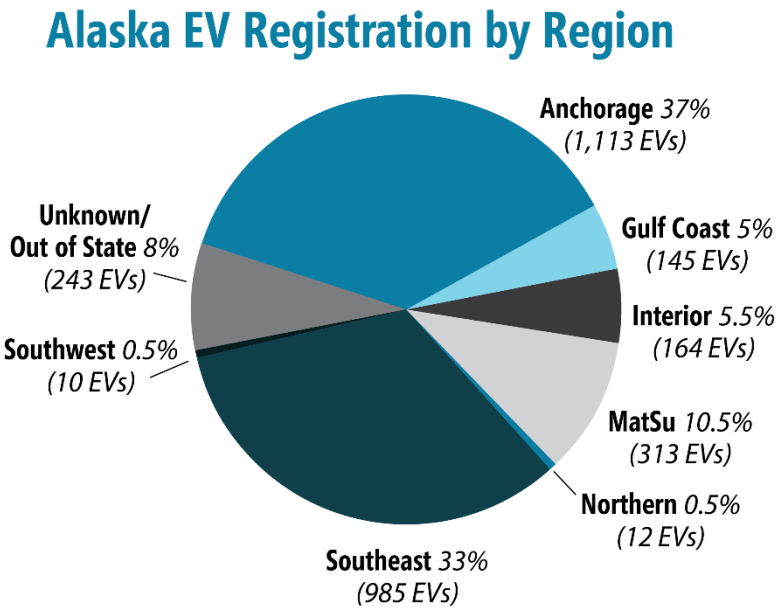


Figure 12. EV Registrations in Alaska by Region

Future State of EV Adoption in Alaska

As of May 2024, there were 2,985 EVs registered in Alaska. The EV adoption in Alaska is trending upward as indicated by a 38% increase in registrations since last year's plan update (May 2023 data). The EV penetration rate is 0.54%, which still lags behind the national average, but is also increasing. Sport Utility Vehicles (SUVs) and pickup trucks account for 80% of new vehicles purchased in Alaska.[2] Due to this vehicle preference trend, it is expected that EV market share in Alaska will increase once battery electric pickups trucks are readily available to Alaska consumers. Electric SUVs make up approximately 17% of the EVs in the state and the

2 White Paper - Electric Vehicles and Infrastructure in Alaska: https://www.akenergyauthority.org/Portals/0/2020.12.09%20AEA%20Board%20Meeting%20Documents/9B.%202020.12.09%20EV%20EVinfrastructure%20WhitePaper.pdf?ver=2020-12-03-164813-090&ver=2020-12-03-164813-090

pickup trucks are 5.8%, both increasing rapidly. For comparison, SUVs comprised of 11% of all EVs in May 2023 and pickup trucks comprised of 1.7% of all EVs. Tesla continues to hold the majority of the market; however, its share has decreased from 53% to 38.6% since 2022. The two strongest competitors, Ford and Chevrolet, added 156 and 140 EV registrations, respectively, compared to Tesla's 230 registrations since May 2023.

The future state of EVs in Alaska was evaluated to determine if the deployed capacity along the AFC related to the NEVI requirements would be satisfactory to the expected number of EVs on the road at the end of the program. To assist in the development of future EV registrations, two growth scenarios were developed.

It is important to recognize that a variety of factors can affect EV adoption, including access to charging infrastructure, availability of models, price points and comparability to ICE models, and willingness to make the transition.

Continued Growth Scenario

The continued growth scenario projects that EV adoptions continue the 2020 to 2021 growth of 42.05% throughout the five-year period. The results are that the state would realize about 1,200 EV sales per year on average, adding about 6,000 new EV registrations in the five-year period. The penetration rate of EVs in Alaska in 2026 would be 1.01% of all registered vehicles in the state, up from the existing 0.20% in 2021 for light-duty vehicles.

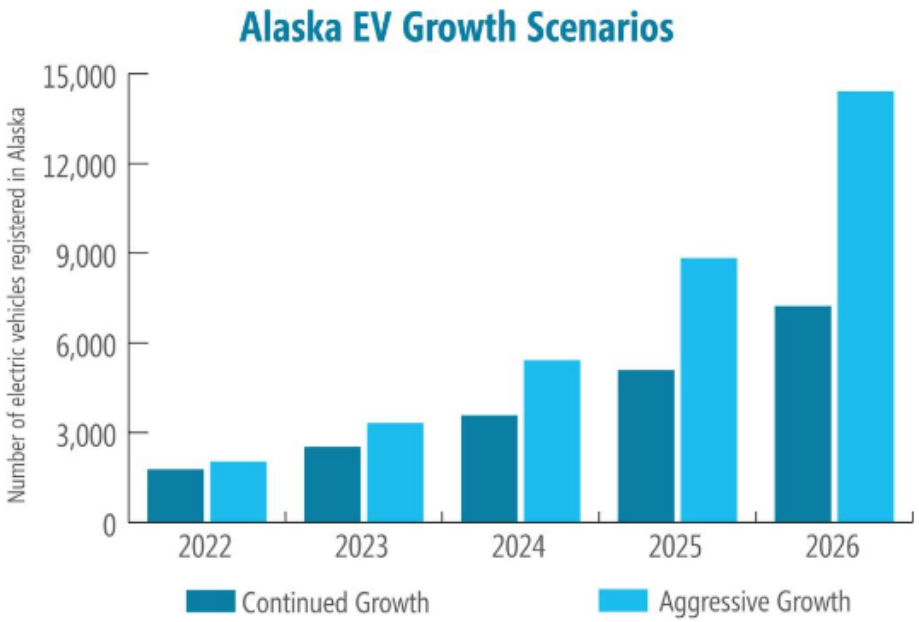


Figure 13. Alaska EV Growth Scenarios

Aggressive Growth Scenario

The aggressive growth scenario increases the 2020 to 2021 growth by a factor of 1.5, resulting in a 63% growth rate. This scenario addresses the expected increase in registration due to the new battery electric pickup
truck models coming to market and expanded offerings for SUVs. The results are that the state would realize about 2,600 EV sales per year on average, adding 13,160 new EV registrations over the five-year period. The penetration rate for EVs in Alaska under this scenario would be 2.02%, up from the existing 0.20% in 2021 for light-duty vehicles.

Growth Monitoring

Monitoring the growth of EVs in the state is essential to assess how closely actual trends align with projections. The continued growth scenario projects 2,965 registered EVs through May 2024, and the actual number is 20 registrations more. It appears as if the market has recovered from past supply chain constraints related to battery minerals and semiconductors. Last year's plan showed the continued growth scenario at 212 registrations short, and the projections appear to be on target now.

Chugach Electric Association has contracted with S&P Global Mobility for data over the past six years and has observed substantial changes in EV adoption trends across Alaska. The most recent data indicates an annual EV growth rate of over 70% for the Railbelt, significantly higher than the statewide average. Based on these

data, the aggressive growth scenario is a more accurate representation for the Railbelt region.

EV registrations have seen a steady growth since the publication of the first plan in August 2022 that cited 1,250 EV registrations in December 2021. In June 2023, the number of EV registrations in Anchorage surpassed the Southeast for the first time as more drivers in the state's largest population center adopt EVs. However, Juneau, Sitka, and the Hoonah-Angoon Census Area lead EV penetration rates with 2.85%, 2.14%, and 2.11%, respectively. No other borough or census area tops 1% EV penetration, and those areas exceed the statewide rate of 0.54%. In all, a total of 821 EV registrations have been added since last year's plan, bringing the total number very close to 3,000 registrations. The 38% growth of EV registrations is outpacing the overall vehicle registrations increase of 5.4% since the last plan.

Grid Capacity

A review of the peak loads combined with historical growth of the electrical loads on the Railbelt Utilities was performed to determine the impact of DCFC stations on the grid in the region. The future capacity projections factored in the decommission of the Healy #2 generation plant in 2024 but did not account for any additional added capacity from renewable sources as a conservative estimate. Based on the projected loads, there is more than adequate capacity for the proposed NEVI-compliant DCFC stations along the AFC detailed in this study.

Table 11: Summary of Future Grid Loads and Capacity

	2022	2023	2024	2025	2026
Firm Peak Load (MW)	809.2	849.6	892.0	936.6	983.4
Total Capacity (MW)	1569.8	1569.8	1519.8	1519.8	1519.8
Reserve Margin (MW)	760.6	720.2	627.8	583.2	536.4
Reserve Margin (%)	94%	85%	70%	62%	55%

Additional reviews of the grid will be completed as locations outside of the AFC are identified for installations.

AFC - Corridor Designation

Alaska does not have any designated interstates due to its isolation from the contiguous United States. However, Alaska submitted and was approved Corridor Pending status for a single AFC in Round 4 of nominations. The nominated section of the highway is between Anchorage and Fairbanks, with a distance of 358 miles

The corridor was submitted to FHWA as the entirety of the Parks and Glenn Highways from Anchorage to Fairbanks. As stated in the 2020, Round 4 application submitted by Alaska DOT&PF:

> *"We propose the EV vehicle corridor to correspond to the National Freight Route along the [National Highway System] NHS from Anchorage to Fairbanks initially as a target for investment, with an eventual build out along the entire NHS."*

There are no updates proposed to the AFC designations in Round 8, which ran concurrently to updating this plan for FY25. Figure 14 shows the existing AFC through Alaska.

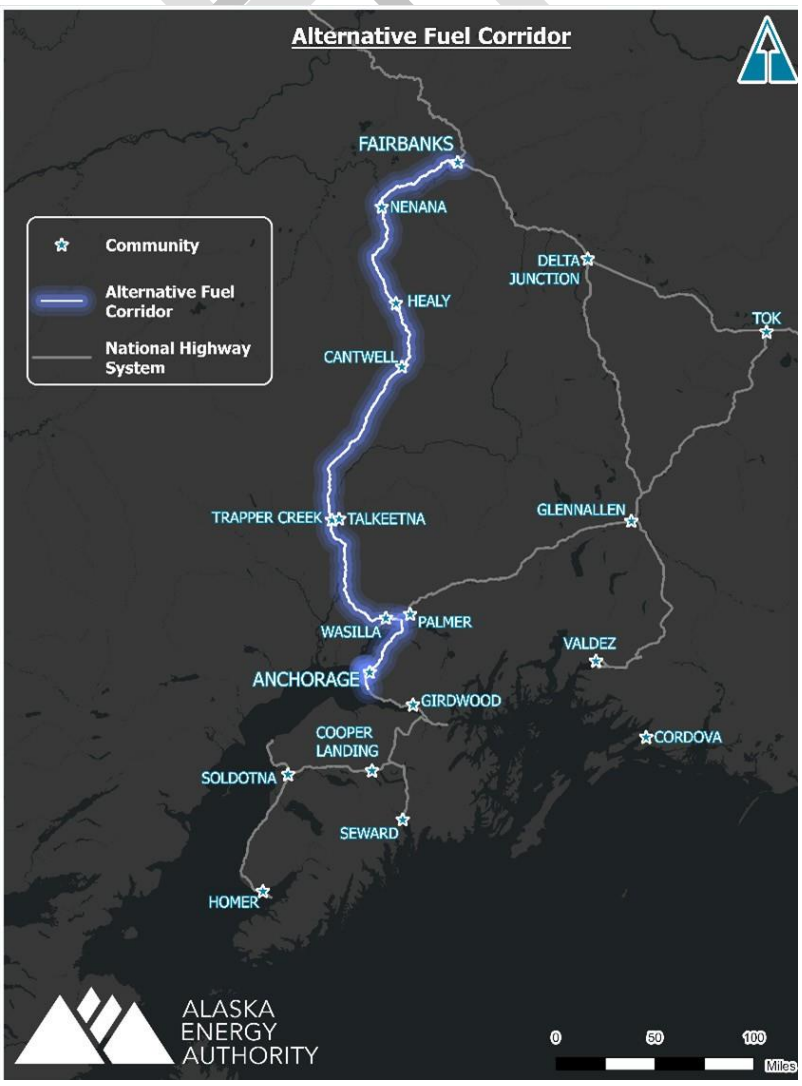


Figure 14. Alternative Fuel Corridor

Corridor Pending Corridors

The route from Anchorage to Fairbanks is the only approved AFC through eight rounds of application.

Corridor Ready Corridors

Alaska currently does not have any ready corridors. This plan intends to upgrade the corridor from Anchorage to Fairbanks to ready by 2025.

Existing Locations of Charging Infrastructure Along AFCs

As of June 2024, there are six existing DCFC locations with 17 ports located within a mile of Alaska's proposed AFC along the Parks and Glenn Highways. Of the existing DCFC locations, most do not have connectors and speed output (minimum 150 kW) that meet the NEVI standards. The average output is 50kw for the six existing DCFC stations that are not Tesla Superchargers. The Supercharger in Chugiak is rated at 250 kW and includes the "Magic Dock" from Tesla, a permanently affixed CCS adapter that can be unlocked through the Tesla app for drivers of CCS vehicles. However, it does not have a credit card reader on the pedestals to make it Creditable.

Figure 15 displays the gaps in coverage for DCFC locations and highlights the longest gap, which spans 170 miles from Wasilla to Cantwell. Within that span there are three Level 2 stations, but only one is open year-round.

Two locations are RV campgrounds and provide access to charging only during summer months. The second longest gap in charging access is from Healy to Fairbanks, a span of over 110 miles. This span also lacks Level 2 charging locations. Once into Fairbanks, the nearest DCFC location is approximately 4.5 miles from the AFC. Neither DCFC nor Level 2 stations have yet been installed along the Glenn Highway.

In all, Alaska has 65 public EV charging station locations with 127 EV charging ports according to the Alternative Fuels Data Center records.

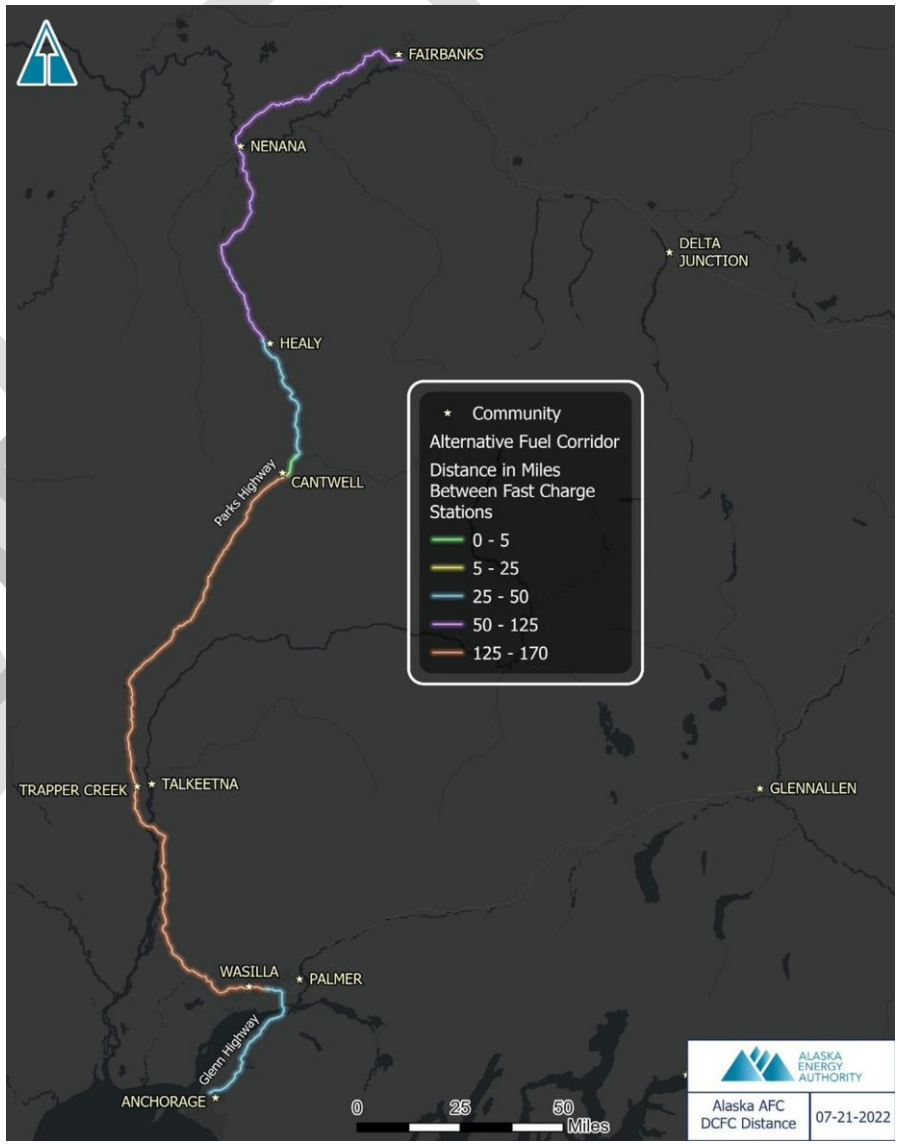


Figure 15. Alaska AFC Distance Between Fast Chargers

Table 12: Existing Locations of EVSE Within One Mile and Along Alternative Fuel Corridor (as of June 2024)

State EV Charging Location Unique ID	Charger Level (DCFC, L2)	Charger Type	Location	# of Charging Ports	EV Network (if known)	Meets all relevant requirements in 23 CFR 680?	Intent to count towards Fully Built Out determination?
AK3_5.94_NEVI_Wasilla	DCFC	4 CCS	1875 E Parks Hwy, Wasilla, AK 99654	4	FLO	Yes	Yes
AK1_0_EasyPark7thG	Level 2	J1772	650 G St, Anchorage, AK 99501	2	Non-Networked	No	No
AK1_0_EVGatewayLinnyPacillo	Level 2	J1772	513 W 7th Ave, Anchorage, AK 99501	2	evGateway	No	No
AK3_323.24_NEVI_Fairbanks West	DCFC	8 NACS/CCS	3755 Airport Way, Fairbanks, AK 99709	8	Tesla Supercharger	Yes	Yes
AK3_174.73A_JamJam	Level 2, DCFC	1 J1772, 1 CHAdeMO/CCS Combo	Mile 209.9 Parks Highway, Cantwell, AK 99729	2	FLO	No	No
AK3_174.72_NEVI_Cantwell	DCFC	8 NACS/CCS	Mile 209.9 Parks Highway, Cantwell, AK 99729	8	Tesla Supercharger	Yes	Yes
AK3_5.12_KendallFordWasilla	Level 2	J1772	2701 Mountain Village Dr, Wasilla, AK 99654	1	Non-Networked	No	No
AK3_203.78_NEVI_Healey	DCFC	4 CCS/NACS	Mile 238.9, 238.9 Parks Hwy, Denali National Park and Preserve, AK 99755	4	Jule	Yes	Yes

AK3_97_NEVI_DenaliStatePark	DCFC	4 CCS/NACS	133 Parks Hwy, Trapper Creek, AK 99683	4	Jule	Yes	Yes
AK3_6.33_MidasWasilla	Level 2	J1772	1032 E Steam Cmns Ave, Wasilla, AK 99654	2	ChargePoint	No	No
AK3_269.8_NEVI_Nenana	DCFC	8 NACS/CCS	Mile 304 Parks Highway, Nenana, AK 99760	8	Tesla Supercharger	Yes	Yes
AK3_179.59_ReChargeDenali	Level 2, DCFC	1 J1772, 1 CHAdeMO/CCS Combo	Mile 214.5 Parks Hwy, Denali National Park and Preserve, AK 99755	2	Non-Networked	No	No
AK3_203.6_Tesoro	Level 2	Tesla	Mile 238.6 Parks Hwy, Denali Park, AK 99755	2	Non-Networked	No	No
AK3_213.66_ThreeBearsHealy	Level 2, DCFC	2 J1772, 2 CHAdeMO/CCS Combo	248.5 Parks Hwy, Healy, AK 99743	4	evGateway	No	No
AK3_79.7_ThreeBearsTrapperCreek	Level 2, DCFC	2 J1772, 2 CHAdeMO/CCS Combo	23471 Parks Hwy, Trapper Creek, AK 99683	4	evGateway	No	No
AK1_21_ThreeBearsChugiak	DCFC	Tesla/CCS Combo	22211 Birchwood Loop Road, Chugiak, AK 99567	8	Tesla Supercharger	No	No
AK1_4.12_NEVI_Anchorage	DCFC	4 CCS	1200 N Muldoon Rd, Anchorage, AK 99504	4	FLO	Yes	Yes
AK3_79.63_NEVI_TrapperCreek	DCFC	8 NACS/CCS	114 Parks Highway, Trapper Creek, AK 99683	8	Tesla Supercharger	Yes	Yes

AK3_327.15_NEVI_FairbanksEast	DCFC	4 CCS/NACS	813 Noble St, Fairbanks, AK 99701	4	Jule	Yes	Yes

*Charging station installed since the publication of last year's plan.

