



State of Alaska Electric Vehicle Infrastructure Implementation Plan FY26



ALASKA
ENERGY
AUTHORITY





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.

Executive Oversight

Curtis Thayer, Executive Director, AEA
Ryan Anderson, PE, Commissioner, DOT&PF
Katherine Keith, Deputy Commissioner, DOT&PF

Staff

Audrey Alstrom, PE, Director of Alternative Energy and Energy Efficiency Programs, AEA
Josi Hartley, Renewable Energy and Energy Efficiency Manager, AEA
Adam Moser, Program Development Chief, DOT&PF

Support

Jeff Kupko, PE, PTOE, Consultant Project Manager, Michael Baker International
Karin McGillivray, Public Engagement Manager, Michael Baker International
Jennifer Gross, GIT Supervisor, Michael Baker International
Caitlin Frye, Communications Specialist, Michael Baker International
Malia Walters, Communications Specialist, Michael Baker International

Cover Photo: Ford F-150 Lightning in Kotzebue. Courtesy Tim Leach / Launch Alaska



Acronyms

AEA	Alaska Energy Authority
AFC	Alternative fuel corridor
AKEVWG	Alaska EV Working Group
AMHS	Alaska Marine Highway System
API	Application programming interface
ARED	Alaska Rural EVSE Deployment
BIL	Bipartisan Infrastructure Law
CCS	Combined Charging System
CFR	Code of Federal Regulations
CHAdEMO	CHArge de MOve Protocol
CISA	Cybersecurity and Infrastructure Security Agency
CVEA	Copper Valley Electric Association
DCFC	Direct current fast charging
DOT&PF	Department of Transportation & Public Facilities
EV	Electric vehicle
EVSE	Electric vehicle supply equipment
FHWA	Federal Highway Administration
ICE	Internal combustion engine
kW	Kilowatt
kWh	Kilowatt-hour
MW	Megawatt
NACS	North American Charging Standard
NEVI	National Electric Vehicle Infrastructure
NHS	National Highway System
PCI-DSS	Payment Card Industry Data Security Standard
PKI	Public Key Infrastructure
PII	Personally identifiable information
RFA	Request for Applications
STIP	Statewide Transportation Improvement Program
SUV	Sport utility vehicle
USC	United States Code
USDOT	United States Department of Transportation



Table of Contents

- Introduction..... 1**
- NEVI Program Obligated Funds To Date & Distribution 3**
 - AFC Corridor Designation..... 4
 - AFC Corridor Procurement..... 4
 - Independent Site Deployment..... 6
 - Charging Station Spacing 7
 - Plan to Deploy Unobligated Funds 8
 - AFC Sites..... 8
 - Developing Alaska’s Phase 2 Approach 8
 - Phase 2 Funding 9
 - Summary..... 10
 - Appendices..... 10
- Community Engagement Outcomes Report 11**
 - Plan Outreach 11
 - Targeted Workshops..... 11
 - Alaska EV Working Group..... 12
 - Alaska EV Working Group Technical Sessions..... 14
 - Monthly Newsletter 15
 - Community Surveys 17
 - Outreach Outcomes..... 18
- Physical Security & Cybersecurity 19**
 - Physical Security 19
 - Cybersecurity 19
- Appendix A: Existing Conditions..... A1**
- Appendix B: Trends Evaluation..... B1**



List of Figures

Figure 1. Alaska’s AFC.....	4
Figure 2. Charging sites selected during Phase 1 of NEVI rollout in Alaska.	6
Figure 3. Newsletter stats.....	16
Figure 4. Outreach participant locations.	17
Figure 4. Alaska’s transportation network.....	A3
Figure 5. Alaska’s AADT.....	A4
Figure 6. EV growth scenarios.	B2
Figure 7. EV registration by manufacturer.	B4
Figure 8. EV registration by region.....	B4
Figure 9. Year-over-year growth of EVs by region.	B5
Figure 10. Statewide BEV and PHEV registration numbers.	B5

List of Tables

Table 1. FY 2022-2026 NEVI formula program annual allotments.....	3
Table 2. Public survey results about preferred site spacing.....	7
Table 3. Expenditure of FY22 funding.	8
Table 4. Balance of FY22 funding that will apply to Phase 2 and FY23-26 funds.	9
Table 5. Targeted Workshops.....	12
Table 6. Working Group Meetings.....	13
Table 7. AKEVWG Technical Sessions	14
Table 8. AEA Newsletters	15
Table 9. Community Surveys.....	17
Table 10. Grid capacity.....	A6



Introduction

The Infrastructure Investment and Jobs Act (IIJA) of 2021 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, and seamless between states and networks ensuring consistent service for drivers to support Alaska's mobility and economic needs.