Known Risks and Challenges

There are several risks and challenges worth noting, given the diverse and challenging terrain of Alaska paired with its size and low population density.

Lack of Development

Long distances with no development, including a 100-mile stretch along the AFC between Trapper Creek and Cantwell, pose logistical challenges for installing EV charging infrastructure and seeking hosts for sites. In these remote transportation corridors, there may be only electric transmission lines with no existing tie-in capability (along the Parks and Richardson Highways, for example) or, in some areas, no electricity infrastructure at all (along the Dalton Highway, for example). Until these logistical challenges are solved, it will be difficult to combat range anxiety among potential EV adopters.

The lack of reliable internet or cell service in underdeveloped

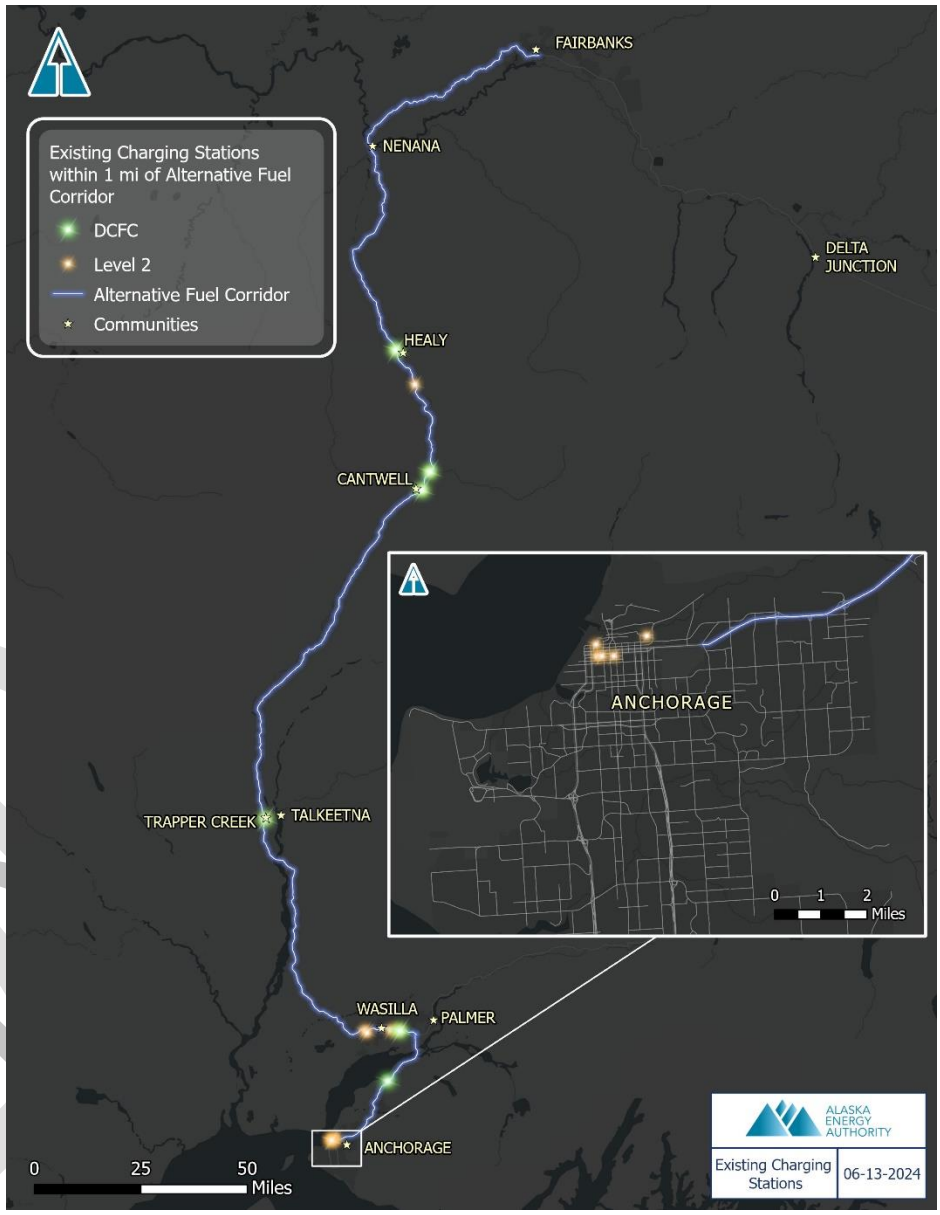


Figure 16. Existing EV Chargers Within One Mile and Along Alaska's AFC

and undeveloped areas poses a challenge to keep remote stations connected to a network to provide accurate real- time reporting on energy pricing and downtime. The EV charging infrastructure may need to rely on hard-wired communication if the site has access.

Additionally, an RFI was issued by AEA in April 2022 for public comment, and to gather feedback regarding EVs and charging infrastructure needs in Alaska. Ninety- nine responses were received with new ideas for charging locations, risks that may affect the program, and other supporting information regarding the seasonal use of EVs that will continue to inform AEA's NEVI program.

Climate

Along the Railbelt corridor, average low temperatures in the winter range between -20˚F and 5˚F, with much colder temperatures occurring frequently throughout the season. These cold temperatures can cause a range decrease of up to 50% for EVs, which will contribute to range anxiety. Colder temperatures can also increase the time required to charge the battery.

The challenges with frequent snow and ice removal at charging stations could increase station downtime. Likewise, winter driving conditions and winter storms could make travel between charging stations hazardous or impossible for brief periods. Most major highways are maintained year-round by State of Alaska maintenance crews, but conditions along some corridors (the Richardson Highway, for example) require complete road closures due to high winds or avalanches more often than others. Several corridors like the Denali Highway and Taylor Highway are not maintained in the winter, effectively closing them to car and truck traffic.

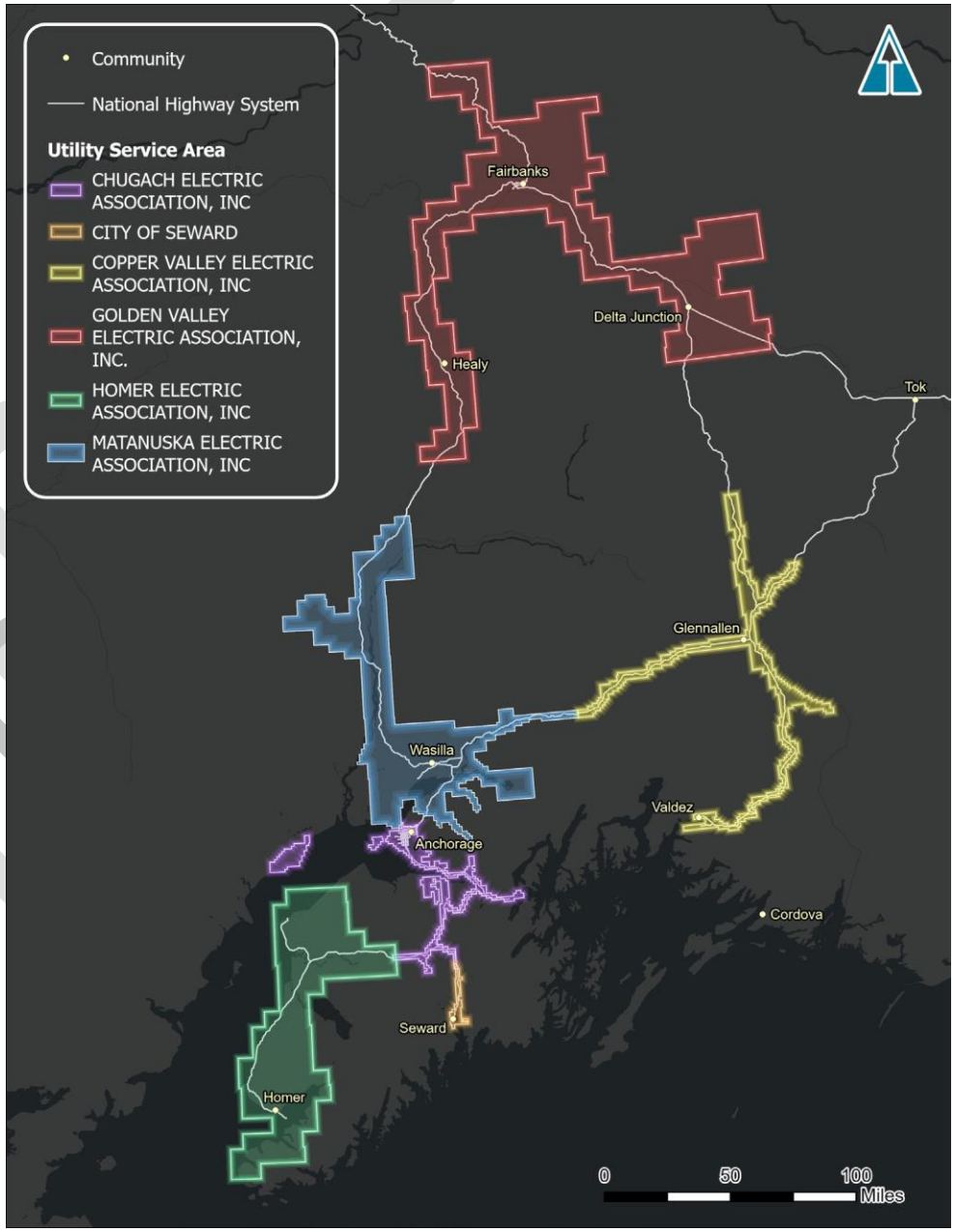


Figure 17. Utility Service Areas

Some roadways may not be open year-round due to the lack of winter maintenance. According to the Alaska DOT&PF/511AK, the following highways are not maintained during the winter months (October – May):

- Copper River Highway (MP 18 to Million Dollar Bridge, MP 49)
- Denali Highway (Paxson, MP 0 to Cantwell, MP 130)
- Denali Park Highway
- Eureka-Rampart Road (MP 0 to MP 3)
- Taylor Highway (Tetlin, MP 0 to Eagle, MP 160)
- Top-of-the World Highway
- McCarthy Road (Copper River Bridge, MP 0 to Kenicott River by McCarthy, MP 58)
- Nome area:
  - Council Road (E. of Nome, MP 5 to Council, MP 73)
  - Kourgarok Road/Nome-Taylor Highway (N. of Nome, MP 13 to Kougarok River, MP 86)
  - Nome-Teller Highway (Snake River Bridge, MP 7 to S. of Teller, MP 68)
  - St. Mary's/Mountain Village Road (St. Mary's Airport, MP 5 to Mtn. Village Airport, MP

Some of the DCFC stations in rural areas, such as the one in Healy, have been retrofitted with an enclosure that increases the temperature of the air around the station by about 30 degrees to ensure that it works in the harsh, cold climate. This could be a consideration for the charging stations installed based on the operating parameters of the available stations.

Barriers to Consumer Adoption

It will be difficult to overcome skepticism about whether EVs are appropriate for Alaska's geography and climate. Many Alaskans live in small communities located a great distance from developed commercial infrastructure, many of which are off the road system and accessible only by water or air. The cost, logistics, and sustainability of low-usage sites will be a challenge in reaching these users. Further, the low existing EV penetration may impact the economic viability for the return on investment of the match funding provided by site hosts or charging vendors. There have also been supply chain constraints that have limited EV availability in all parts of the world, including Alaska, and particularly limiting preferred vehicle types that Alaskans typically purchase such as larger SUVs and trucks.

Petroleum and coal sources account for 70% of Alaska's electricity production, which could negate some of the positive environmental benefits of EV use in Alaska and be a barrier to adoption for environmentally focused consumers.

Energy Sources and Costs

Alaska's electricity grid is isolated from the rest of North America—it is not connected to power grids in Canada or the contiguous United States. This could leave Alaska more vulnerable to reliability issues in its electric grid. There are two distinct grid categories in the State of Alaska: Railbelt and remote. The majority of the population (70%) resides in urban areas in the Southcentral region of the state and are serviced by the Railbelt Electric System. The remaining 30% of the population reside in isolated rural communities served by independent utilities. Petroleum and coal sources account for 70% of Alaska's electricity production, which could negate some of the positive environmental benefits of electrical vehicle use in Alaska and be a barrier to adoption for environmentally focused consumers.

Alaska's Railbelt Electric System is serviced by five electric utilities (four cooperatives and one municipal utility): Chugach Electric Association, Golden Valley Electric Association, Homer Electric Association, Matanuska

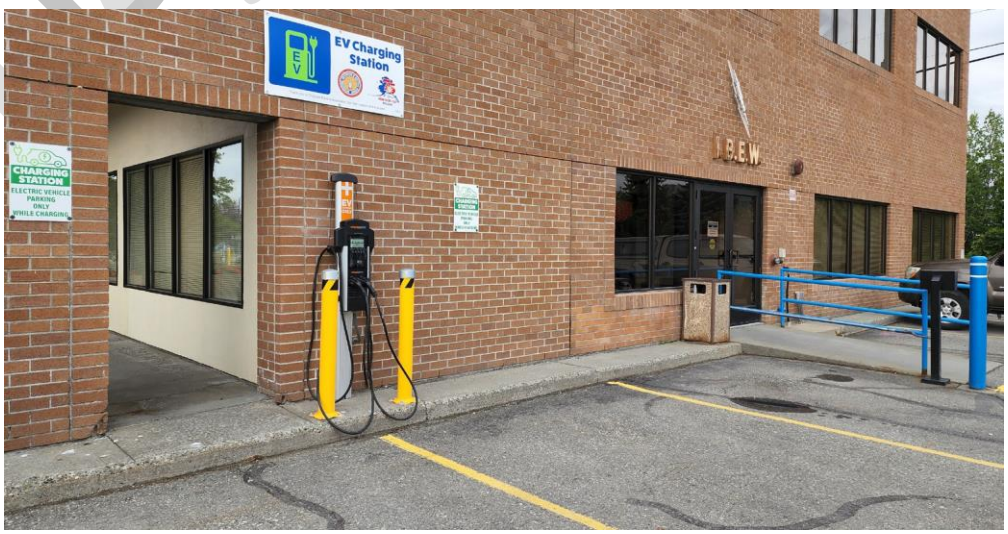
Electric Association, and Seward Electric. The "Railbelt" refers to the interconnected grid that loosely follows the route of the Alaska Railroad. The system stretches approximately 700 miles and services 70% of Alaska's population. The State of Alaska, through the AEA, owns significant transmission and generation infrastructure on the Railbelt system. The residents and businesses along the Railbelt consume approximately 80% of the state's electricity across a service area similar to the distance from West Virginia to Maine. On an annual basis, the Railbelt Electric System generates approximately 4800 GWh. Interconnection between regions is by single transmission lines. This relatively small interconnected electrical system is home to significant Department of Defense assets, tribal governments, highly diverse populations, and a remarkable variety of carbon and non-carbon energy resources.

The Railbelt is subject to several different climate zones and seasonally harsh conditions, including a sub-Arctic climate with significant seismic activity. Disruptive natural events occur often; earthquakes, wildfires, extreme cold and winter storms are experienced annually. The reliability of the Railbelt is susceptible to the effects of these natural events. Depending on their scale, they can affect service to member-consumers and service communities.

In the spring of 2022, the Regulatory Commission of Alaska approved electricity rates proposed by the regulated electric utilities that will be charged to the operators of high-speed commercial EV charging stations. The previous electric rate structures imposed a demand charge based on the peak amount of electricity drawn during any 15-minute period over a billing period, and an EV using a DCFC could impact the demand charge assessed to the site. The new rates have gone into effect over a 10-year inception period and the RCA will monitor the effect of EVSE usage on utilities and the progress of the deployment of EVSE in the state. The utilities recognize that high-speed EV charging stations with imposed demand charges would likely render the charging stations uneconomic. Under an agreement with the RCA, the utilities are using a formula which a per kWh rate will be charged for EV charging. The approved charging station rates are:

- Golden Valley Electric Association: $0.14951/kWh
- Homer Electric Association: $0.16640/kWh
- Matanuska Electric Association: $0.30243/kWh
- Chugach Electric Association (North District): $0.15274
- Chugach Electric Association (South District): $0.13508
- Juneau Utility, Alaska Electric Light and Power Company: $0.1383 to $0.2489/kWh depending on class of customer and time of year

The EV Tariff for the Chugach Electric Association South District secondary service establishes an energy charge of $0.13508 per kWh, for billing periods where the load factor is below 34.478%. Chugach has filed a rate case with the RCA proposing to consolidate North and South Distract tariffs. This will result in the tariff for the South District as the best representation of Chugach's EV rate.



EV charging station at the IBEW office in Anchorage. Photo courtesy of AEA

The state's AFC is located within the Railbelt service territories of Chugach Electric Association, Matanuska Electric Association, and Golden Valley Electric Association. The RCA's action does not address EV rates for unregulated utilities. Golden Valley Electric Association initially received approval for a DCFC tariff of $0.654801 but revised its load factor and submitted an alternative rate to the RCA of $0.14951/kWh to be more in line with the other utilities along the Railbelt and promote deployment of charging stations within its service area.

The remaining 30% of the state's population resides in remote and rural communities. Alaska's 183 remote villages are primarily powered by small diesel engine generator sets. Alaska has very few roads despite being 665,000 square miles and more than twice the size of Texas—it is vastly more remote than even the most rural parts of the contiguous United States. There are no natural gas pipelines, electric transmission lines, or central generation plants serving multiple villages. Engines, generators, switchgear and supporting equipment vary significantly among the 183 powerhouses dispersed across Alaska's remote communities. Each village is a stand-alone microgrid and many do not have the expected professionally trained utility and maintenance personnel.

The cost of energy varies drastically depending on the cost of fuel. The non-subsidized cost of energy in rural Alaska ranges between $0.30/kWh and $1.20/kWh. The Southeast region consumes the least amount of fossil fuel for electric generation. Both Kodiak and Southeast have large, mature hydroelectric projects that provide the majority of power in their more populated communities, resulting in stable, low energy costs. Northwest Arctic regions. Some communities in The Aleutians, Bering Straits, Bristol Bay, Lower Yukon-Kuskokwim, and Yukon-Koyukuk/ Upper Tanana regions are almost entirely reliant on diesel for power generation. An increasing amount of wind power is generated in the Bering Straits, Lower Yukon-Kuskokwim, and the Bristol Bay and Aleutians regions have developed hydropower resources. The amount of hydroelectric and wind generation has been continually increasing in the last 15 years.

Through conversations with the utilities outside of the Railbelt, there are additional challenges and considerations related to the capacity and grid availability when determining where EV charging infrastructure should be placed. There are utility service gaps between communities and some community's electrical capacity varies by time of year due to hydroelectric being more abundant in the warmer months and in the winter months it is supplemented by other sources like diesel. This also leads to a great fluctuation in the cost of electricity by time of year.

Private Investment

Given the current low penetration and expected usage of the DCFC stations, some small businesses that could be site hosts may find the 20% match to be a challenging proposition. AEA is investigating solutions to reduce the burden and identifying potential site hosts to determine if match funding can be fully supported. From Round 1, the average NEVI- creditable site will cost $889,000 to construct, requiring $178,000 of private cost share to pair with the $711,000 of federal funding. While AEA received many responses to the RFA, it is unclear at this time if any businesses chose not to respond due to the amount of match required to participate in the program. There may have been enough incentive or enough anticipated EV traffic and charging sessions to support the deployment of infrastructure along the corridor, but AEA will monitor the situation for the Highway and Marine Highway phases of the program to evaluate the viability of private investment in more remote areas.

EV Charging Infrastructure Deployment

The Alaska EV Infrastructure Implementation Plan identifies where and when EV charging infrastructure should be deployed with the NEVI formula funding. Considerations of consumer adoption, cost to install, return on investment, utility availability, roadway traffic, weather, and site host availability were taken into account to develop a proposed strategy to deploy infrastructure. Throughout the five-year NEVI program, the deployment plan is expected to evolve through lessons learned, data collection and analysis, and continued stakeholder engagement.

This section has been updated for FY25 to reflect the previous edition's planned EV charging stations that have been commissioned and additional grassroots efforts in the state to showcase EV capabilities.

Funding Sources

No State funding or highway gas taxes have been allocated for the construction of the infrastructure. Match funding sources will come from one or a mix of the below options. Therefore, AEA is evaluating the matching funding sources available.

- **Site hosts:** While the 20% match could be significant, some sites may be able to support the entire match. Regardless of other match funding sources, it is expected that the site may provide match funding or support the operations and maintenance throughout the five-year period.
- **State EV Program Funds:** AEA received $1.5 million of state funding to leverage as matching funds for discretionary grant funding opportunities. However, these funds are not expected to be used for the

NEVI formula program.

- **Utilities:** Utilities are permitted to support line extensions that can count as part of the overall project costs and therefore count towards match requirements. Utility contributions may include a portion of service upgrade and line extension costs as well as direct financial support through incentive programs.

Infrastructure Deployment Upgrades

An inventory of EV charging stations currently being installed through other initiatives outside of NEVI was compiled for review to identify locations and determine if any of the sites would be NEVI compliant. Coordination with the other deployments could help maximize the formula funding and present opportunities to engage with potential site hosts that already support EV charging. At this time, there are no known Proposed EV charger installations outside of the NEVI program.

Table 13: Proposed EV Charger Installations by Other Initiatives

State EV Charging Location Unique ID	Charger Level (DCFC, L2)	Charger Type	Location	Number of EV Connectors	EV Network (if known)	Corridor

Volkswagen Settlement: Homer to Healy Corridor

In 2021, AEA spent $1 million from the VW settlement to fund a charging corridor from Homer and Seward on the Kenai Peninsula to Healy, south of Fairbanks. The corridor consists of nine charging stations separated by less than 100 miles, allowing drivers the ability to travel from the Kenai Peninsula to Fairbanks without fear of losing power. Sites in Anchorage, Homer, Seward, Soldotna, Cantwell, Chugiak, Healy and Trapper Creek are currently operational. Figure 18 identifies the corridor deployment. The proposed stations will not meet NEVI requirements as all the DCFC stations will be a minimum 50 kW and at most there will be two stations per site installed.

AFC Corridor Pending Designation to Corridor Ready Designation

AFC pending designation in Alaska as of Round 6 goes from Anchorage to Fairbanks. In order to receive the corridor-ready designation and comply with NEVI requirements, the corridor will require an entire buildout of new infrastructure, as none of the existing stations meet the requirements of the NEVI program.

Some locations along the corridor are not within a utility service area. Because of the power utility gaps, some EV charging locations will not be within the 50-mile radius required by NEVI. The EV charging locations are optimized to be within the shortest distance of each other. Last year's plan proposed that the AFC be upgraded to Corridor Ready once the selected Priority Sites are commissioned, and this year's plan reaffirms that statement.

Charging and Fueling Infrastructure Discretionary Grant Program

In addition to the NEVI Formula Funding, the BIL provides for $2.5B in discretionary funding which has taken the form of the Charging and Fueling Infrastructure (CFI) grant program. AEA and DOT&PF submitted a joint application to install EV charging infrastructure in coastal communities at AMHS facilities. The CFI grant submission intends to jumpstart the state's activities in Phase 2 of the plan rather than wait until the AFC is certified complete. This will help give marine hub communities earlier access to charging infrastructure to

support electrification.

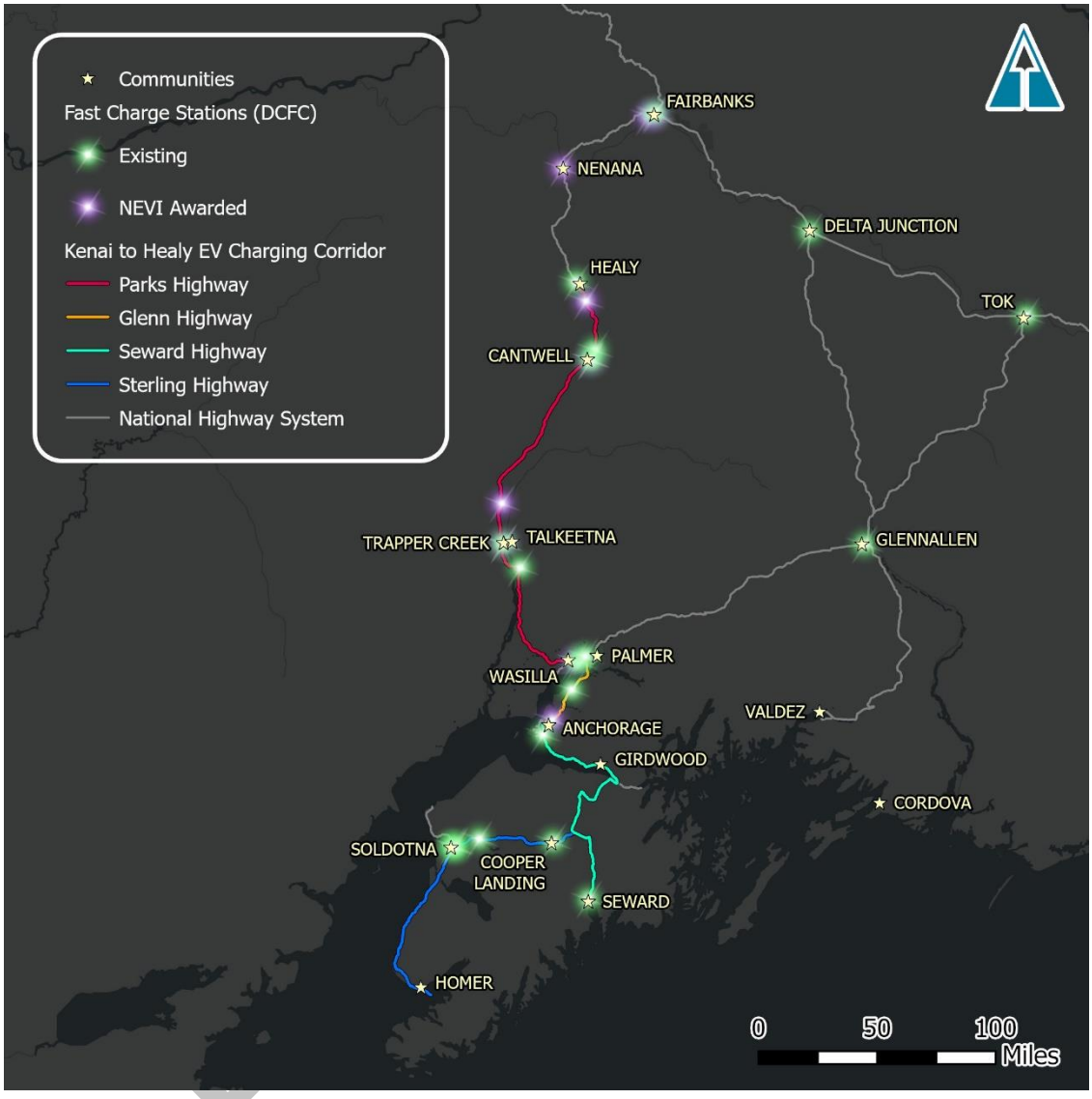


Figure 18. Alaska's Current and Future EV Charging Locations

Vehicle Technologies Office Funding Opportunity Announcement

AEA submitted an application for the Fiscal Year 2022 Vehicle Technologies Office (VT) Program Wide Funding Opportunity Announcement (FOA) and was selected. The project title is Alaska Rural EVSE Deployment (ARED). This application was submitted to support rural communities in alignment with Phase 3 of the plan.

The ARED project aims to facilitate EV adoption in remote Alaskan communities across multiple energy regions. This project involves identifying communities based on multiple criteria including their electrical grid infrastructure and local interest in EV adoption. The project aims to install EVSE in up to nine rural communities. AEA has partnered with the Alaska Center for Energy and Power (ACEP), DOT&PF, AML, Launch Alaska, and Yellowstone-Teton Clean Cities Coalition (YTCC) to deliver this project. This project is currently underway.

Increases of Capacity/Redundancy along Existing AFC

AEA intends to build out the AFC to its maximum capability. It was not expected that any location will exceed the minimum number of charging stations prescribed in the NEVI guidance. However, the awarded Tesla sites included eight total ports, five of which will be funded through the NEVI program.

Electric Vehicle Freight Considerations

Nearly half of Alaska's freight by weight is transported by truck, another quarter by rail, and just under 15% by boat. The majority of trucked goods and materials are transported to the state by ship or barge, then trucked within the state to their destination. The highest volume of this truck traffic occurs between the urban centers of Anchorage and Fairbanks.

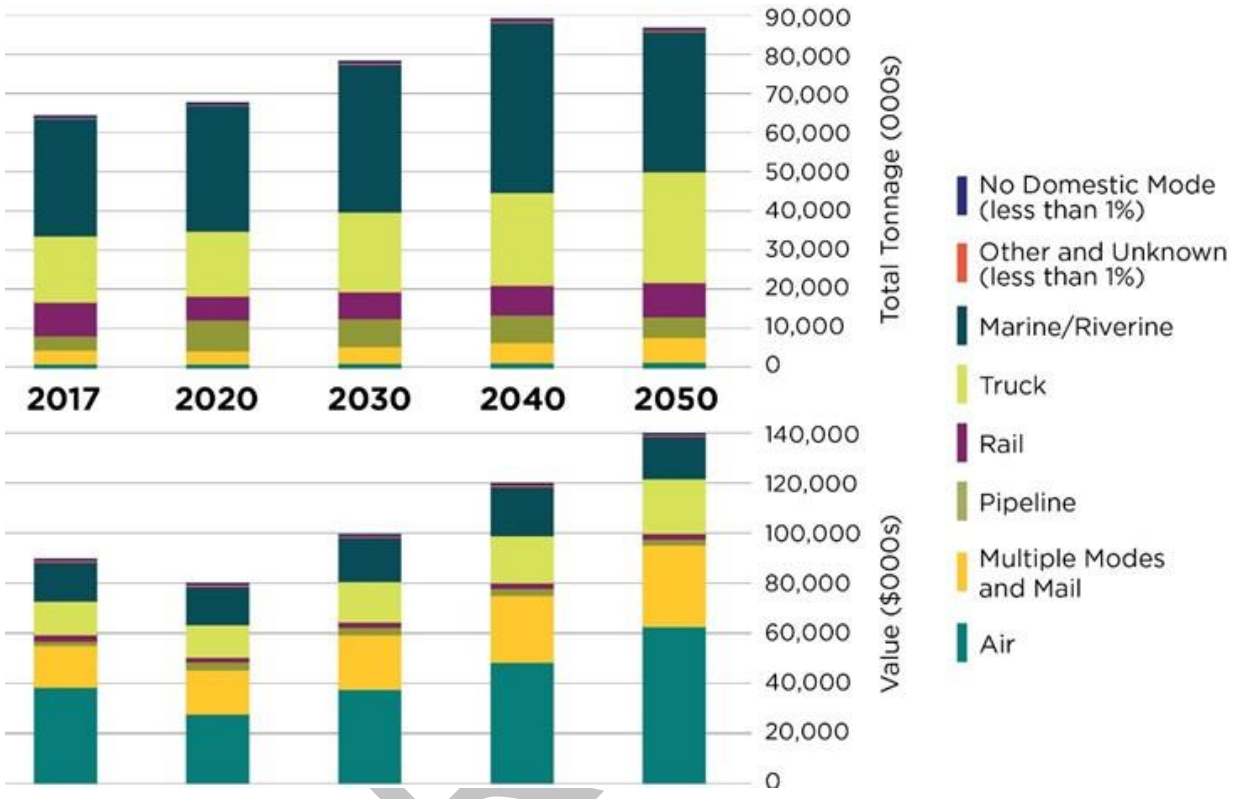


Figure 19. Freight Moved by Mode (Within, Into, and Out of Alaska)
Source: Alaska Moves 2050 Statewide Freight Plan

According to the Alaska Trucking Association, the trucking industry in Alaska does not anticipate the electrification of fleets in the foreseeable future and is not aware of any sales of electric freight vehicles in the state.

When fleet electrification does begin in the state, range and infrastructure will be two major considerations. Alaska's freight routes are more defined than freight routes in the contiguous United States because there are fewer destinations and fewer alternative routes. For example, a driver traveling between Anchorage and Fairbanks will need to travel the entire distance (approximately 360 miles) and charge at the destination. A lengthy break for charging in the middle of the route would make the trip economically infeasible. AEA will continue to monitor fleet manufacturing roadmaps to determine if battery-electric trucks become the industry preference or if another alternative fuel or hybrid powertrain becomes prominent.

A lack of electric infrastructure along some freight routes will also be a barrier to fleet electrification. For example, the oil and gas industry based on the North Slope depends on freight trucked year-round up the Elliott and Dalton Highways to Prudhoe Bay, a nearly 500-mile one-way trip, and there is no power grid available along the route.

Electrification of the state's marine fleet may be more feasible in the near term. A research project is currently underway, funded by Alaska DOT&PF, that is studying the feasibility of low emission and electric ferries as an option as the state replaces its aging AMHS fleet.[1]

Public Transportation Considerations

Two electric buses are currently in use in Alaska—one city transit bus in Juneau and one school bus in Tok.

Tok Transportation operates the state's only electric school bus, which is half-powered by solar panels and half by the local electric utility. The community of Tok is located in Interior Alaska, which experiences some of the coldest winter temperatures in the state. In the milder shoulder seasons, the bus runs between 1.4 and 1.7 kilowatts per mile. At -38˚F, the bus's efficiency decreased to 3.46 kilowatts per mile. The extra energy costs are spent heating the inside of the bus to a minimum of 45 degrees. To increase efficiency, the battery is insulated, and the engine is covered.

Juneau's bus, operated by Capital Transit, has faced mechanical, electrical, and range issues since its purchase in spring 2021. Capital Transit is working with the manufacturer to get the bus performing reliably. Despite the difficulties with its first bus, Capital Transit continues to follow the development of electric bus technology. After talking with other transit operators in cold environments with electric buses and reviewing FTA reliability testing, Capital Transit placed an order for seven Gillig electric buses. They are expected to arrive in summer 2024. Capital Transit's current fleet consists of Gillig diesel buses, which share many of the same components and operator controls. This will aid in training when the new buses arrive.

In 2018, the Municipality of Anchorage leased an electric bus to test its viability, but no electric buses were purchased after that initial test. In its 2019 Climate Action Plan, the municipality included a goal to "monitor the economic viability" of transitioning its public transit fleet to EVs, although progress on that goal was not discussed in the 2019/2020 follow-up report. According to a report on the Anchorage School District website,[2] although the school district recognizes the future potential of electric buses, cost and performance of the buses on long routes, especially in the winter, make them not viable.

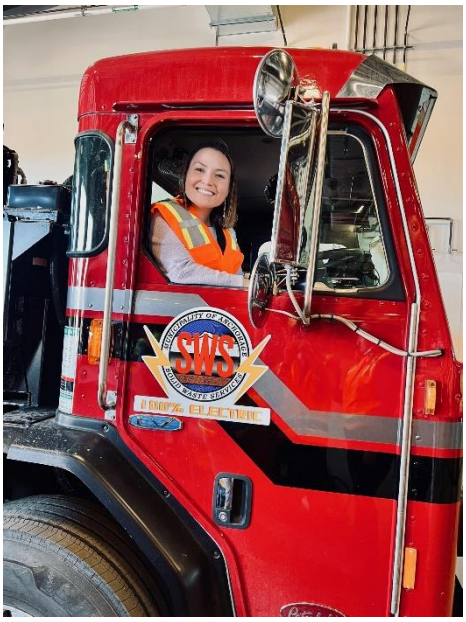
Several smaller transit services provide transportation within rural communities (like Sunshine Transit serving communities in the upper Susitna Valley) and between rural communities and urban areas (like Soaring Eagle Transit, operated by the Gulkana Village Council, which runs between communities in the Copper River Basin and Anchorage). None of these services use EVs but could benefit from the buildout of EV infrastructure.

The greatest barriers to adoption of EVs in public transit appear to be initial investment costs and cold weather performance. The Anchorage School District claims electric buses can cost three to four times as much up-front and requires a capital investment of $8 million to $10 million to convert the current diesel fueling infrastructure to electric charging stations. Performance in cold weather is also a concern, with much of the battery power being used to heat the interior of the bus. Currently Juneau's electric bus cannot complete a full day's worth of routes in the winter without having to be switched out to charge.

AEA will continue to monitor electric bus technology improvements and agencies as they plan to purchase electric buses to determine if there are opportunities to collaborate on future infrastructure deployments outside of the designated AFC.

1. https://dot.alaska.gov/comm/pressbox/arch2022/PR22-0021.shtml
2. https://www.asdk12.org/Page/13936

Other Fleet Electrification Efforts



The Solid Waste Services Department of the Municipality of Anchorage launched two electric garbage trucks on March 20, 2024. These Heavy-Duty Peterbuilt 520 vehicles were added to a fleet that includes a Medium-Duty Peterbuilt 220 box truck that has been in operation since 2021. The Heavy-Duty vehicles were funded through a US DOE grant.

Alaska DOT&PF took delivery of a Ford F-150 Lightning in early 2024, the first EV in its fleet. The vehicle is currently used to support the drone operations by DOT&PF, often traveling to remote areas of Alaska.

FY23-26 Infrastructure Deployments

During Phase 1, the AFC buildout, the focus will be on the priority charging sites located within the 'Priority EV Charging Sites' in Figure 20. Applications were solicited to host the NEVI sites in each zone to maximize coverage of the corridor. With the deployment, there is an expected gap of 77 miles, greater than required 50-mile coverage in the NEVI program. This is due to the lack of utility service and host sites between Trapper Creek and Cantwell.

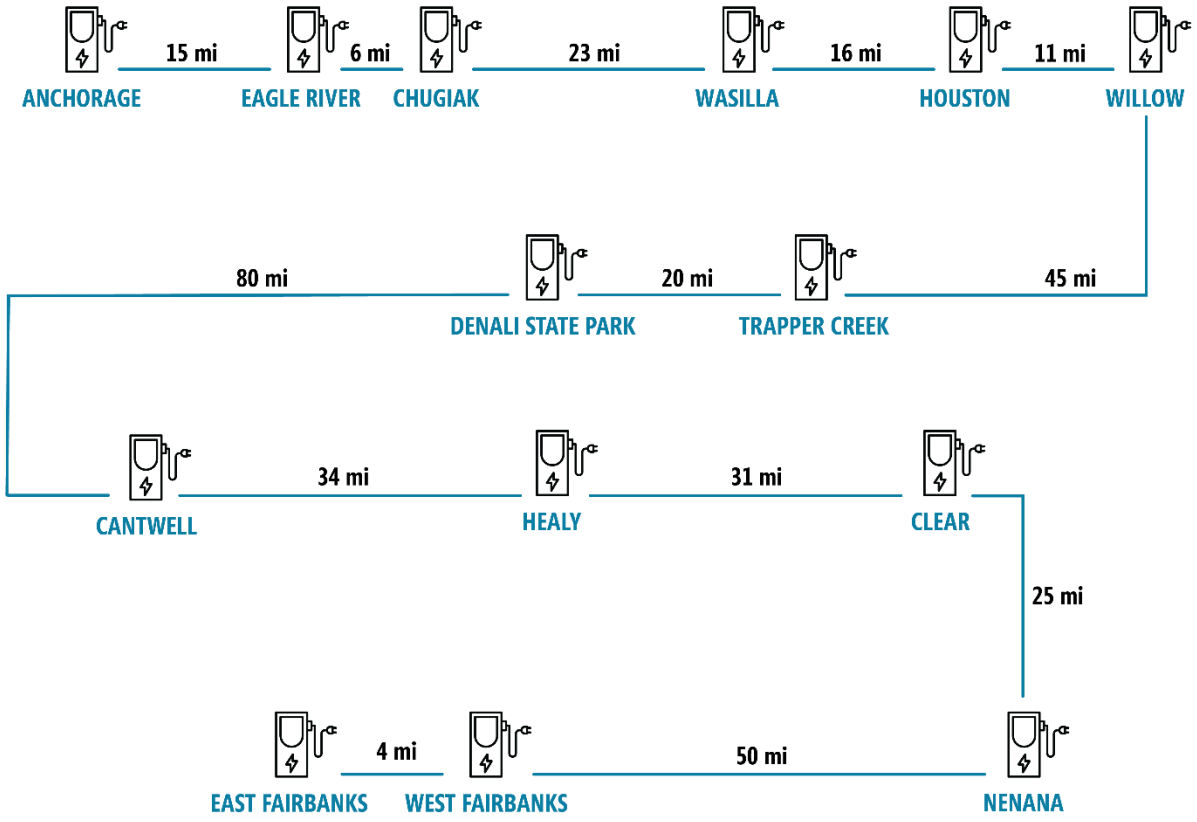


Figure 20. Priority Sites for Phase 1 as Selected from RFA on the AFC.