Through the IIJA 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.

This Plan outlines a strategy for using 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 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 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.

After AEA and DOT&PF determine that the AFC is fully built out and certified by FHWA, AEA and DOT&PF plan to install Direct Current Fast Charging (DCFC) and Level 2 charging stations throughout the rest of the state as funding allows.

- Phase 1: Build Out Alaska's Alternative Fuel Corridor
- Phase 2: Build Out Alaska's Highway and Marine Highway Systems, Install Charging Stations in Rural Hub Communities, and Develop Charging Sites in Urban and "Destination" Locations

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

- Phase 1: 2025-2026
- Phase 2: 2026-2028

This plan is intended to be a living document as AEA and DOT&PF collaborate with communities, laws or policies change, adoption projections alter, and additional guidance from the federal government is published. This plan is not intended to impede other DOT&PF infrastructure improvements.



*Kotzebue Electric Association's Ford F-150 Lightning.
Photo Courtesy Tim Leach / Launch Alaska*



NEVI Program Obligated Funds To Date & Distribution

Based on the formula allocations contained within the IJA, Alaska is set to receive \$52,415,294 broken out into annual allotments as indicated in Table 1.

Table 1. FY 2022-2026 NEVI formula program annual allotments.

FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
\$7,758,240	\$11,164,195	\$11,164,272	\$11,164,282	\$11,164,305	\$52,415,294

The State of Alaska has obligated funds for planning/program management of the NEVI program as well as to the design project that covers technical support to implement projects selected under this funding source. Work to-date under the planning/program management includes securement of consultant technical services, public and stakeholder engagement, and development of plans for implementation of the funding. Work to-date for the design project has included the environmental clearance efforts for the sites selected to complete the AFC. In total, \$1,122,663 has been obligated to these two efforts out of the \$52M total, and all obligations have occurred under FY22 funds.

The expectation is that planning/program management and design support will utilize \$3M of the total allocation for the program, but not all of the funding is obligated yet. That results in \$49,415,294 available for project 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.”

AFC Corridor Procurement

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 request for applications (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 Alaska Marine Highway System (AMHS).

All funds associated with the NEVI formula program and the Alaska NEVI request for applications are to be administered 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 comply with federal and Alaska state laws and additional program requirements.

Applicants are 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.