Following the RFA, AEA is proposing to construct nine EV charging sites that meet NEVI requirements. This awards allocated $6.4 million of federal funding, leaving about $40 million for other phases of the program. AEA is requesting that FHWA consider the Corridor Ready status for the state's only AFC, thus leading to Corridor Complete status under the NEVI program. With Corridor Complete status, AEA can move to Phase 2 and identify priorities along the AHS and AMHS to support other Alaskan communities. With approval of the FY25 plan, AEA expects to have about $32 million on-hand for Phase 2. Figure 21 depicts what a Corridor Ready AFC would look like following commissioning of all recommended sites.

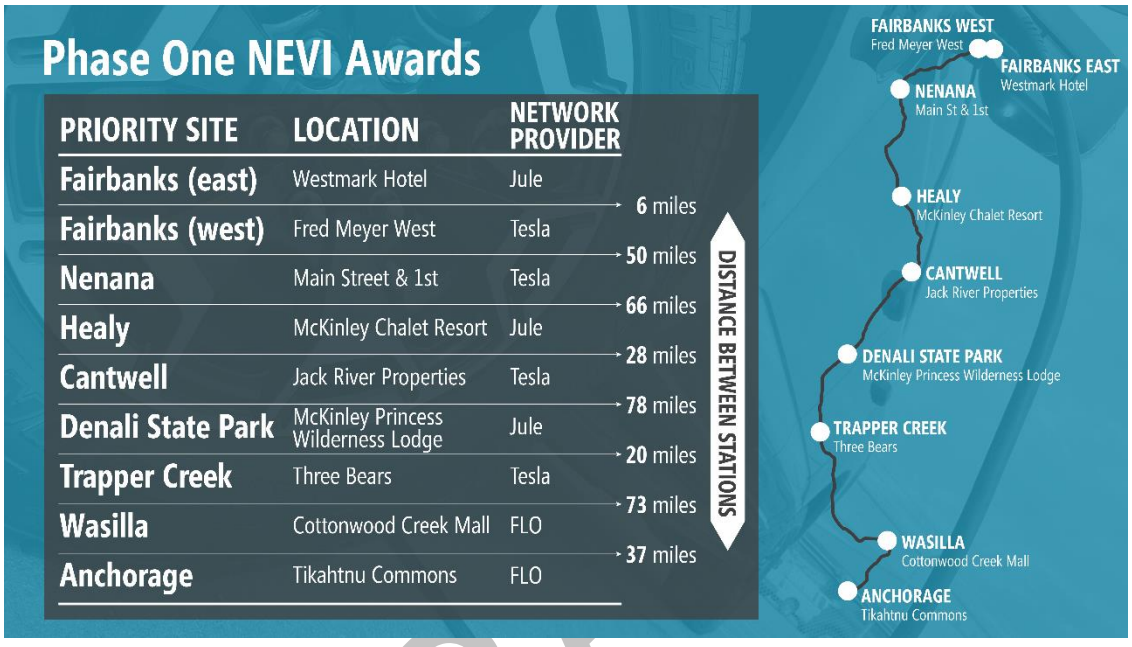


Figure 21. Priority Sites for Phase 1 as Recommended For Award

Planned Infrastructure Deployments

Table 14: Stations Under Construction

State EV Charging Location Unique ID	Route (note if AFC)	Number of Ports	Estimated Year Opera-tional	Estimated Cost	NEVI Funding Sources (Choose one: No NEVI, FY22/23, FY24, FY25, FY26, FY27+)	New Location or Upgrade?
*						

*There are no sites currently under construction as of July 2024 since the solicitation process is ongoing.

Table 15: Planned Stations

State EV Charging Location Unique ID	Route (note if AFC)	Number of Ports	Estimated Year Opera-tional	Estimated Cost	NEVI Funding Sources (Choose one: No NEVI, FY22/23, FY24, FY25, FY26, FY27+)	New Location or Upgrade?
AK3_5.94_NEVI_Wasilla	AFC	4	2025	$1,191,188	FY22/23	New
AK1_4.12_NEVI_Anchorage	AFC	4	2025	$1,299,683	FY22/23	New
AK3_79.63_NEVI_TrapperCreek	AFC	8	2025	$564,986	FY22/23	New
AK3_174.72_NEVI_Cantwell	AFC	8	2025	$564,986	FY22/23	New
AK3_323.24_NEVI_FairbanksWest	AFC	8	2025	$564,986	FY22/23	New
AK3_269.8_NEVI_Nenana	AFC	8	2025	$564,986	FY22/23	New

AK3_203.78_NEVI_Healy	AFC	4	2025	$1,094,939	FY22/23	New
AK3_327.15_NEVI_FairbanksEast	AFC	4	2025	$1,094,939	FY22/23	New
AK3_97_NEVI_DenaliStatePark	AFC	4	2025	$1,094,939	FY22/23	New

Current AFC sites have not progressed into the planned or construction phases at this time. Notices of Intent to Award have been issued to selected site hosts, and DOT&PF is currently conducting NEPA assessments for each of the selected sites. Construction is anticipated to begin in Q3 of 2024.

Planning Toward a Fully Built-Out Determination

As noted in the Awarded Contracts section of the Contracting chapter, AEA and DOT&PF are requesting acknowledgment of Corridor Ready status following commissioning of the selected Priority Sites for the state's only AFC. Three gaps along the corridor exceed the 50-mile maximum, but none of them exceed 80 miles, the distance granted an exception in the initial plan. It is AEA and DOT&PF's belief that the market response to the RFA was adequate and there will be no suitable responses to another RFA that seeks to solicit charging locations in Willow and Clear. The lack of development and potential sites in these two locations is limited, especially as identified in Clear with no applications submitted for the first round. The initially approved Discretionary Exception is requested again – albeit at 77 miles instead of 80 miles due to sites recommended for award – due to the lack of power grid within this gap on the AFC.

If Corridor Ready status is granted, this will complete the only AFC in the state and Alaska then requests Corridor Complete status for fully built-out determination.

How many stations are still needed to achieve Fully Built Out status (based on the State's EV AFCs as of the date of this update's submission)?	*Zero. The only AFC will be complete with the sites awarded in Phase 1 RFA and the state will achieve Fully Built Out Status*
Provide the estimated month/year to achieve Fully Built Out status:	*August 2025. In the interim, Alaska requests the ability to move into the procurement of Phase 2 as the process is refined during this fiscal year.*

State, Regional, and Local Policy

Policies at the state, regional, and local level affect how the infrastructure can be deployed, funds collected, adoption rates and willingness to adopt EVs from the public, and how the infrastructure may be used by the public and fleet vehicles.

Public Utility Definition

The RCA approved U-21-022 on October 25, 2021, which clarified that EV charging stations are not public utilities or subject to restrictions on the resale of electric service, so vendors and owners of charging stations could assess a fee for the provision of electricity. Previously, site hosts had to charge customers based on the amount of time spent using the EV charger since only public utilities were allowed to charge multiple different customers for electricity.[1]

State Energy Policy

The State Energy Policy (Alaska Statutes 44.99.115) recognizes the importance of promoting energy efficiency in the transportation sector.[2]

State Motor Fuel Tax – Registration Fees

There was a proposed bill that implemented a biennial registration fee to supplement the highway fuel tax that is used for highway construction, maintenance, and operations. Electric and alternative fuel vehicles would have paid $100 and hybrid vehicles would pay $50 under the proposal.[3] The bill passed the Alaska House of Representatives and was referred to the Finance Committee in the Senate, but the 2021-2022 session ended before the Senate passed the bill. It has not been reintroduced at the time of this publication.

Alternative Fuel Vehicle Acquisition Requirement

Per Alaska Statute 44.42.020, every five years the Alaska DOT&PF must evaluate alternative fuel cost, efficiency, and commercial availability for automotive purposes. When practical, vehicles using alternative fuels should be purchased or vehicles should be converted to alternative fuels. To ensure the availability of alternative fuels for consumers, the DOT&PF may work jointly with public or private partners.[4]

Regional Zoning

Zoning ordinances are useful tools for state and local governments to indicate where EVSE is allowed or prohibited. Planners and other officials can utilize zoning to incentivize or require EVSE like chargers throughout a municipality's zoning districts or in specific areas.

Alaska can look to what other states and local municipalities

EV charging station in Anchorage
Photo courtesy of AEA

1 Poux, 2021
2 Alaska State Government, 2020
3 Josephson, 2021
4 U.S. Department of Energy, n.d

have done to promote EV adoption. For example, in the case of Methuen, Massachusetts, an addendum to the existing zoning ordinance permitted the use of EVSE in single- and multi-family dwellings along with commercial and industrial zones. Even more radical measures include incentivizing EV supply equipment installation through parking requirement measures. In Georgia, a municipal ordinance includes an incentive program in which each designated EV space in a parking facility counts as three spaces toward meeting off-street parking requirements. The effects of this ordinance are twofold: EV use is incentivized, and traditional ICE vehicle use is constrained and disincentivized.

Any changes in zoning ordinances must include clear definitions and provisions to avoid unintended limitations on EVSE deployment. New York City's Department of City Planning demonstrated this best practice when it amended zoning language to define EVSE in conjunction with parking facilities as an accessory use. This action allowed EVSE to be located in any drive-in property in a commercial district, rather than only at existing fueling station locations.[1]

Further, state or local ordinances could restrict the parking of non-EVs or EVs not charging in parking spaces with fines and/or towing implications.

Grassroots

AKEVA plans to set up a temporary EV charging corridor from Fairbanks to Oliktok Point to bring attention to the challenges of electrifying all communities across Alaska. Demonstration, education, advocacy, and fundraising are pivotal as AKEVA builds its platform for EV drivers, activists, and stakeholders across the state to engage. These measures accelerate the adoption of EVs and improve EV infrastructure in Alaska. Education can also be utilized to dispel public misconceptions about range anxiety, EV performance in cold climates, and costs that prevent consumers from confidently making an EV their next vehicle purchase.[2]

ReCharge Alaska is a private project led by EV enthusiasts in Alaska. The group's goal is to "open up Alaska and advance the EV transformation through the deployment of DC Fast Chargers." ReCharge Alaska has deployed its own DCFC stations to support EV drivers in the state, written white papers on the subject, and researched and developed solutions to deploying infrastructure in the extreme cold temperatures of Alaska. The group has voiced satisfaction with AKEVA's 2020 R-20-005 tariff. The RCA evaluated the current electrical tariffs for emerging EV market and concluded that the R-20-005 incentive for electric users

A crowd gathers in the Golden Valley Electric Association parking lot in Fairbanks to send off the 10-vehicle Arctic Road Rally caravan on August 12, 2022. Photo courtesy AEA

1 U.S. Department of Energy, 2015
2 AKEVA, 2022

to reduce their power loads from short bursts of loads to a levelized load would be easier for the electrical utilities to manage. Such cooperation between private entities and state organizations is a promising step towards popularizing EV use. In this framework, passionate citizens take the initiative further than individual EV purchase, towards bolstering the public good.[1]

After departing from the Golden Valley Electric Association parking lot on August 12, 2022 the Arctic Road Rally caravan of 10 EVs successfully traversed a 1,096-mile round trip from Fairbanks to the Arctic Ocean and back, testing the limits of where EVs can go and negotiating the lack of infrastructure along the way.

The biggest challenge on the Dalton Highway wasn't the performance of the vehicles themselves, but the lack of infrastructure, underscoring the need for more charging stations across the state. With no power lines to provide a charge, the group used a combination of diesel and natural gas generators to electrify their trip. Renewable energy credits provided by Chugach Electric Association helped them achieve net-zero emissions.

The event was meant to demonstrate and test the capabilities of EVs in some of the harshest environments—and the vehicles delivered. The group is planning another rally where they plan to bring in vehicles from more manufacturers and run some larger vehicles.

Ten EVs assemble at the edge of the Arctic Ocean after driving north up the Dalton Highway during the 2022 Arctic Road Rally Demonstration event. Photo courtesy Tim Leach, Launch Alaska

Another adventurer, Rainer Zietlow, showcased the abilities of his Volkswagen ID.4 while driving from Homer (southernmost road-network location in Alaska) to Deadhorse, the northern most point in the United State, while traversing the AFC and the Dalton Highway[2]. This trek occurred between March 28, 2023, and April 4, 2023, encountering some harsh spring conditions along the way, and arrived at the earliest time of year for an EV. From Deadhorse, Rainer then drove to Key West, Florida, the southernmost location in the United States and arrived on May 6, 2023.

1 Hall, 2022
2 https://vwid4-alaskatour.com/vw-id4-alaska-tour/

Implementation

AEA has experience in supporting the deployment of EV charging stations, so past lessons learned and understandings can be applied to the NEVI program as AEA supports its deployment. The strategies in this section will support a successful deployment and lower risk to drivers, site hosts, network companies, the federal government, and AEA.

Strategies for EVSE Operations & Maintenance

Following the EV infrastructure installation process, there will be several operational considerations to be aware of, including electricity and maintenance costs and associated networking fees.

Maintenance & Warranty Costs

Charging infrastructure general maintenance includes storing charging cables, checking parts, keeping the equipment clean, and some intermittent repairs to chargers. Warranties vary by manufacturer and can be packaged as fixed-term, renewable, or included with equipment costs. However, while routine maintenance can be minimal, repairing broken chargers that are no longer under warranty can be costly. It is necessary to establish responsibility for maintenance costs (site host, charging network, or installer). Maintenance contracts should include response and repair times.

The site hosts and charging vendors will be responsible for the warranty, maintenance, and operations of the sites. The five-year costs related to these activities are expected to be included in the total project cost to be factored in with the federal share and local match. Once the NEVI funds are expended, the costs will entirely transfer to the site host and vendor, where it is expected that the sites will continue to operate and will be supported by collection of charging fees.

Fees

Charging station site hosts who want to generate revenue or recover costs may assess a fee for use of the charging infrastructure. Many charging networks will facilitate the fee transaction at the charging unit, but fees can also be collected via app, credit card, over the phone, or at a nearby establishment. According to the final federal rulemaking, "all revenues received from operation of the EV charging facility are used only for:

i. Debt service with respect to the EV charging station project, including funding of reasonable reserves and debt service on refinancing;

ii. A reasonable return on investment of any private person financing the EV charging station project, as determined by the State or other direct recipient;

iii. A reasonable return on investment of any private person financing the EV charging station project, as determined by the State or other direct recipient;

iv. If the EV charging station is subject to a public-private partnership agreement, payments that the party holding the right to the revenues owes to the other party under the public-private partnership agreement; and

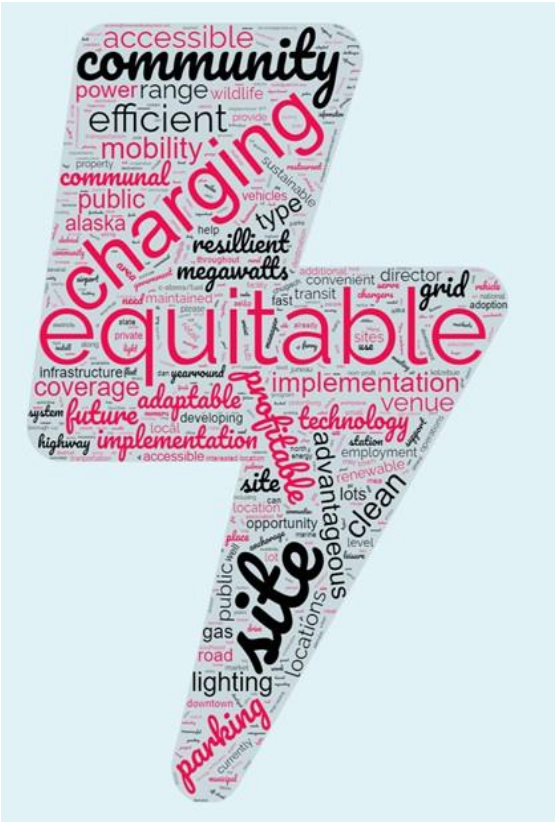
v. Any other purpose for which Federal funds may be obligated under Title 23, United States Code."

Pricing Structures

A report released by the University of California, Los Angeles Luskin Center for Innovation details important information about the factors that influence the financial viability of charging stations. Common pricing structures charge by kWh, session, length of time, or through a subscription. The RCA has enabled charging by the kWh—the preferred method for EV drivers—so AEA required that the recipients of the NEVI funding assess fees per kWh. This has not been an issue along the AFC with the Railbelt utilities, but discussions continue with other utilities to ensure this pricing structure can occur in their territories.

Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners

On May 13, 2022, AEA publicly released a RFI directed at interested site hosts and businesses of all sizes. The RFI was directly shared with local and small businesses that expressed interest in the VW Mitigation DCFC deployment. The intent was to begin a list of entities to engage as the program unfolds, generate interest in the program, and compare interested parties with identified areas for infrastructure deployment. Participants were encouraged to submit ideal locations with Global Positioning System (GPS) coordinates. This information can be used in initial outreach to gauge interest. Further, respondents were asked to provide suggestions and considerations for the plan. The



word cloud in Figure 22 highlights the responses received, and the notable themes collected from the public during this phase are:

- **Equitable:** In alignment with AEA's goals and the Justice40 requirements, equity will be ensured throughout the program.
- **Community:** The program should provide community charging. Alaskan's transportation patterns do not commonly include corridor travel.
- **Efficient:** Providing adequate speeds of charging will allow those using the charging stations to receive the charge needed and get back on the road.
- **Profitable:** Host sites will need to support the installation and have a return on investment of the match funding provided.
- **Accessible:** The stations need to be accommodating of all users and need to be placed in convenient locations for those traveling.

All procurements will be conducted through a publicly competitive process but conducting engagement activities with suppliers and site owners in advance should help bolster the number of applications received.

Site Selection

Criteria were developed in the initial plan and updated for the RFA so help distinguish sites when multiple applications were received for each Priority Area. The criteria reflected desirable site characteristics such as distance from the AFC, lighting provided on the site, located within a Justice40 boundary, and access to amenities while charging.

Table 16: Site Selection and Prioritization Criteria

Criterion	Max Points
Utility Service Site Information Form Evaluation Has the applicant demonstrated a clear understanding regarding the infrastructure needs and utility improvement costs for the site? Does the project schedule along with the demonstrated infrastructure and utility needs?	80
Site is located within 1 mile of the highway Within 1 mile: 60 points 1-3 miles: 30 points 3-5 miles 15 points Over 5 miles: 0 points	60
Site provides adequate lighting for security around the EVSE.	20
Site has amenities for users to access while charging their vehicle.	40
Site is located within a Justice40 boundary.	40
Site match contribution: 20%: 20 points 25%: 40 points 30%: 60 points	60
Total available base points	**300**
Bonus Considerations	**Max Points**
Site offers pull through charging access.	20
Site offers make-ready work for additional ports and increased speed (e.g. 350 kW in the future).	20
Site offers additional plug standards to be inclusive of other drivers (e.g. NACS and CHAdeMO)	10

There are a variety of configurations for site layouts that a site host could pick based on expected usage and space or parking spaces available. Through the many public engagement actions to-date, accommodating vehicles towing trailers has been brought up several times and could be an important consideration for the success of EV charging in Alaska as pickup trucks gain market share. Figure 23 shows an example configuration that accommodates one EV with a trailer. Additional layout examples can be found in Appendix B.

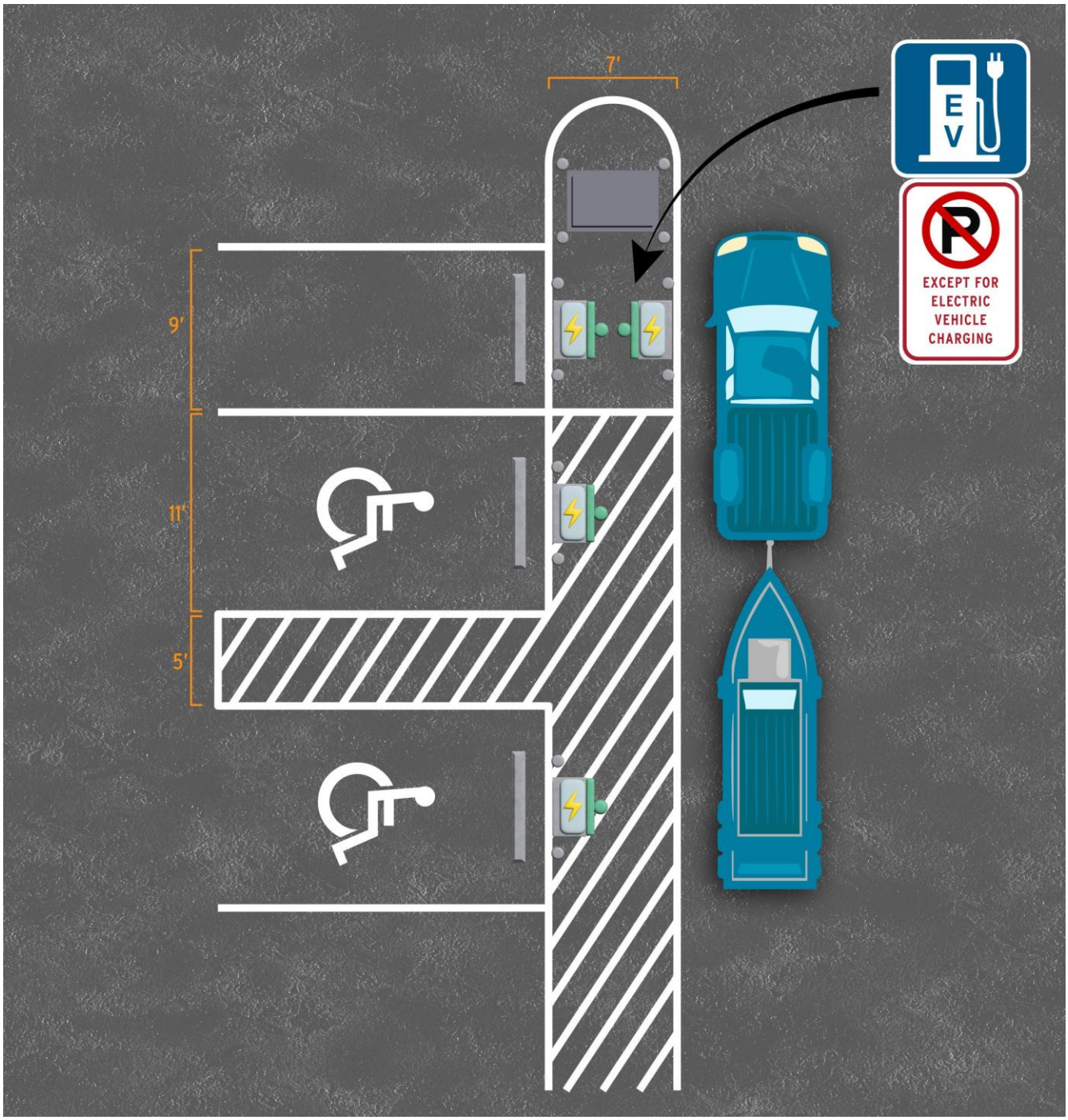


Figure 23. Example Configuration to Accommodate EVs with Trailers

Strategies for EVSE Data Collection & Sharing

AEA will collect data on the usage of the EV charging stations for performance measurement, planning for future deployments, and reporting to the Joint Office on the program's metrics. To be compliant with the expected reporting requirements of the NEVI Standards and Requirements, the grantee shall provide a quarterly report in a form to be approved by AEA that includes the following:

- EV charging station identifier
- Charging port identifier
- Charging session start time/end time
- Charging session error codes
- Energy (kWh) dispensed to EVs per session by port
- Peak session power (kW) by port
- Payment method associated with each charging session
- Charging station uptime for each of the past three months as calculated by the methodology contained in 23 CFR 680.116(b)
- Duration of each outage
- Number of charging sessions per zip code for use by AEA in tracking Justice40 benefits. This is an Alaska-specific requirement.

The grantee shall produce an annual report (as dictated by the NEVI Standards and Requirements) which contains the following data:

- Maintenance and repair cost per charging station for the previous year
- Identification of and participation in any state or local business opportunity certification programs including but not limited to minority-owned businesses, veteran-owned businesses, woman-owned businesses, and businesses owned by economically disadvantaged individuals

The grantee shall produce a one-time report per the NEVI requirements that contains the following data:

- Name and address of the private entity(ies) involved in the operation and maintenance of the chargers
- Distributed energy resource installed capacity, in kW or kWh as appropriate, of asset by type (e.g., stationary battery, solar) per charging station
- Charging station real property acquisition cost, charging equipment acquisition and installation cost, distributed energy resource acquisition and installation cost, and grid connection and upgrade cost on the utility side of the electric meter
- Aggregate grid connection and upgrade costs paid to the electric utility as part of the project, separated into:
    - Total distribution and system costs
    - Total service costs

These requirements will be imposed through the project agreements executed between AEA, DOT&PF and the site host. Further, the charging vendor will be required and responsible for sharing information through its own applications and other third- party applications. To enable data sharing with third-party entities, the vendor will be required to provide an application programming interface (API) with specific static information (such as location and name) and dynamic information (such as pricing structure and availability status). The APIs will also be used to create a centralized dashboard for the public to view stats on the Alaska EV program.

The chargers will be required to display and base the price for electricity in $/kWh. The price of charging will be displayed on the chargers and communicated via the charging network. Further, the pricing structure that

is inclusive of maintenance and operation costs will be required to be explained via an application or a website. In an effort to make EV charging station location information more accessible, AEA will coordinate with the Alaska DOT&PF to add a layer to 511AK. This website garners frequent views due to the dynamic and changing conditions of Alaska's roadways. This will help inform the public of charging station locations and help ease range anxiety.

Strategies to Address Resilience, Emergency Evacuation, Snow Removal/Seasonal Needs

Alaska has significant risks related to earthquakes, mudslides, flooding, and avalanches. All of these—while serious and not entirely uncommon—are not as impactful as winter weather. Certain roads are not maintained during the winter season, and year-round availability and maintenance of the charging stations. Some local entities have designed enclosures for the DCFC stations to maintain an acceptable operating temperature during the winter.

Site partners will be required to clear the parking spaces for the EV charging equipment, but it may take additional time to complete snow removal based on the weather conditions. These factors cannot be used against the vendor for station uptime, especially if the adjacent roadway is not traversable. Requirements for operating temperatures and conditions will be included in the project agreements, but modifications, such as enclosures, may need to be accepted if the available equipment does not meet the specifications of the surrounding environment.

Charging station at the Dimond Center, Anchorage
Photo courtesy of AEA

Strategies to Promote Strong Labor, Safety, Training, and Installation Standards

To ensure Alaska's workforce is prepared to install and maintain EV infrastructure, AEA will coordinate with and seek feedback from unions including the International Brotherhood of Electrical Workers (IBEW Local 1547), the National Electrical Contractors Association (NECA), and local Laborers' International Union of North America (LIUNA) affiliates like the Laborers' Local 942 in Fairbanks and the Laborers' Local 341 in Southcentral Alaska, and other vocational organizations. Coordination efforts will focus on identifying challenges and risks in training Alaska's workforce to prepare for EV infrastructure and creating recommendations for certification requirements and state regulation changes, if needed

Coordination efforts with unions will take place through the AKEVWG as outlined in the Public Outreach and Engagement Plan in Appendix A. The Working Group includes representatives from Alaska's business community, including chambers of commerce, small businesses, and potential site hosts. All recommendations related to the labor issues surrounding EV infrastructure that are discussed in technical group sessions will be presented to the larger group for consideration.

The NEVI Standards and Requirements identifies the EVITP as the certification program for electricians to install, maintain, and operate EV infrastructure. The EVITP website currently lists four Alaska businesses (located in Anchorage and Fairbanks) as utilizing EVITP-certified installers. The Public Outreach and Engagement Plan lists each of these businesses as potential stakeholders to help inform future EV installation and maintenance standards due to their experience with the certification process. As the Working Group considers the best path to certification for Alaskans, it will consider the option to allow certification through a registered electrical apprenticeship program that includes EVSE-specific training, as outlined in the proposed NEVI program regulations.

Bringing labor, business, and contracting groups into the EV conversation will have the added benefit of creating EV community advocates as workers learn more about EVs in Alaska and their economic development potential.

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An EV passes through the intersection of Fireweed Lane and Arctic Blvd in Anchorage. Photo courtesy of AEA

Strategies to Address Compliance with Minimum Standards

There were no significant plan changes from the initial plan document to adhere to the NEVI Standards and Requirements Final Rule that was posted on February 28, 2023, and became effective March 30, 2023. All requirements and associated final rule reference sections can be found in Table 17.

Table 17: National Electric Vehicle Infrastructure Standards and Requirements

Requirement	Reference
Procurement Process Transparency for the Operation of EV Charging Stations	Section 680.106(a)
Number and Type of Chargers	Section 680.106(b)
Connector Type	Section 680.106(c)
Power Levels	Section 680.106(d)
Availability	Section 680.106(e)
Payment Methods	Section 680.106(f)
Equipment Certification	Section 680.106(g)
Security	Section 680.106(h)
Long Term Stewardship	Section 680.106(i)
Qualified Technician	Section 680.106(j)
Customer Service	Section 680.106(k)
Customer Data Privacy	Section 680.106(l)
Use of Program Income	Section 680.106(m)
Interoperability of EV Charging Infrastructure	Section 680.108
Traffic Control Devices or on-premises signs acquired, installed or operated	Section 680.110
Data Submittal	Section 680.112
Charging Network Connectivity of EV Charging Infrastructure	Section 680.114
Communication of Price	Section 680.116(a)
Minimum Uptime	Section 680.116(b)
Third-Party Data Sharing	Section 680.116(c)
Other Federal Requirements	Section 680.118(a) & Section 680.118(b)
ADA Requirements	Section 680.118(c) & Design Recommendations for Accessible Electric Vehicle Charging Stations
Title VI of the Civil Rights Act	Section 680.118(d)
Title VII of the Civil Rights Act	Section 680.118(e)
Uniform Relocation Assistance and Real Property Acquisition Act	Section 680.118(f)
National Environmental Policy Act of 1969 (NEPA)	Section 680.118(g)

Equity Considerations

DOT&PF and AEA employees know and understand the varying demographic communities throughout the state of Alaska as well as the importance of reaching out to all of our communities. The State is committed to not only public input and public outreach from our rural, underserved, and disadvantaged communities, but continued communication throughout the life cycle of the process and project of delivering EV charging stations within the communities and proposed corridors. Alaska has extensive rural regions and communities that range from all around the borders of the state to the interior border with Canada.

Rural communities face challenges related to location, terrain, resources, and communication capabilities. AEA will work with community leaders to provide opportunities to engage, comment, and participate in the development of the EV charging stations.

AEA will use social media, community councils, radio ads, in-person meetings, virtual meetings, and partnerships with local governments/municipalities and tribes to collaborate with these groups to understand local needs. Within the urban areas, community leaders will have the opportunity to attend virtual meetings and in-person meetings to provide comments from the community as well as reviewing site selections and project rollout.

In rural communities, social media, virtual meetings, and in-person meetings with the DOT&PF's tribal liaison, tribes, and community elders will provide vital information as to sacred areas/burial grounds within their communities to avoid. The State understands the subsistence hunting/fishing lifestyle and times of year and will work with the tribes to avoid outreach/public participation within those time frames with the goal to re-engage with those communities at a later date.

The Plan reflects that the concerns, questions, input, and ideas from the public comments/public outreach events will have a direct effect on the corridor and EV site selection. Continued communication with communities and stakeholders throughout the life cycle of the project will allow for modifications to the Plan

based on public feedback from individuals within disadvantaged communities. As contractors are selected for capabilities, DOT&PF and AEA will require the selected vendor to review and evaluate site locations within the EV study area using federal requirements and guidelines made available by the Joint Office.

Identification and Outreach to Disadvantaged Communities (DACs) in the State

Through Executive Order 14008, the Justice40 Initiative was signed by President Biden. The Justice40 Initiative sets a goal that 40% of the overall benefits in certain federal investments flow to DACs that are marginalized, underserved, and overburdened. Through meaningful and consistent stakeholder engagement, Justice40 will allow stakeholders and community members the opportunity to engage and provide input on project and programs decisions. Through the use of the Climate and Economic Justice Screening Tool, which is the digital tool developed with the use of U.S. Census Bureau data, AEA will identify marginalized, underserved, and overburdened communities within the project area for outreach and DAC participation.

The initial stakeholder list contains many government communities that fall within Justice40 boundaries as other DACs, including tribal councils. AEA commits to furthering outreach through promotion of efforts on social media and through newsletters so AEA can continue to foster engagement with all communities. 39.8% of Railbelt residents live in DACs or Alaska Native village statistical areas, so the benefits along the AFC should meet the Justice40 requirements.

Large parts of the AFC lie within DACs, so initial outreach will occur in these communities for deployment, while outreach in other communities will be used to update and refine the Plan for the out-years. The investments beyond the AFC will focus on the AMHS, where many of the port communities fall within

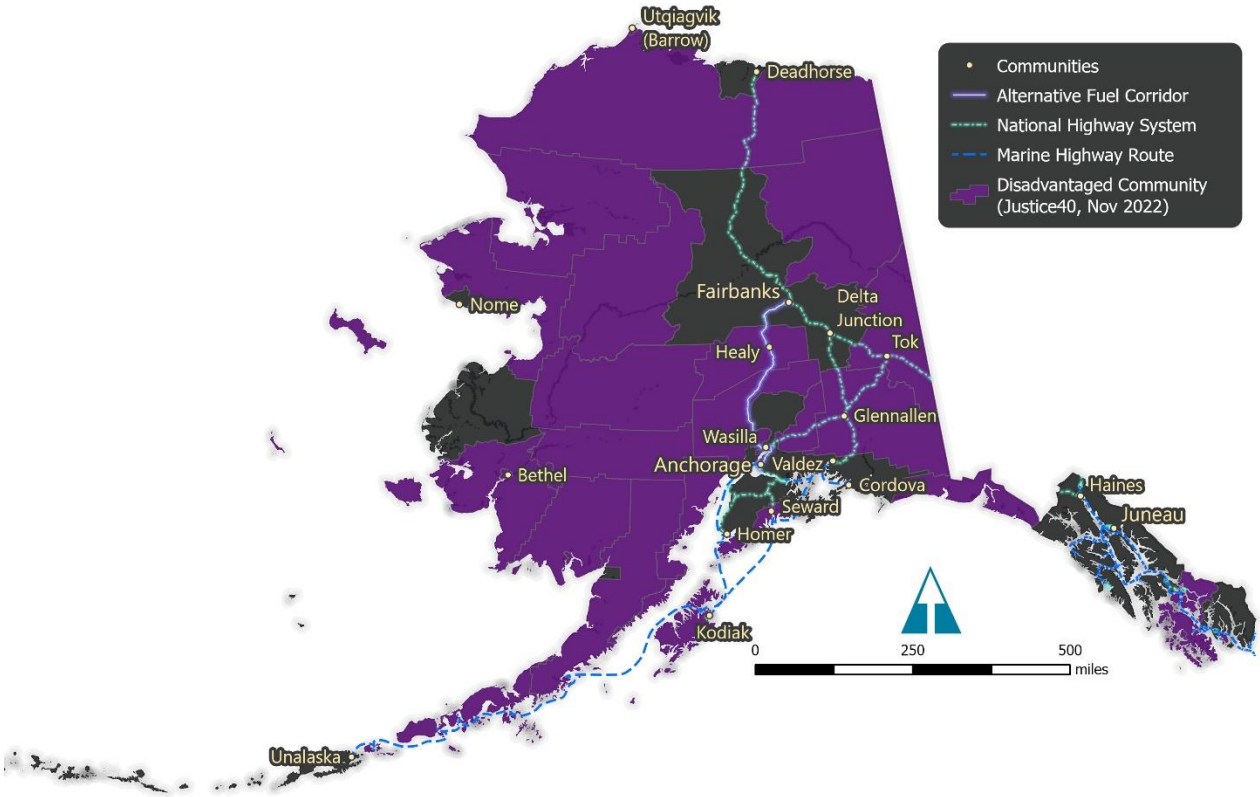

Figure 24. Alaska's Justice40 Tracts
Source: Climate & Economic Justice Screening Tool

Electric vehicle charging station in Anchorage. Photo courtesy of AEA

Justice40 boundaries, and then community and destination charging where AEA can provide charging access in rural DACs to foster growth for EVs. The expected penetration in the early years in these communities is expected to be low, but the investment will ensure that the DACs are not left behind as the vehicle fleet shifts to electric power.

To support equitable deployments, 30 of the 54 (56%) communities and local governments on the stakeholders list lie within Justice40 boundaries. By only having one AFC, AEA will have the flexibility to disseminate investments and benefits to more communities across the state. AEA and DOT&PF are also currently reviewing the Justice40 map for discrepancies between their own records of DACs, as it appears the two datasets are not in alignment. Should discrepancies be found, AEA will request credit for the benefits of DAC deployments not located on the Justice40 map.

Process to Identify, Quantify, and Measure Benefits to DACs

The initial measurement method to track the benefits to DACs will be quantifying the amount of funding invested into DACs. This process will involve identifying the infrastructure installed within Justice40 boundaries. For locations that are not within boundaries, an evaluation will be performed using GIS mapping to determine if the infrastructure is in close proximity to the boundary and along a roadway to the community. With Alaska's roadway network, terrain, and rural nature, many communities only have one access point to the roadway network, so infrastructure placed along that access but outside the boundary may still benefit the DAC.

Consultant and AEA labor will also be tracked for engagement activities that directly correlate to DACs, as education and outreach will be important to involve DACs, collect their input, and support them with the NEVI funding. Awareness of the project will also increase chances of small business participation in the communities as site hosts, recognizing the indirect benefit of site sales while travelers charge. AEA understands that community needs are dynamic. The current engagement plan recognizes this and will be updated accordingly throughout the NEVI program. The plan calls for meeting with DACs, engaging with their needs, providing transparency in the implementation process, and eventually gaining trust within the community.

There is an additional opportunity to integrate DACs into the clean energy job pipeline as job training related to EV infrastructure installation and general clean energy infrastructure could be provided. Such training measures would not only increase community engagement related to the clean energy transition, but also provide additional income and job security that could provide upward mobility from DAC status. AEA will coordinate with the AWP, and the AATCA, AGC, and ABC to support women and minority participation in the apprenticeship programs.

Benefits to DACs through this Plan

AEA and DOT&PF are in the early stages of identifying and setting performance targets for the benefits to DACs. Investment in communities ensures access to EV charging infrastructure. While adoption rates may be low initially, providing access will make the transition to EVs easier as more affordable and accessible vehicles are released by Original Equipment Manufacturers (OEMs). Context-sensitive approaches must be utilized in Alaska, especially as it pertains to alternative vehicles like All Terrain Vehicles (ATVs) and snowmachines. While electric versions of these vehicles are by no means low-cost capital, they are significantly more affordable than electric passenger vehicles. ATVs and snowmachines are used daily by some Alaskans, and their personal preferences must not be disregarded. Including these means of transportation in the EV transition may be a more financially viable variation for DACs in the transition to electric passenger vehicles.

While total cost of ownership is typically lower over the life of the vehicle, financial barriers to entry into the EV market can be prohibitive. Therefore, an alternative to remedy these barriers could be the popularization of -transit and shared-ride vehicles for DACs. By alleviating the financial burdens of individual vehicle purchase and providing community support for transit, DACs can receive the same mobility benefits for a lower per capita price. These communally utilized modes also cut down on vehicle miles traveled in their entirety, decreasing the economic and environmental constraints of EV producers and EV users.

These wholesale changes to travel habits would result in air quality improvements due to increased EV adoption. Air quality improvements are critical as DACs are oftentimes disproportionately affected by transportation emissions from ICE vehicles.

To help inform the measurement of benefits to DACs, AEA published a community benefit survey at outreach events. The number of responses to the survey are shown in Figure X.