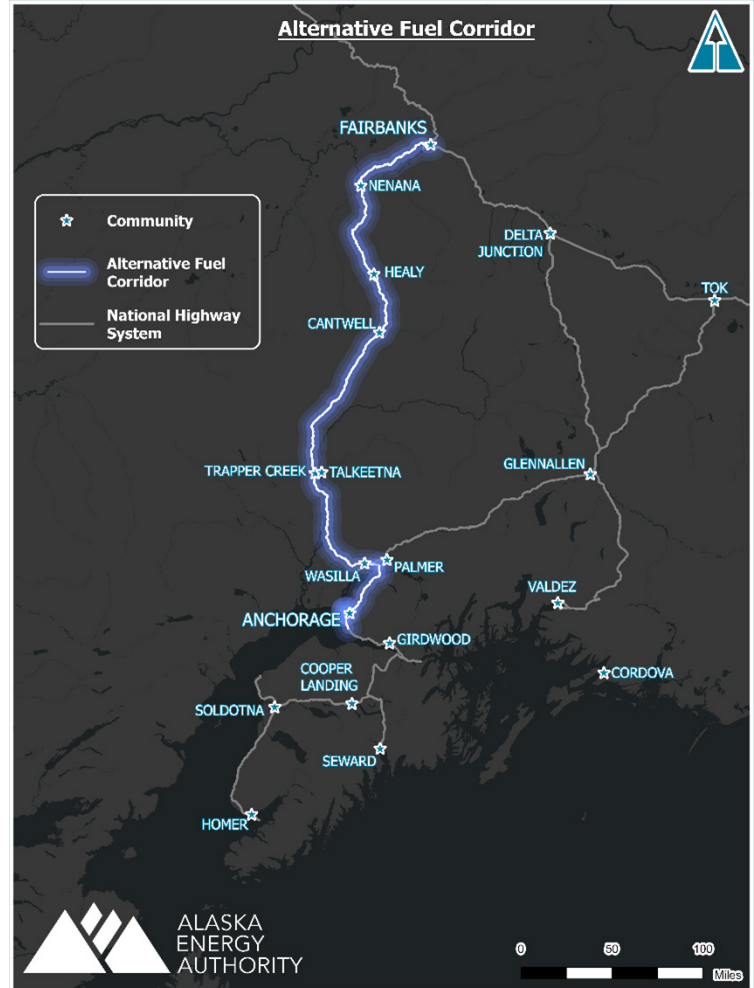


Figure 1. Alaska's AFC.



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. **Accepted 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 confirmed recommended projects, DOT&PF incorporated the project by line item addition based on budget, scope, and schedule values for all incorporated projects.
5. **Federal Project Agreements and Authorization to Proceed:** AEA and DOT&PF provided 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 part 680 of the Code of Federal Regulations (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.



We are here!

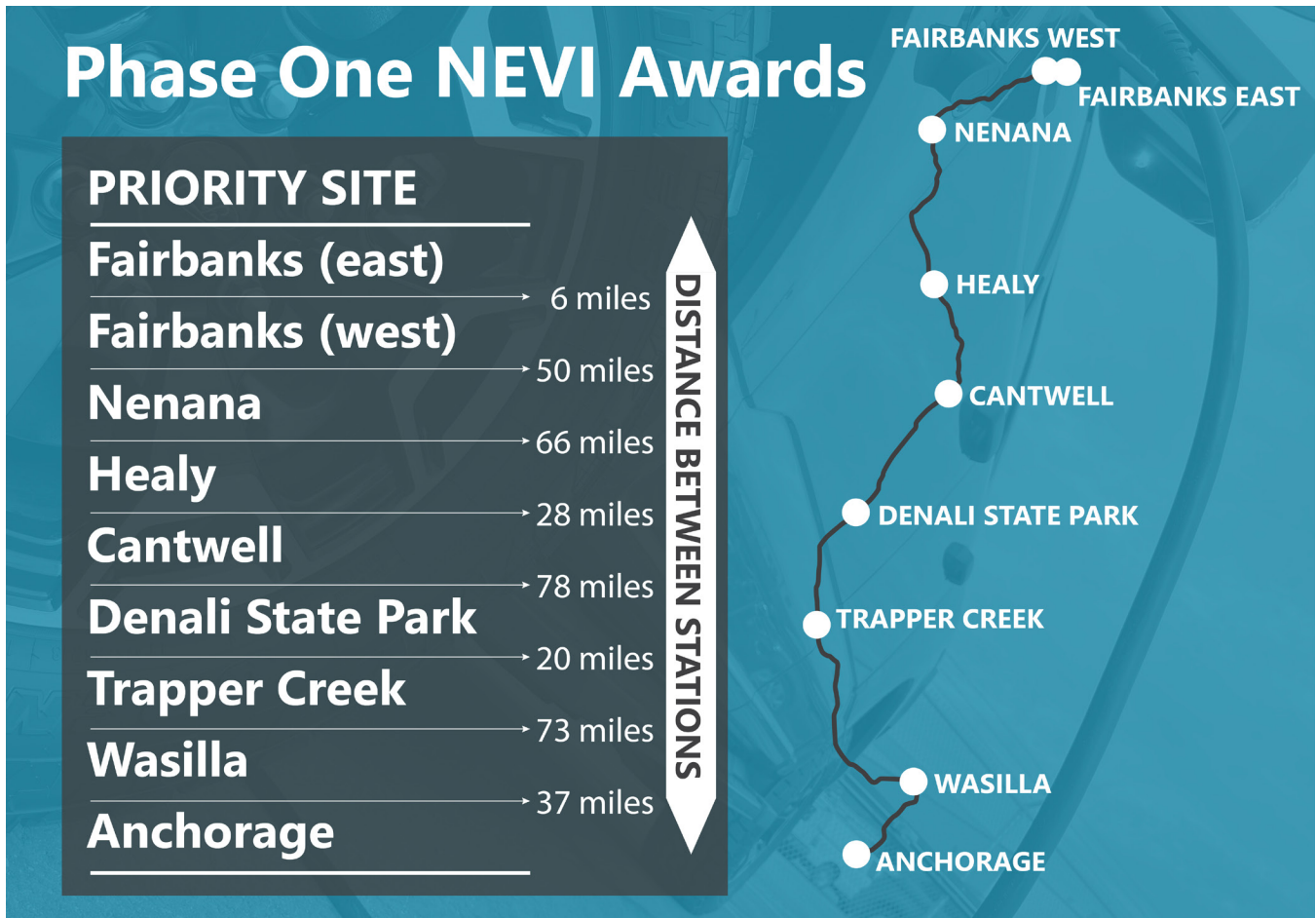


Figure 2. Charging sites selected during Phase 1 of NEVI rollout in Alaska.

Independent Site Deployment

Following the implementation of the January 29, 2025, memorandum from the US DOT Secretary of Transportation that suspended the NEVI program until further review and guidance could be issued, Tesla informed AEA and DOT&PF that it would proceed with developing its four awarded sites (Fairbanks West, Nenana, Cantwell, and Trapper Creek) without the support of the NEVI funding. This action reflects the positive impact that Alaska’s NEVI program had on charging infrastructure deployment in the state by highlighting a demand for charging and the gaps that need to be addressed.

Given that Tesla is deploying outside the program and is not obligated to meet NEVI standards, such as the CCS connector type or credit card reader functionality, it remains outstanding if Alaska can count these four sites toward fully built out status. It is our request and opinion that these sites count as NEVI-creditable since they were inspired by the NEVI program and its procurement. We also believe it wouldn’t be a prudent use of the federal program funds to issue another procurement in these four areas to solicit and install charging infrastructure essentially across the street from the newly installed Tesla sites. Further, it will prove challenging to identify a site host and network provider willing to contribute the match funding when there will likely not be enough demand to support two sites in the same priority area. Tesla is installing eight ports at its sites, so an additionally procured site would result in 12 fast charging ports in these four priority areas.



Charging Station Spacing

In previous efforts supporting the NEVI funding disbursement, AEA aligned with the national target to deploy EV charging infrastructure along the AFC every 50 miles. However, that proved challenging based on existing electrical grid availability and site host interest and locations. The AFC is remote for most of its distance, limiting the number of areas that could support the infrastructure.

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 resolved, it will be difficult to combat range anxiety among potential EV adopters.

The lack of reliable internet or cell service in 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.



A driver looks at a new Tesla Supercharger in Trapper Creek.

In previous EV infrastructure efforts, AEA was responsible for deploying the Volkswagen Diesel Settlement Trust Fund, and set an internal goal of charging infrastructure every 100 miles along the corridor from Homer and Seward on the Kenai Peninsula to Healy, south of Fairbanks. To get a sense of the public’s opinion on spacing of charging stations, a survey was also conducted prior to the submission of this plan to FHWA, and asked respondents to rank their preferred distance between charging sites along the corridor. As of September 5, 2025, the weighted rank of spacing from respondents is as follows:

Table 2. Public survey results about preferred site spacing.

Spacing Distance (mi)	50	75	100	125	150	175	200
Total Weighted Score	110	115	99	76	59	42	31
Rank	2	1	3	4	5	6	7

Based on the available sites along the corridor, the response received in the initial procurement round for the AFC, prior goals, and public input, AEA is recommended that charging infrastructure be deployed at least every 100 miles. This recommended spacing will ensure that charging infrastructure is deployed at key locations and not oversaturate the corridor. If there are opportunities to secure site hosts more frequently along the AFC, this could provide some redundancy. Additional sites could also be developed during Phase 2 of the program.



Plan to Deploy Unobligated Funds

AFC Sites

Based on the bids received in the first RFA, it is anticipated that the State of Alaska will allocate \$5,544,660 of NEVI formula funding to AFC project sites after the 20% match, resulting in \$6,930,826 in total project costs. These sites will be constructed with FY22 funds. Following the construction of these sites and previous FY22 obligations, \$1,090,917 will remain in FY22 funds to be obligated. Table 3 has a summary of expenditures of FY22 funding.

Table 3. Expenditure of FY22 funding.

\$7,758,240	FY22 Funding
\$5,544,660	Selected Projects Costs
\$1,122,663	Existing Obligated Funds
\$1,090,917	Remaining FY22 Funds

It should be noted that Tesla removed \$1,807,955 in requested NEVI formula funds, or \$2,259,944 total project costs, from AFC buildout cost due to constructing the four sites on its own.