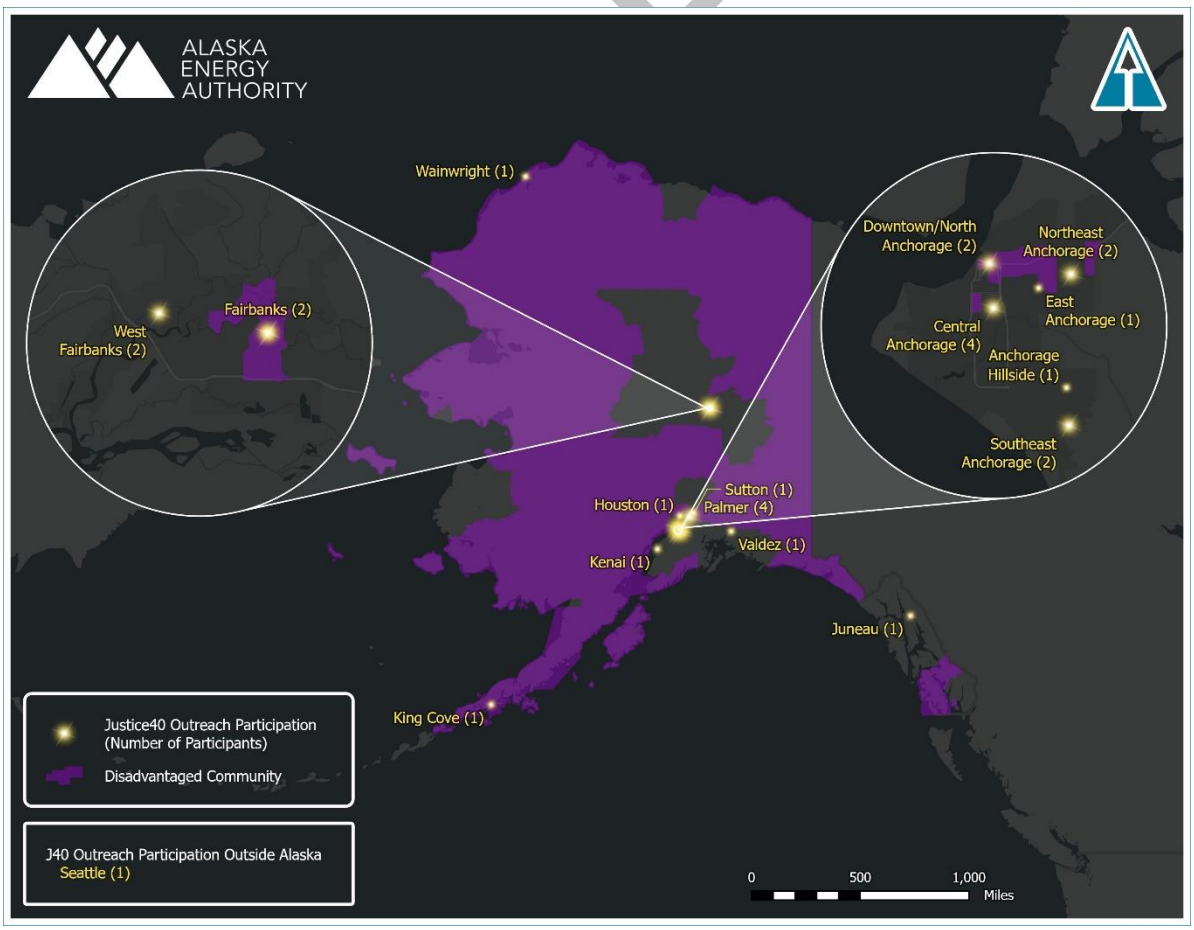

Figure X. Justice40 Community Participation in Outreach

A measure that AEA and DOT&PF expect to monitor but may be more qualitative is resilience. For instance, if there are charging stations that are supported by a battery back-up system, a user could charge during a power outage. AEA plans to monitor these occurrences to determine other benefits of the program.

An early measurement through the Phase 1 RFA is project investment in DACs. Five of the nine sites are located within a Justice40 boundary and based on the costs of each site, 54.9% of program investment has gone to Justice40 communities. AEA and DOT&PF will continue to monitor and measure the other benefits as identified below.

Table 18: Benefits Category and Strategy for Tracking Benefits

Benefits Category	Strategy for Tracking Benefits (Metrics, Baseline, Goals, Data Collection & Analysis Approach, Community Validation)
Improve clean transportation access through the location of chargers.	**Metric:** Increase number of EV charging stations in Justice40 areas **Baseline:** The number of EV charging stations prior to RFA awards **Goals:** At least 40% of the cost of investment with new charging stations is within Justice40 boundaries **Data/Analysis:** AEA will track the expenditures of the program and identify the costs for locations within J40 boundaries to determine this benefit. **Community Validation:** Community engagement during July 11, 2023 technical session on J40 Benefits. Future outreach events and listening sessions in J40 communities.
Decrease the transportation energy cost burden by enabling reliable access to affordable charging.	**Metric:** Transportation Energy Cost Burden **Baseline:** 2020 US Census Data; 2021 EV registration data **Goals:** Reduce the transportation energy cost burden in J40 communities. **Data/Analysis:** Overlay EV registration data (from DMV data 2022-) to determine adoption in census tracks to calculate a revised transportation energy cost burden; price of gas; price of electricity by census tract, J40 overlay; Zip codes that are J40 **Community Validation:** Community engagement during July 11, 2023 technical session on J40 Benefits. Future outreach events and listening sessions in J40 communities.

Benefits Category	Strategy for Tracking Benefits (Metrics, Baseline, Goals, Data Collection & Analysis Approach, Community Validation)
Reduce environmental exposures to transportation emissions	**Metric:** Environmental Exposure **Baseline:** Emissions and air quality models from the state and regional planning agencies; 2021 EV registrations **Goals:** Reduce PM2.5 and CO2 emissions. **Data/Analysis:** Use model to determine the change and apply cost of impacts to determine benefit; new EV registrations by zip code **Community Validation:** Community engagement during July 11, 2023 technical session on J40 Benefits. Future outreach events and listening sessions in J40 communities.

Increase the clean energy job pipeline, job training, and enterprise creation in disadvantaged communities.	**Metric:** Number of new clean energy jobs, and jobs related to clean energy. **Baseline:** Number of EVITP contractors and personnel in 2022, Number of electricians, contractors, and engineers working on EV infrastructure in 2022. **Goals:** Increase the number of EVITP contractors and personnel by 5 in 5 years, Increase number of electricians, contractors, and engineers working on EV infrastructure by 5% in 5 years. **Data/Analysis:** EVITP registrations, Survey of contracted entities for NEVI program, Zip code of employees, **Community Validation:** Community engagement during July 11, 2023 technical session on J40 Benefits. Future outreach events and listening sessions in J40 communities.
Economic impacts to business owners.	**Metric:** Indirect impacts of retail/site sales while patrons charge **Baseline:** With no NEVI creditable sites, there is no existing indirect impact currently. **Goals:** Show a positive benefit at all sites commissioned through NEVI funding. **Data/Analysis:** Voluntary economic benefits by site hosts; survey results **Community Validation:** Community engagement during July 11, 2023 technical session on J40 Benefits. Future outreach events and listening sessions in J40 communities.
Knowledge Sharing and Program Awareness.	**Metric:** Community opportunities for engagement about the program. **Baseline:** Pre-2022 engagements **Goals:** Increase engagements with communities. **Data/Analysis:** Number of educational and listening sessions, Labor costs to produce **Community Validation:** Community engagement during July 11, 2023 technical session on J40 Benefits. Future outreach events and listening sessions in J40 communities.

Labor & Workforce Considerations

Alaska expects the capacity of the state's EV workforce to increase with the implementation of NEVI funds. EV adoption in Alaska is an opportunity for the development of skilled workers and job creation. As EV penetration and charging infrastructure increase, the demand for an in-state EV workforce and associated training programs will increase as well. The State of Alaska has a current EV penetration level of approximately 0.53%, with minimal supporting EV charging infrastructure in place. A significant amount of EV installation, operations, and maintenance expertise currently resides out of state.

The goal of the State's NEVI Labor and Workforce plan is to develop and retain as many EV workforce opportunities as possible within the state. This can be accomplished, in part, by working with our partners at the Department of Labor, AWP, AATCA, AGC, ABC, IBEW, and other vocational schools and universities to promote in-state EV training programs and opportunities.

To ensure a network of reliable and effective EV chargers, Alaska will need to implement strong labor, training, and installation standards. Electricians installing EVSE and charging equipment must understand the aspects of the market to adequately address customer questions, concerns, and satisfaction. Currently there are four EVITP certified contractors in Alaska—three in Anchorage and one in Fairbanks. This number has not changed since FY23. The planned EV infrastructure investment will bring a significant amount of EV employment opportunities to the state, which could overwhelm the current in-state EVITP certified workforce capacity.

In March 2023, AEA joined the EVITP course at the IBEW Local 1547 to discuss the NEVI program and share the outlook for future EVSE work opportunities in Alaska. The IBEW in Alaska offers 2 EVITP courses per year; one of these courses is offered in Anchorage and one is offered in Fairbanks. The EVITP course is 20 hours

with typical attendance of 10 electricians. Over time, the IBEW EVITP course registration numbers have been steadily increasing.

AEA begun to discuss how the state can support Electric Vehicle Charging Vocational Training. The intent is to increase access and frequency of EVITP training to the local vocational workforce and expand on the existing 20-hour EVITP certification in a continuing education style course for journeyman electricians. The program would aim to develop a curriculum to support future EVSE deployment throughout Alaska by providing the following:

- Classroom training for Level 2 and DCFC charging protocols and electrical requirements (Existing EVITP).
- Hands-on experience with AC Level 2 and DCFC chargers; installation, maintenance, and troubleshooting (Existing EVITP).
- Creation of an "Alaska-specific" EVSE training program to meet EVITP required coursework or supplement EVITP required coursework.
- Support to obtain supplies to power and purchase EVSE for the "lab/hands on" portion of the training program.
- Support for instructor certification and continuing education.
- Develop program to facilitate charger manufacturer-specific installer/maintainer certifications. This component of the program would facilitate local electrician's ability to receive "factory certification" to do service and warranty work on their equipment. Facilitate an in-state training where training can occur on-site.

Dedication of an AEA-funded EV charging station at the Linny Pacillo Parking Garage in Anchorage. Photo courtesy of AEA

AEA plans to work with DOT&PF and FHWA to develop a funding mechanism for labor and workforce development activities, Workforce development activities for NEVI formula program projects are eligible so long as they are directly related to the charging of an EV. States are required to comply with the qualified technician requirements in 23 CFR 680.106(j). Workforce development activities funded by the NEVI formula program will contribute to the State's compliance with these requirements.

In compliance with 23 CFR 680.106(j) to ensure that the installation and maintenance of chargers is performed safely by a qualified and increasingly diverse workforce of licensed technicians and other laborers, all electricians installing, operating, or maintaining EVSE must receive certification from the EVITP or a registered apprenticeship program for electricians that includes charger-specific training developed as part of a national guideline standard approved by the Department of Labor in consultation with the Department of Transportation, if and when such programs are approved.

The State of Alaska has a Policy on Anti-Discrimination and Equal Opportunity to protect against illegal discrimination. Alaska is one of the most racially and ethnically diverse states in the nation and is committed to promoting a workforce that is representative of all Alaskans. As an employer and service provider, the State fully supports equal opportunity, equal employment opportunity (EEO), and affirmative action. The State does not condone, permit, or tolerate discrimination against its employees or applicants for State employment on the basis of race, color, national origin, religion, sex, age, physical or mental disability, marital status, changes in marital status, pregnancy or parenthood, or status as a veteran or veteran with a disability.

Physical Security & Cybersecurity

Physical Security

Providing a welcoming and secure environment for motorists looking to charge their vehicles will help ensure the success of the deployments. This is a challenge, due to the remoteness of some of the locations along the AFC and the lack of sunlight in the winter months. Adequate lighting is paramount and was included as a scoring criterion in the selection process for this reason. Other site amenities that could aid in security include cameras, security detail, a staffed facility that is open 24/7, and locating the stations on-site in areas with high visibility. AEA will work with the vendors through the selection and design process to ensure that physical safety is kept in mind.

Cybersecurity

AEA's approach to deploying infrastructure through the NEVI program is to use third-party vendors to own, operate, and maintain the EV charging stations and the data that is stored and transmitted. The data that will be publicly available will be transmitted through an API, and the data will be limited to non-sensitive material. AEA does not intend to collect, nor does it want personally identifiable information (PII).

The energy sector is uniquely critical as all other infrastructure sectors depend on power and/or fuel to operate. A threat on energy infrastructure can directly affect the security and resilience within and across other critical infrastructure sectors—threatening public safety, the economy, and national security.

AEA is in the process of writing a State Energy Security Profile (SESP) as an essential part of energy security planning. These plans will describe the state's energy landscape, people, processes, and risks, and will include

considerations and planning as they relate to EVSE. AEA will work with partners to develop and finalize a plan to ensure the infrastructure is safe against all physical and cybersecurity threats.

As part of the contract with the site partner and/or charging providers, language surrounding cybersecurity requirements will be included. The vendor will be responsible for meeting the latest cybersecurity requirements around PII and Payment Card Industry Data Security Standard (PCI-DSS) security standards to protect customer payment information. The vendor will be responsible for alerting AEA and the Cybersecurity and Infrastructure Security Agency of any known or suspected network or system compromises.

In addition to ensuring payment information is secured in compliance with PCI-DSS, AEA will work with partners to ensure all potential threat vectors are reviewed with respect to current standards and best practices for each. This will require design reviews and collaboration with charging providers to ensure EVSE cybersecurity is fully addressed. In the absence of any one specific EV charging cybersecurity standard, the following standards and guidelines will be used as part of these discussions. This is not an exhaustive list and is updated regularly as the industry evolves: NIST Interagency Report 8294; NREL Project 1.3.4.402, Consequence-Driven Cybersecurity for High Power Charging Infrastructure; SAE J1772 for EV plugs and adapters; IEC 68151-1 EV Charging Modes; IEC 62196 EV plugs and adapters and ISO 15118 where applicable.

Design reviews will include discussions of Open Charge Point Protocol (OCPP) implementations; Public Key Infrastructure Architecture and Certificate Management methodologies; and other protocol reviews from a cybersecurity perspective to ensure that secure development lifecycle and operations best practices are used by all vendors.

AEA will ensure best practices by vendors are followed to include but not be limited to:

- A method to authenticate all software as part of the initialization phase
- Secure configurations in all meter equipment, disabling any unused ports and protocols such as Bluetooth or Telnet
- Encryption of all over-the-air transmissions where applicable
- Transport Layer Security for all web-enabled devices
- FedRAMP and/or SOC 2 certification for all cloud services
- Continuous monitoring by the EV Charging Management System

AEA will consider requesting cybersecurity scan results from the charging provider, ensuring all configurations and vulnerabilities have been addressed prior to operational service date.

AEA has considerable cybersecurity resources available to assist in ensuring the entire EV ecosystem is securely implemented and maintained.

Program Evaluation

Monitoring

AEA will work with Alaska DOT&PF to develop a public-facing dashboard that displays the data collected from the infrastructure deployed with NEVI formula funding. This dashboard will inform the community of the number of stations, their usage, and their uptime. The AEA program manager will be responsible for monitoring the deployment schedule and monitoring the progress of the installations. The dashboard will be updated as new stations come online.

Reporting

The dashboard developed to monitor the program will also assist AEA in reports that need to be developed for submittal to the Joint Office. These reports will assist in evaluating compliance for speed of charging provided as well as station uptime. Alaska will comply with the quarterly and annual reporting requirements identified in the NEVI Standards and Requirements. AEA will also provide an extract of the maps produced and provide them to DOT&PF for incorporation into the 'Family of Plans' and other transportation-related maps.

Annual Updates

This report is intended to be a living document and will be updated annually based on data collected throughout the year. Summaries will be included to inform Alaskans and the Joint Office on the progress of the program and its usage. This data will also aid in informing out-year decisions, such as if additional capacity at certain locations is required or the type of facility that benefits the most from infrastructure installation.

While AEA has developed a roadmap for the five-year NEVI program, continued engagement with stakeholders will refine and alter the proposed method and locations for infrastructure outside the AFC.

Discretionary Exceptions

Summary of Requests

AEA and DOT&PF, on behalf of Alaska, are currently requesting three discretionary exceptions to the NEVI requirements as identified in Table 19.

Table 19. Discretionary Exception Requests

Exception #	Type	Distance of Deviation	Included in Round 7 AFC Nomination	Reason for Exception Request
1	✓ 50 miles apart 1 mile from exit	27 miles __ miles	Yes ✓ No	✓ Grid Capacity ✓ Geography Equity Extraordinary Cost
2	✓ 50 miles apart 1 mile from exit	27 miles __ miles	Yes ✓ No	Grid Capacity ✓ Geography Equity Extraordinary Cost
3	✓ 50 miles apart 1 mile from exit	16 miles __ miles	Yes ✓ No	Grid Capacity ✓ Geography Equity Extraordinary Cost

Justification for Exception 1

The State of Alaska is requesting an exception to the requirement that EV chargers be placed no more than 50 miles apart due to the lack of electric service and infrastructure area along a 77-mile stretch of the AFC. There is currently no electric infrastructure between approximately Parks Highway mile 135 (north of Trapper Creek) and mile 210 (Cantwell). The recommended sites for award leave this gap at 77 miles. It was approved in the

initial plan due to the lack of electric grid.

The Matanuska Electric Association provides electric service to points south of mile 135. Its certified authority extends north to approximately mile 173, although no infrastructure is currently installed north of mile 135. Golden Valley Electric Association provides electric service to points north of mile 210 and its certified authority extends south to mile 199. This leaves a 26-mile gap where no electric utility has regulatory authority to install new service.

Within the area where no electric infrastructure currently exists, there are few commercial establishments and none that operate year-round, leaving limited options for utilities to recoup the costs of extending power lines. Installing power lines to EV charging stations to meet the 50-mile distance requirement would be prohibitively expensive and logistically onerous, with few, if any, site stakeholders to engage to host the stations within the gap. The two utility companies on either side of this utility gap are active stakeholders in the AKEVWG, which will continue to work to overcome these challenges.

AEA proposes to install charging stations as close as feasible to the edges of the utility gap to minimize the EV charging infrastructure gap along the AFC. AEA will work with businesses and property owners to find suitable sites to minimize the length of this gap to the greatest extent possible.

One alternative solution considered was to install a charging station within the utility gap that utilizes diesel or solar power generation, or a combination of both. The environmental costs of diesel power generation, the feasibility of utilizing solar power during Alaska's dark winter months, and the cost of constructing and operating a NEVI-compliant charging station with these alternative power sources rule out this option.

Map of Exception 1

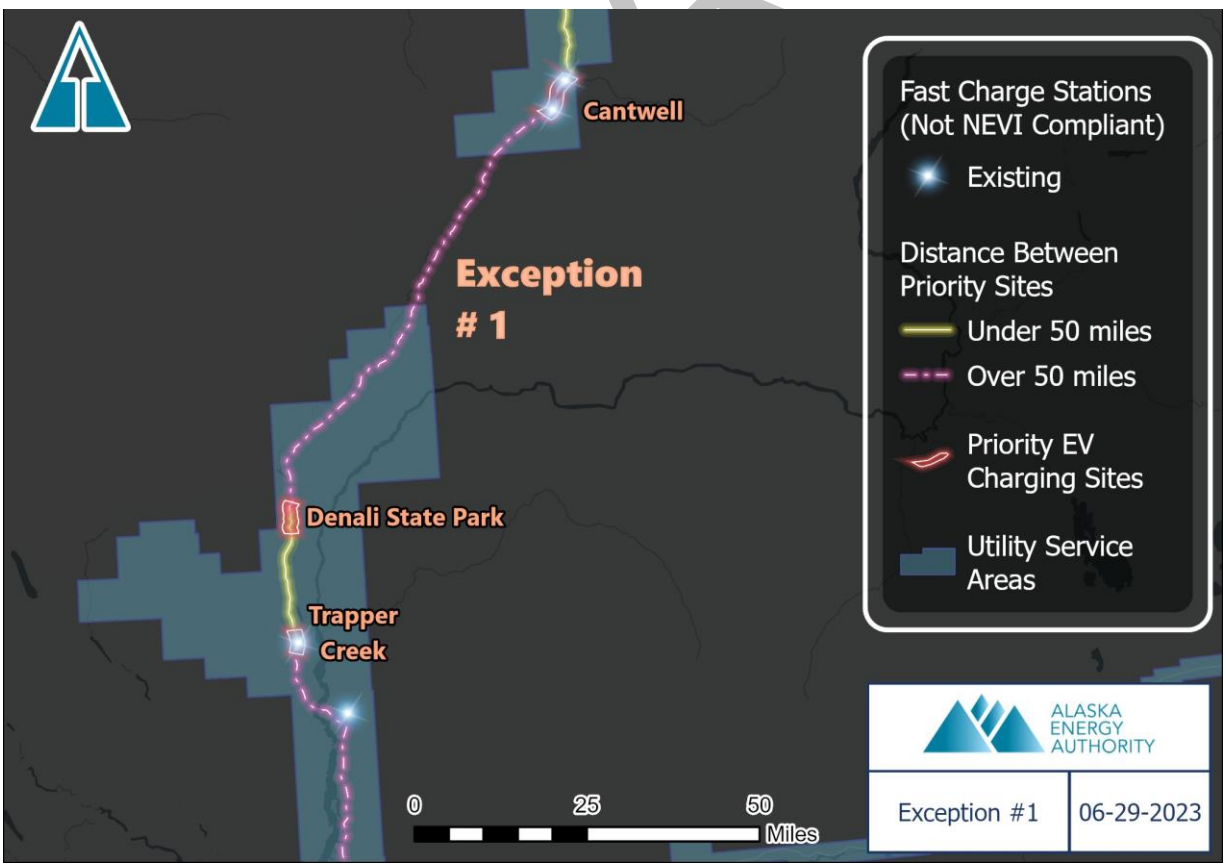

Figure 25. Discretionary Exception 1

Justification for Exception 2

The State of Alaska is requesting an exception to the requirement that EV chargers be placed no more than 50 miles apart between Wasilla and Trapper Creek. The recommended sites for award leave this gap at 77 miles. The were no acceptable submissions in Houston or Willow that would have reduced this gap, and it is not expected than there would be an acceptable sites submitted in another round of RFA due to the lack of development in these locations. Further, cutting this distance could harm the economic viability of the charging stations installed in Wasilla and Trapper Creek, as it is expected there will initially be low utilization of the four ports.

Map of Exception 2

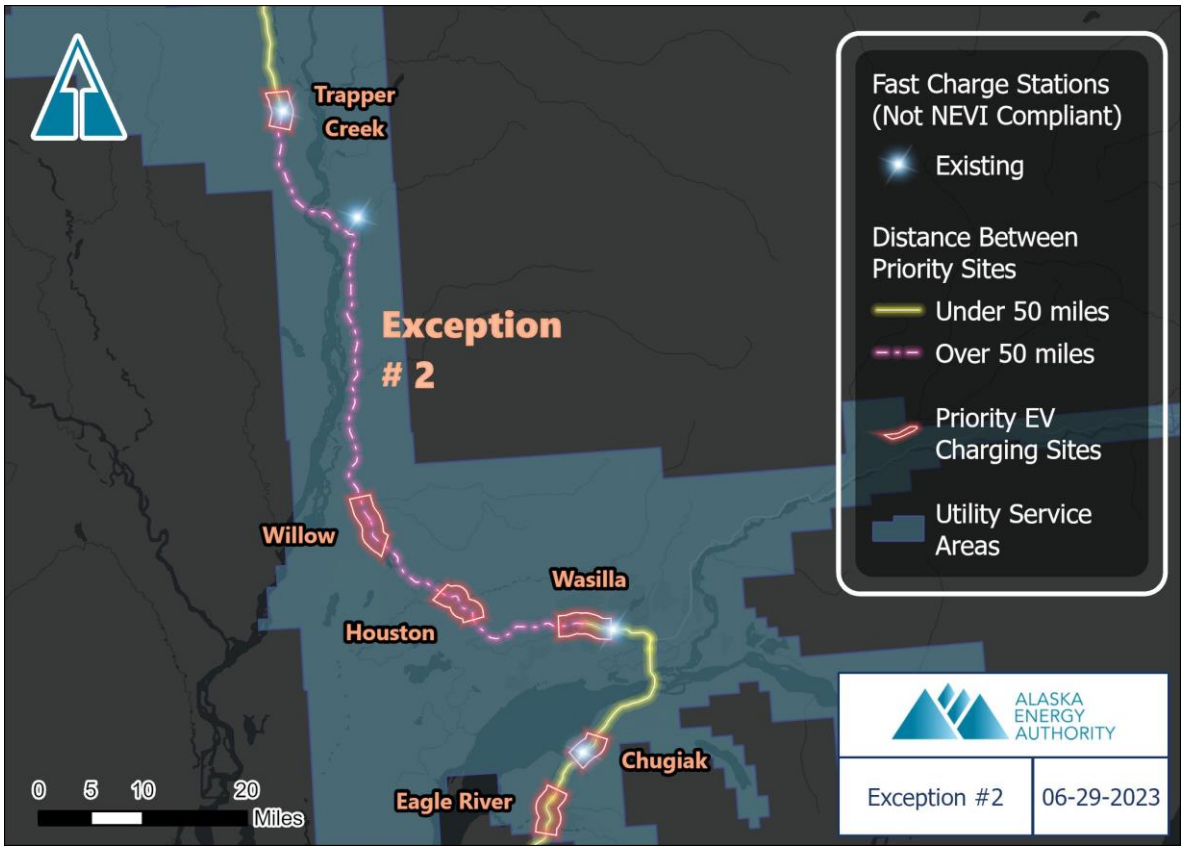

Figure 26. Discretionary Exception 2

Justification for Exception 3

The State of Alaska is requesting an exception to the requirement that EV chargers be placed no more than 50 miles apart between the Healy assigned site and Nenana. The recommended sites for award leave this gap at 66 miles. The identified priority site identified between these two locations was Clear and it received no submissions during the RFA initial round. AEA does not expect to receive any applications in any future rounds due to the lack of development in this area of the AFC. Initially, AEA decided to attempt to solicit a site in this location but without any applications received, additional effort should not be expended to solicit a site in this area.

Map of Exception 3

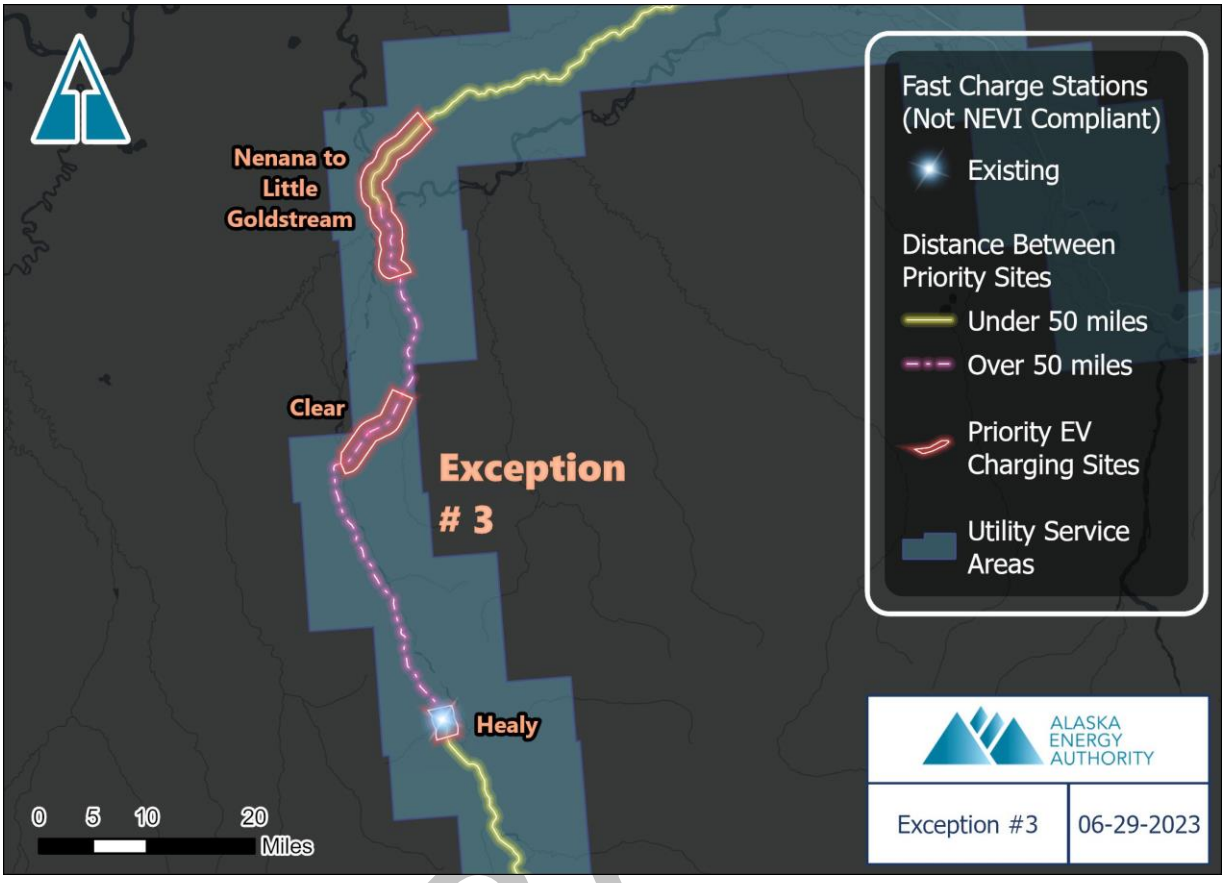

Figure 27. Discretionary Exception 3

Appendix A: Public Outreach and Education Plan

ALASKA ELECTRIC VEHICLE OUTREACH & EDUCATION PLAN

UPDATE JUNE 05, 2024

Prepared for:

ALASKA ENERGY AUTHORITY

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This public outreach and education plan is a living document. It may be updated to add or remove objectives, stakeholders, strategies, or methods as needed to adapt to new and changing circumstances as project development progresses.

BACKGROUND & OVERVIEW

The Infrastructure Investment and Jobs Act (IIJA) seeks to improve the United States' nationwide network of electric vehicle (EV) charging infrastructure through the National Electric Vehicle Infrastructure (NEVI) Formula Program by creating a network of 500,000 EV chargers by 2030. This will allow reliable, affordable, convenient, and equitable charging opportunities for all EV users. The NEVI Formula Program required each state to submit an initial EV Infrastructure Deployment Plan by August 1, 2022 outlining how each state intends to use its formula funds. Plan updates are required to be submitted annually throughout the life of the program. This document supplements the State of Alaska's annual plan update.

The Alaska Energy Authority (AEA) is the lead agency in Alaska charged with reducing barriers to the adoption of EVs across the state, disbursing federal grant and program funding related to EVs, and planning for and implementing the expansion of the state's EV infrastructure. One component of this mission and a requirement of the federal funding program is to develop a public outreach and education campaign to support the expansion of EV infrastructure across the state.

GOALS AND OBJECTIVES

We will support the expansion of EV charging infrastructure across the state and break down barriers to EV adoption through the following objectives:

1. Create opportunities for stakeholders to work through and collaborate on EV issues statewide through the following objectives measured between July 2024 and June 2025:
    a. Host public meetings/workshops in at least five communities across the state
    b. Host quarterly working group meetings that provide an opportunity for stakeholder updates and discussion
    c. Host nine technical sessions in a panel- or discussion-based format that address specific EV issues relevant to Alaska (e.g., workforce training, winter maintenance)
2. Keep the public informed about NEVI-related activities in Alaska as measured by the following objectives:
    a. Earn five Alaska-based media stories in print, radio, or television
    b. Distribute 12 monthly email newsletters, with content cross-posted on the AEA website and social media, covering a variety of topics of interest to Alaskans
    c. Attend at least five external community events (e.g., Alaska Federation of Natives conference, Alaska Municipal League conference, Transportation Fairs, Alaska Sustainable Energy Conference, and chamber of commerce events) to provide information about EVs in Alaska and the NEVI program
3. Conduct equitable and inclusive public outreach as measured by the following objectives:
    a. Receive engagement in the form of meeting attendance, comments, or survey results from communities in each region of the state, including remote communities that are not connected to the contiguous North American highway system
    b. Target one technical session to Justice40 communities along the Railbelt to ensure the communities' needs are reflected in Phase 1 roll-out

c. Help facilitate the pursuit of additional grant funding to support EV charging infrastructure deployment in rural and remote communities

This Public Information Plan will comply with best practices in public involvement and all applicable local, state, and federal regulations including 23 CFR 450.210.

STRATEGY

Meetings and events will be the primary avenue for engaging stakeholders and the public with EV-related information. Through quarterly working group meetings, technical sessions, and community workshops, we will ensure a wide variety of topics and targeted interests are represented in our outreach. We will also engage directly with communities and the public by attending events, meeting Alaskans with EV-related information where they are.

DATA COLLECTION

To ensure our outreach is equitable and reaches multiple and disadvantaged communities, we will collect demographic data throughout the public involvement process. We will analyze this data to identify gaps and address them with new techniques or approaches (for example, offering different meeting times, advertising through different formats, or changing venues to increase ease of access). We will enact tasks to gather participant data to include but not limited to:

- Hard copy sign in sheets
- Required registration for virtual meetings
- Demographic questions within each survey
- Email sign up form on website

TIMELINE

This plan covers to period of July 2024 through June 2025. Outreach work, however, is ongoing and planned to continue throughout the life of the NEVI program

OUTREACH TACTICS

Our primary outreach tactics are:

2. **Quarterly Working Group Meetings:** AEA established this group in 2020 to solicit feedback and share information among EV stakeholders across the state. Working group meetings are generally held once per quarter and typically include about 40 attendees.
3. **Technical Sessions and Community Workshops:** AEA hosts targeted meetings based on specific topics related to EVs in Alaska (technical sessions) and individual community coordination (community workshops) to ensure AEA's statewide efforts are aligned with local community efforts. Each technical session has an in-person and virtual attendance option and are held 8-10 times per year. Community Workshops are scheduled by request or are offered when staff are traveling for other business needs.

4. **Email Newsletters and Announcements:** AEA's email listserv for EV-related news is robust with high open and click rates. This listserv is utilized for monthly newsletters, meeting announcements, funding opportunity announcements, and calls to action.
5. **Community Events**: AEA attends community events (such as the Arctic Road Rally in Fairbanks and the DOT&PF Transportation Fair in the Mat-Su Valley and Anchorage in 2024) to share information with the public about EVs in Alaska. Staff also give presentations by request to community groups like chambers of commerce and the Institute of Electrical and Electronics Engineers.

QUARTERLY WORKING GROUP MEETINGS

This working group of EV stakeholders was established in 2020 after the State of Alaska received funding from the VW emissions settlement. The group's quarterly meetings, which are open to the public, allow stakeholders to share information, discuss EV-related projects, and learn about EV-related topics on the national and statewide level.

Over the life of this plan, we intend to host four quarterly Working Group meetings tentatively scheduled for August, November, February, and May. Each meeting will be open to the public and will include in-person and virtual attendance. The in-person component will typically be hosted in Anchorage. Meetings typically occur over the lunch hour between 11:30 a.m. and 1:30 p.m. Meeting are recorded and recordings and presentations are posted online within one week of each meeting.

Providing updates on NEVI plan progress and implementation will be a standing agenda item at each meeting. We will also solicit presentations from stakeholders to update the group on other projects, new infrastructure and business partnerships, state agencies, and the electric vehicle market in Alaska. Due to feedback from the group, we will focus on Alaska-specific content over national content.

MEETING NOTICES & DOCUMENTATION

We will use the following tactics to advertise the meeting to our stakeholders and the public:

- **Email blast** to working group, including all previous attendees who have provided their email addresses
- Advertise meetings in monthly **Newsletters**
- Post content on Alaska Energy Authority **social media** pages
- Create content for **flyers** to be posted at community locations like local businesses and post offices

Each advertisement will include a link (and QR code on flyers) to the AEA website where all meeting information will be housed and archived including the date, time, and in-person meeting location; agenda (posted at least three days prior to each meeting); and the virtual meeting link.

Sign-in sheets that collect demographic information will be distributed to in-person attendees. Virtual attendance will require registration. A recording and transcript of each meeting will be posted to the AEA website within one week of the event.

TECHNICAL SESSIONS AND COMMUNITY WORKSHOPS

Technical sessions and community workshops are targeted outreach intended to serve specific stakeholder groups. Technical sessions are held 8-10 times per year and focus on specific topics or issues. We typically solicit panelists from stakeholder groups and provide them with questions ahead of the meetings to prompt discussion. For example, a technical session held in 2022 focused on workforce development and training. We solicited panelists from the state's primary electric workers' union, small businesses with staff who had completed the EVITP certification process, and a professor who is training students on EV maintenance. The discussion revolved around Alaska's current readiness to support EV infrastructure and strategies to develop training programs in-state.

Community workshops similarly target outreach to local areas and issues. AEA solicits attendance from community leaders and the public, and typically will give a presentation on the NEVI program and potential future funding opportunities. Attendees always have the opportunity to discuss and comment on their own EV-related plans and how those fit into AEA's work.

MEETING NOTICES & DOCUMENTATION

Technical sessions and community workshops will be noticed and documented using the same process as the quarterly working group meetings.

EMAIL NEWSLETTERS AND ANNOUNCEMENTS

We will create content for the monthly EV newsletter, which will be sent from the AEA communications team to the EV listserv hosted by AEA. Each newsletter will focus on a different topic related to EVs in Alaska. We will also include any meeting information or public comment opportunities in these monthly emails. Past topics for the newsletter include:

- The latest options for off-road electric vehicles
- Electric vehicles and electricity derived from fossil fuels
- Electric vehicles in fleet, transit, and air travel in Alaska
- Clean vehicle tax credit
- Arctic Road Rally event in which a group of electric vehicles traveled the Dalton Highway
- Electric vehicle workforce in Alaska
- NEVI RFA Update and Timeline
- Clean Vehicle Tax Credit. Electric Buses in Metlakatla and Ketchikan
- NEVI Minimum Standards and Requirements. Build America, Buy America Act Waiver
- The Charging and Fueling Infrastructure Discretionary Grant Program
- Updated EPA Vehicle Pollutant Standards. Updates on the Clean Vehicle Tax Credit. VW 1D.4 Alaska Tour. GVEA kWh Rate Change for DC Fast Chargers
- AEA Intent to Negotiate for DE-FOA-0002611. Ford Adopts NACS
- EV Charging Ports, NEVI Plan Comments Due Monday, and What We're Reading
- Justice40 Initiative Survey, August 15 Technical Session, and EV Resources
- EV batteries — composition, recycling incentives, and future solutions

- FHWA Approves FY24 Alaska NEVI Plan, NACS Update, and Local EV News
- Clean Vehicle Tax Credit Updates, Alaska's Latest EV Count, and What We're Reading
- NEVI Plan Spotlight, Funding Opportunity, Technical Session Recap, and January Events
- NEVI Plan Spotlight, EV Sales, and Upcoming Events
- NEVI Plan Spotlight, EV Signs, Funding Opportunities, and Upcoming Events
- Plan Spotlight, Share Your EV Data, and Fairbanks and North Pole EV Survey
- NEVI Workshop Series, Plan Spotlight: Existing & Future Conditions Analysis, and What's in a sign?
-

In additional to the monthly newsletter schedule, the listserv will be utilized for meeting announcements, funding opportunity announcements, and calls to action.

COMMUNITY EVENTS

AEA staff will seek out opportunities to participate in various events throughout the state to share information to groups and the public about the NEVI program and EVs in Alaska. These events could take the form of attendance at a booth, as we did in 2023 and 2024 at DOT&PF Transportation Fairs. It could also involve giving a presentation or hosting a workshop, as we did at the 2023 Alaska Municipal League Annual Local Government Conference where we distributed a survey to rural communities soliciting feedback about interest and needs related to EVs.

STAKEHOLDERS

Current stakeholders are either involved in the working group or have signed up for the monthly newsletter. We will continue to review this list to define gaps and ensure we are reaching Alaskans equitably. Stakeholders with an asterisk indicate groups or communities that are found within a Justice40 area identified by the U.S. Department of Transportation.

CURRENT STAKEHOLDERS

The list below includes groups or communities that participate in our outreach activities or are included in the email listserv.