Developing Alaska’s Phase 2 Approach

With the expected full build-out of the AFC, AEA and DOT&PF are preparing to move into Phase 2 of the overall plan which includes EV charging infrastructure deployment along additional Alaska Highways and the AMHS, install charging stations in rural hub communities, and develop charging sites in urban and “destination” locations. This 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 Phase 2 plan and solicit input into its development. Kicking off this outreach began the process of working to identify sites outside of the AFC. The Phase 2 approach was initially 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 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.

It will be important to ensure that the distribution of funds addresses the needs of the Alaska Highway System, AMHS and rural communities so that charging access can be granted where people live, work, and travel. The impetus behind this is to ensure that there is adequate distribution of funding and sites across the state. The identified needs will continue to be refined through further outreach and engagement across the state. This outreach is expected to continue beginning in October 2025 and lead into at least one procurement round for infrastructure deployment.



Phase 2 Funding

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, but AEA and DOT&PF will seek to secure equipment that is rated at higher speeds.

Allocating the fiscal funds to Phase 2 is a result of identifying the existing obligated funding, the AFC build-out construction, and the expected administrative costs. Table 4 identifies the balance of FY22 funding that will apply to Phase 2 as well as the FY23, FY24, FY25, and FY26 funds. Alaska currently has \$45,747,971 in funds remaining that aren't obligated or won't go to AFC buildout. With \$1,877,377 estimated in administrative funding to complete the program, \$43,870,634 is available for Phase 2 construction. The impact of the federal funding is \$54,838,292 in infrastructure when factoring in the local project match funding required.

Table 4. Balance of FY22 funding that will apply to Phase 2 and FY23-26 funds.

\$1,090,917	FY22 Remaining Funding
\$11,164,195	FY23 Funds
\$11,164,272	FY24 Funds
\$11,164,282	FY25 Funds
\$11,164,305	FY26 Funds
\$45,747,971	Total Funds Remaining
\$1,877,337	Estimated Remaining Funds for Administration
\$43,870,634	Estimated Remaining Funds for Projects

Based on average site costs of Phase 1 awards, Alaska could install approximately 49 additional NEVI creditable stations throughout the state if the requirements for the sites were 4 DCFC ports at 150 kW each. However, it is not expected that each site in the Phase 2 communities will want or need 4 DCFC ports at 150 kW. The upcoming outreach and engagement will refine the make-up of these sites based on localized EV adoption, utility coordination, and community conversations.



EVSE along the AFC.



Summary

- The State of Alaska has obligated \$1,122,663 in FY22 funds to-date and expects to obligate \$5,544,660 in FY22 funds to complete the AFC. That will leave \$1,090,917 in remaining FY22 funding in addition to all of the FY23, FY24, FY25, and FY26 funds in the amount of \$45,747,971 to complete the corridor and remaining program administration costs.
- The State of Alaska would like to request that the under-construction Tesla sites along the AFC be counted to Fully Built Out status since the sites were initiated under the program but moved forward without program funding during the federal pause to review the NEVI program.
- The recommended approach to deploy no more than 100 miles between NEVI creditable stations to meet corridor traveler needs, build where utility infrastructure and interested site hosts exist, and avoid seeking exemptions for corridor spacing is a deviation from previous planning efforts under the NEVI program. We request that FHWA provide concurrence with our approach.

Appendices

To support the development of this program, AEA and DOT&PF have developed supplemental appendices that contain additional information for readers of the plan that exceeds the FHWA plan requirements. These will also be dynamic plans that are updated as required and will be posted on the AEA website. The Appendices included are as follows:

- Appendix A: Existing Conditions
- Appendix B: Registrations/Trends



Community Engagement Outcomes Report

Plan Outreach

A NEVI Plan specific page was created on the Authority's website to host the Plan, Alaska Electric Vehicle Working Group (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.



AKEVWG hybrid meeting in Anchorage.



Table 5. Targeted Workshops

Location	Date	Topic	Entities 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
Whittier, Alaska	TBD*	Phase 2 Outreach	
Valdez, Alaska	TBD*	Phase 2 Outreach	
Delta Junction, Alaska	TBD*	Phase 2 Outreach	

* Phase 2 outreach delayed due to delays in AFC buildout and federal suspension of NEVI program.