Communities & Local Governments		
Akutan*	City of Houston*	Old Harbor*
Municipality of Anchorage	Hydaburg*	Ouzinkie*
City of Anderson	City and Borough of Juneau	City of Palmer*
City of Angoon*	Kachemak*	Pelican
Coffman Cove	Kake*	Petersburg Borough
Cold Bay	Kasaan*	Port Lions*
Cordova	Kenai*	Saxman*
Craig*	Kenai Peninsula Borough*	Seldovia*
Delta Junction	City of Ketchikan*	Seward

Denali Borough	Ketchikan Gateway Borough	City and Borough of Sitka*
Eagle	King Cove*	Municipality of Skagway Borough*
City of Fairbanks	Klawok*	Soldotna*
Fairbanks North Star Borough	City of Kodiak	Tenakee Springs
False Pass*	Kodiak Island Borough*	Unalaska*
Gustavus	Matanuska-Susitna Borough*	City of Valdez
Haines Borough	City of Nenana*	Wasilla*
Homer*	North Pole	Whittier
City of Hoonah*	North Slope Borough	Yakutat
Native Organizations		
Ahtna, Inc.*	Cook Inlet Regional Corp*	Metlakatla Indian Community*
Chickaloon Native Village*	Doyon*	Copper River Native Association
Chugach Corp*	Kodiak Area Native Association*	
Utilities		
Alaska Electric Light & Power Co.	Cordova Electric	Kotzebue Electric Association
Alaska Power & Telephone	Enstar Natural Gas	Matanuska Electric Association
Alaska Power Association	Golden Valley Electric Association	Southeast Alaska Power Agency, Ketchikan
Chugach Electric	Homer Electric Association	Juneau Hydropower
Copper Valley Electric	Kodiak Electric Association	Ketchikan Public Utilities/Electric
Agencies		
Alaska DOT&PF	Bureau of Land Management	US Department of Energy
Alaska Energy Authority	Federal Highway Administration	
Alaska Housing Finance Corporation	Regulatory Commission of Alaska	
Businesses		
Adventure Denali	Loopy Lupine	Denali Chamber of Commerce
ChargePoint	Sheep Creek Lodge	Willow Chamber of Commerce
Dimond Center	Chugiak Eagle River Chamber	Three Bears Alaska
Jack River Inn	Whistle Hill	**Major Marine Tours**
Alaska Sealife CEnter		
Local Organizations		
Alaska Municipal League	Easy Park	Pacific Northwest Economic Region
Alaska Center	Fairbanks Economic Development Corporation	Prince William Sound Economic Development District
Alaska Electric Vehicle Association (AKEVA)	FAST Planning	Prince William Sound Science Center
Alaska Public Interest Research Group	Haines Economic Development Corporation	ReCharge Alaska

Alaska Trails	IBEW Local 1547	Renewable Energy Alaska Project
Anchorage Metropolitan Area Transportation Solutions (AMATS)	Juneau EVA	Transition Sitka
Anchorage Economic Development Corporation	Kenai Peninsula Economic Development District	Sitka Conservation Society
Bering Strait Development Council	Launch Alaska	Southeast Conference*
Copper Valley Development Association	Norton Sound Health Corporation	Southwest Alaska Municipal Conference*
Education		
University of Alaska Anchorage	University of Alaska, Fairbanks	
Private Companies/Vendors		
Compucom	FLO	Tesla
eCAMION		

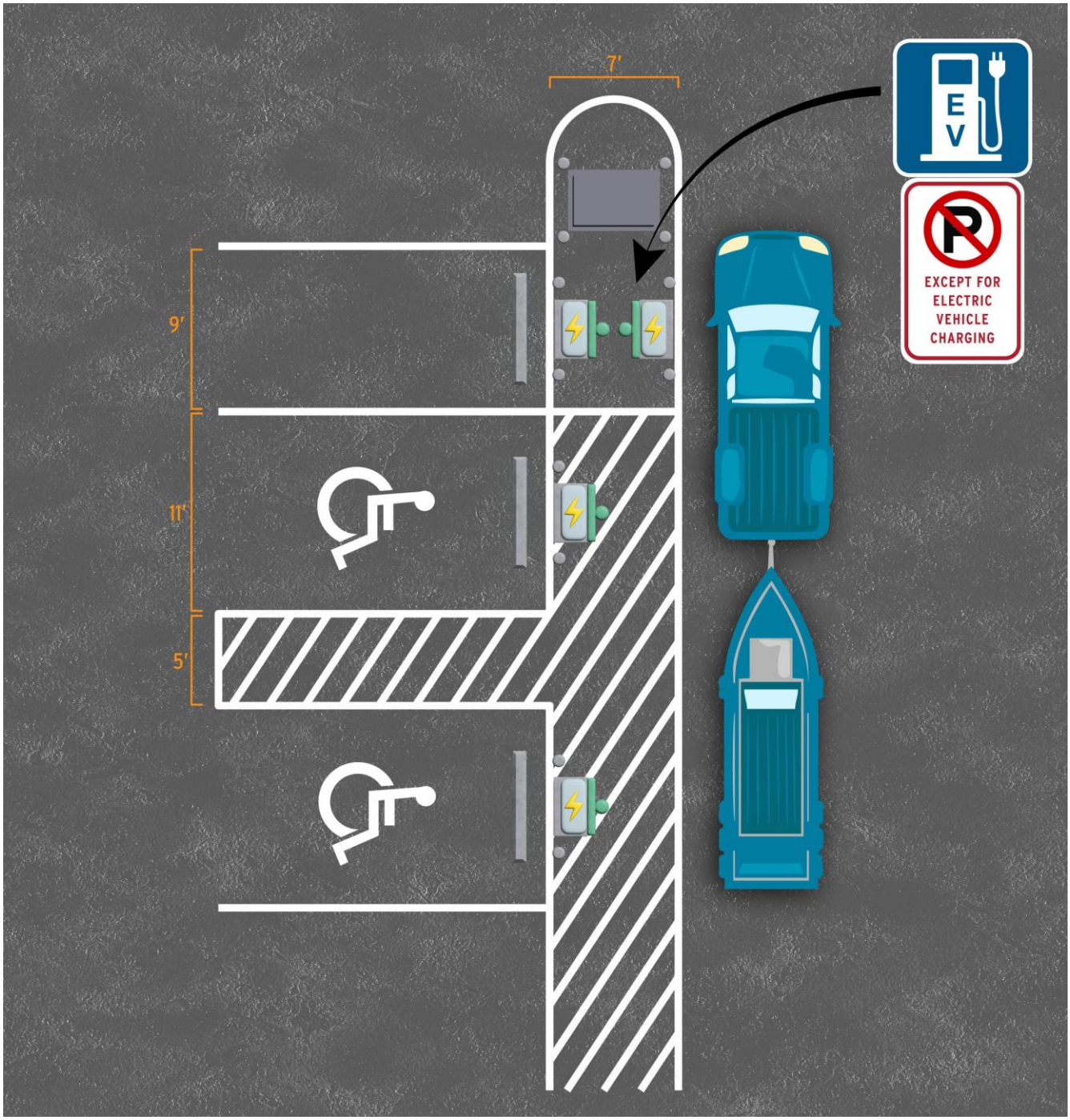
POTENTIAL FUTURE STAKEHOLDERS

The list below includes groups or communities that we would like to engage with moving forward.

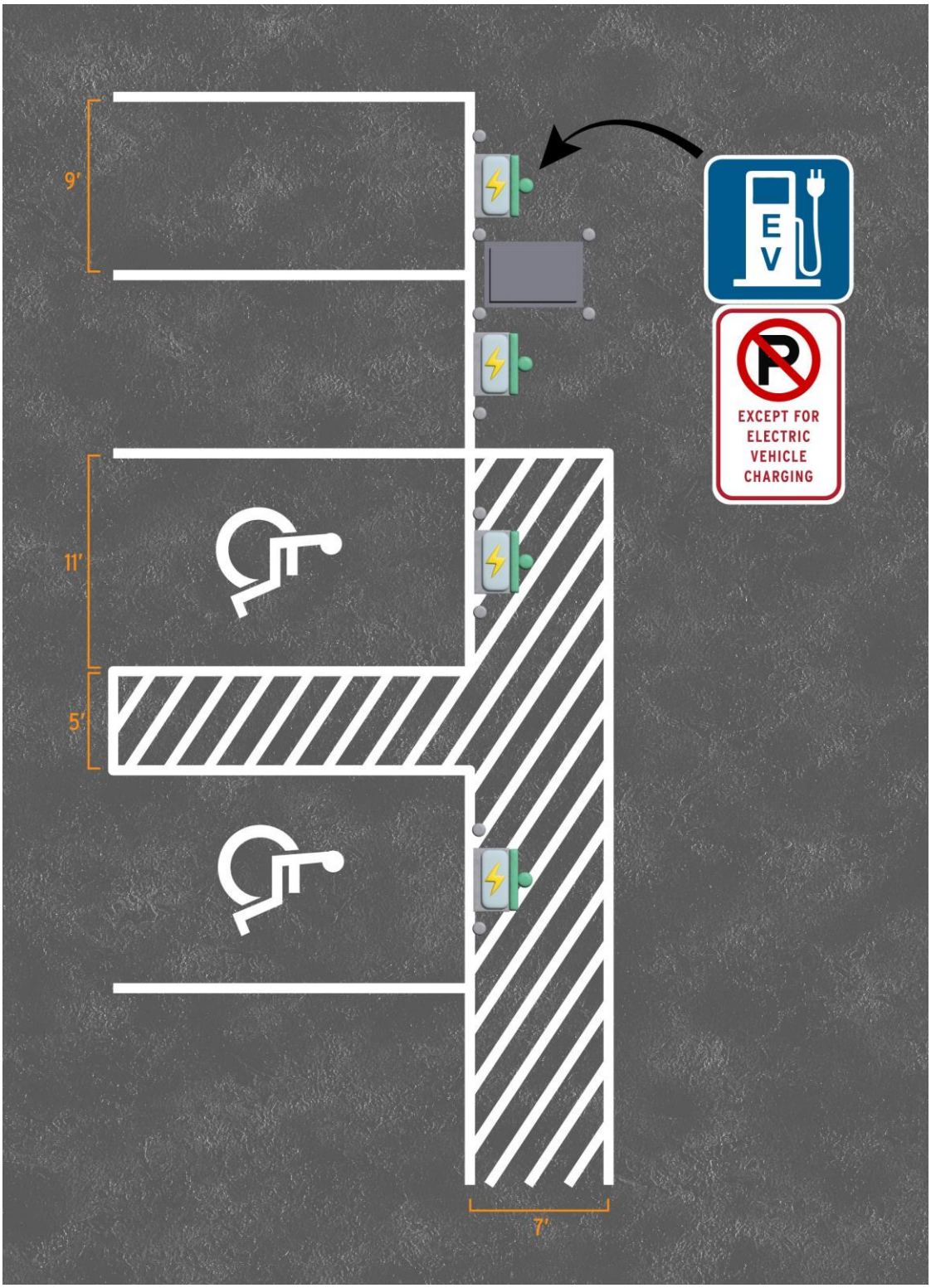
Alaska Dept. of Environmental Conservation, Air Quality Division	Calista Corporation*	Laborers' Local 341
Alaska Federation of Natives*	CCI Electrical Services, LLC	Laborers' Local 942
Alaska Inter-Tribal Council*	Chugach Native Association*	Maniilaq*
Alaska Native Tribal Health Consortium*	Cook Inlet Tribal Council*	McKinley Private Investment
Alcan Electrical & Engineering, Inc.		NANA Regional Corporation*
Aleut Corporation*	Fairbanks Native Association*	National Park Service
Aleutian Pribilof Island Association*	Fullford Electric, Inc.	Northern Alaska Environmental Center
Alyeska Resort	Greater Fairbanks Chamber of Commerce	Sealaska Corporation*
Arctic Slope Regional Corporation	Kawerak	Tanana Chiefs Conference*
	Koniaq Incorporated*	Telecommunications/Internet Entities
Association of Village Council Presidents	Knik Tribe*	Tok Transportation
Bering Staights Native Corporation*	Kodiak Area Native Association*	Bristol Bay Native Corporation*
Sheep Mountain Lodge	Eureka Lodge	**Gunsight Mountain Lodge**
Grow Ketchikan	**EVGateway**	

Appendix B: Example Site Layouts

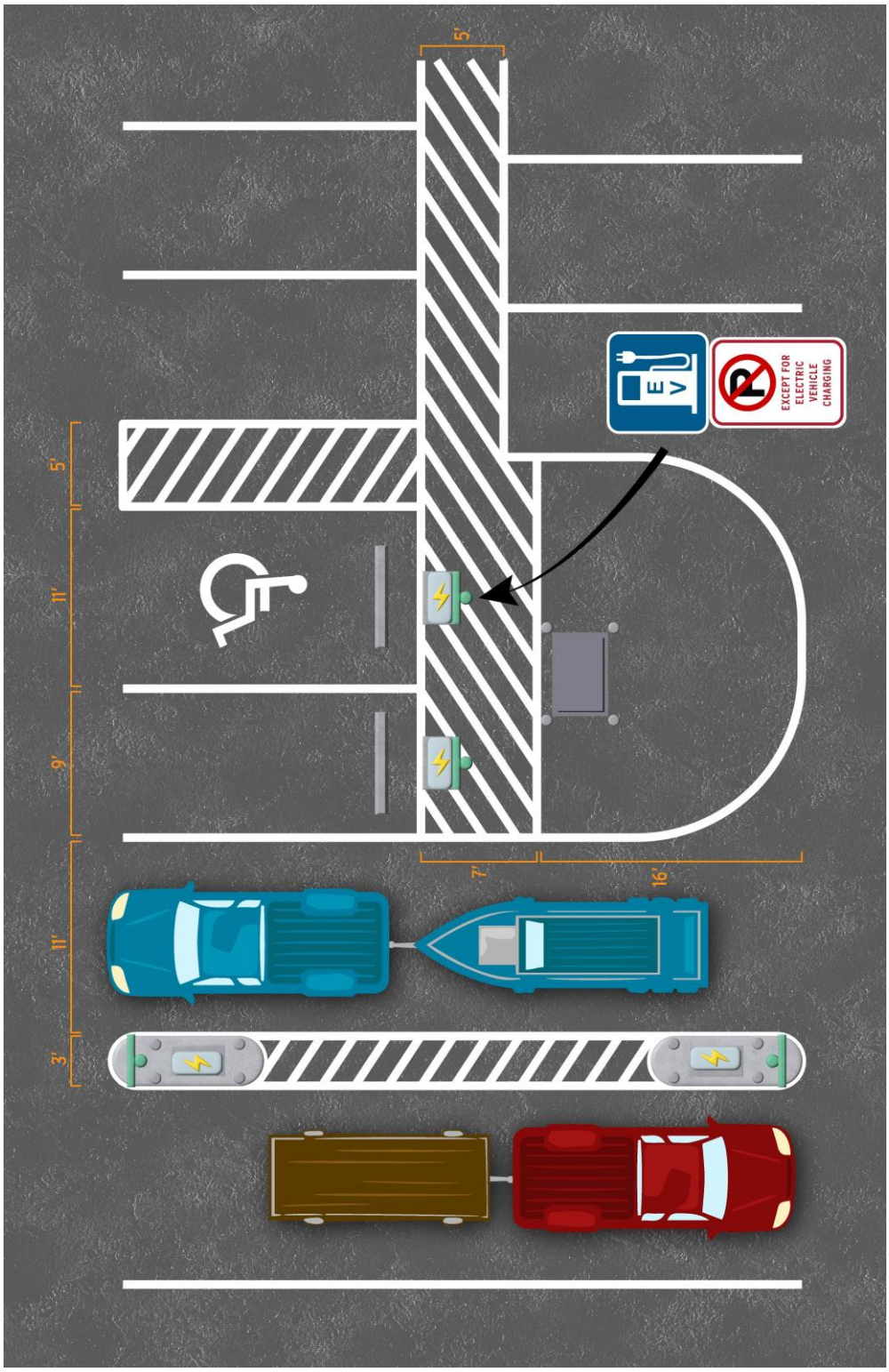
Example One: three stalls and one pull-through station



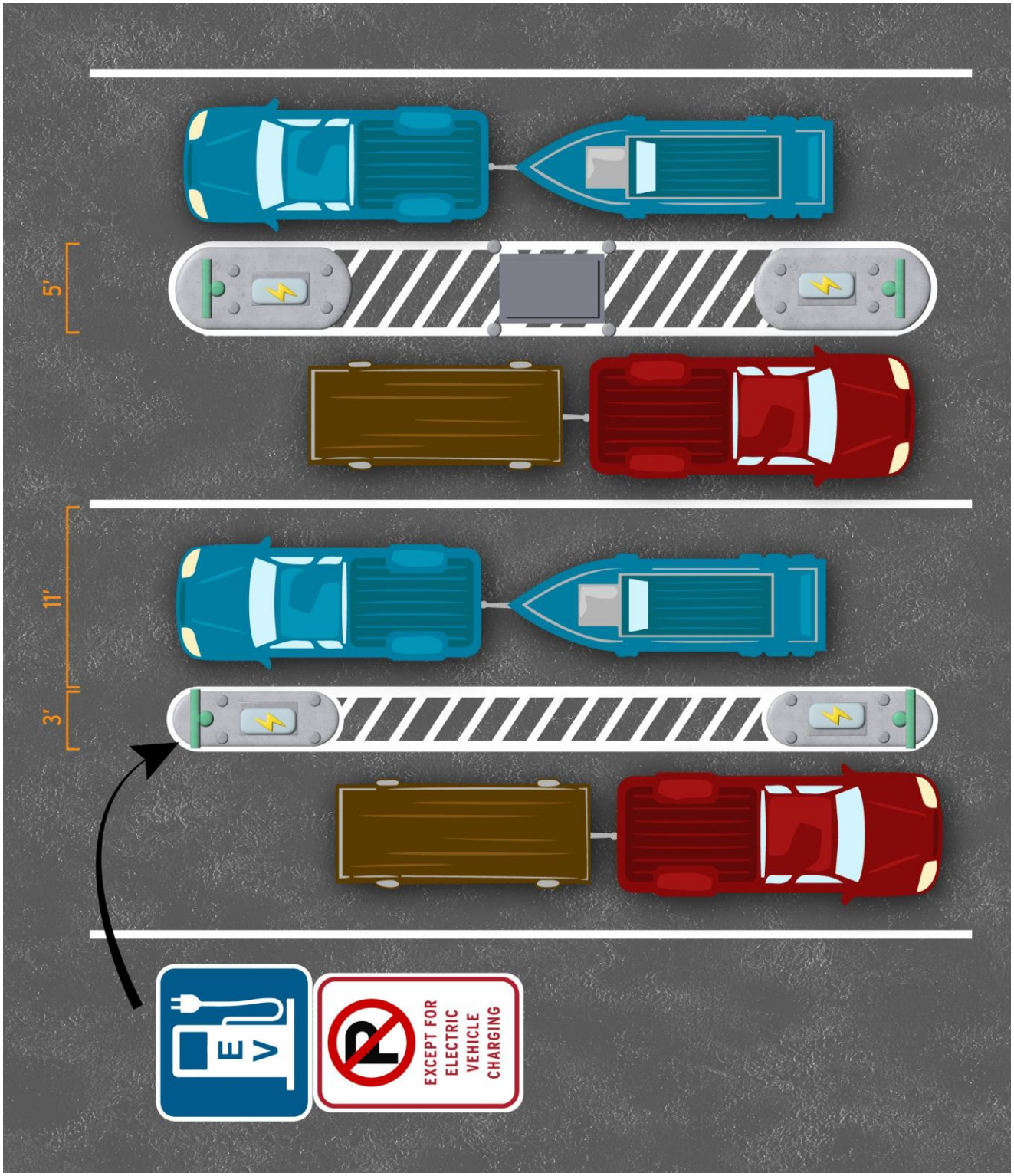
Example Two: four stalls and no pull-through stations



Example Three: two stalls and two pull-through stations



Example Three: no stalls and four pull-through stations



Appendix C: Summary of Public Comments

TO BE UPDATED FOLLOWING CONCLUSION OF PUBLIC COMMENT PERIOD

State of Alaska
DRAFT Electric Vehicle Infrastructure Implementation Plan July 2024

Find EV information at akenergyauthority.org
Contact us at electricvehicles@akenergyauthority.org

ALASKA ENERGY AUTHORITY