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 6: Working Group Meetings

Location	Date	Topic	Entities 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, Flo, Launch Alaska
Virtual & in person: Anchorage, Alaska	March 22, 2024	EV Microtrends and Winter vs. Summer Performance*	MEA, Chugach Electric, UAF, Launch Alaska, ReCharge AK, Southeast Conference
Virtual & in person: Anchorage, Alaska	October 10, 2024	FAST EV Plan Update	Homer Electric, FAST Planning, ReCharge AK, Chugach Electric, Launch Alaska
Virtual via Zoom	December 5, 2024	Lori Sowa (AELP) Accelerator Grant, Kris Hall (ReCharge Alaska) Three Bears Update	Southeast Conference, Homer Electric, ReCharge AK, City of Sitka, Chugach Electric, MEA, MTA, AELP
Virtual via Zoom	April 9, 2025	ARED Program and Volcano Preparedness	Chugach Electric, MEA, GVEA
Virtual via Zoom	July 9, 2025	Are Electric Vehicles a Solution for Arctic Isolated Microgrid Communities? Presentation by Michelle Wilber	ReCharge AK, Launch Alaska, Southeast Conference

*Indicates a combined Tech Session/Working Group Meeting



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.

Table 7. AKEVWG Technical Sessions

Location	Date	Topic	Entities 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	Measuring Program 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	EV Microtrends and Winter vs. Summer Performance*	MEA, Chugach Electric, UAF, Launch Alaska, ReCharge AK, Southeast Conference
Virtual & In person: Anchorage, Alaska	June 18, 2024	Alaska FY25 NEVI Plan Update	Chugach Electric, GVEA, ReCharge, AK, Southeast Conference, UAF, City of Sitka, Electrification Coalition, AKEVA



Location	Date	Topic	Entities Represented
Virtual & In person: Anchorage, Alaska	August 13, 2024	Round table presentations from utilities	City of Sitka, Southeast Conference, Juneau Hydro, GVEA, MTA, Flo, Comcast
Virtual via Zoom	October 30, 2024	SEC – Robert Venables short presentations + SEC 2024 Annual meeting recap	Southeast Conference, MEA, City of Sitka, Homer Electric, Chugach Electric, Southeast Conference, AELP
Virtual via Zoom	February 27, 2025	DMV Data Wishlist	Chugach Electric, Southeast Conference, Launch Alaska, MEA, Alaska DOT&PF, ACEP, TDX Power

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.

Table 8. 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	Measuring Benefits Survey, August 15 Technical Session, and EV Resources
September 14, 2023	EV batteries — composition, recycling incentives, and future solutions
October 12, 2023	First Round Alaska NEVI Funding, Timeline, and Next Steps
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



Date	Topic
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
July 16, 2024	Your Input Needed on FY25 Alaska NEVI Plan, Call for Photos, and New Clean Vehicle Tax Credit Checklist
August 8, 2024	Plan Update, Spotlight with AEL&P, and Upcoming Roundtable with Electric Utilities
September 12, 2024	Alaska's NEVI Plan, Remote and Rural Alaskan EVs, and the Next Quarterly Meeting
October 18, 2024	Alaska's NEVI Plan Update, FAST Planning Invites Input on EV Plan, and (this) Newsletter Earns an Award!
November 14, 2024	EV Sales Reach Another Milestone, FreeWire Update, and What We're Reading
December 9, 2024	Alaska's NEVI Plan Approved, What's Next?, and Three Bears Alaska Charging Stations Update
January 6, 2025	Upcoming Outreach Events, AK Newest EV Plan Approved, and EVs in Norway!
February 13, 2025	Event Updates, Data Insights, and a Must See Documentary
March 14, 2025	NEVI Program Update, EV Related Legislation, and a DMV Data Wishlist Recap
March 27, 2025	Your EV Update: Volcanic Ash Preparedness, Other Emergency Preparedness, and Upcoming Events
May 15, 2025	Research Recognition, Film Premiere, and Upcoming Events
June 12, 2025	Alaska Graphite, EV Film, and Reading Recommendations
July 7, 2025	Wildfires, Electric Vehicles, and Fast Chargers
August 19, 2025	New NEVI Guidance

Alaska Electric Vehicle Working Group 2022-25 Email Newsletter Stats

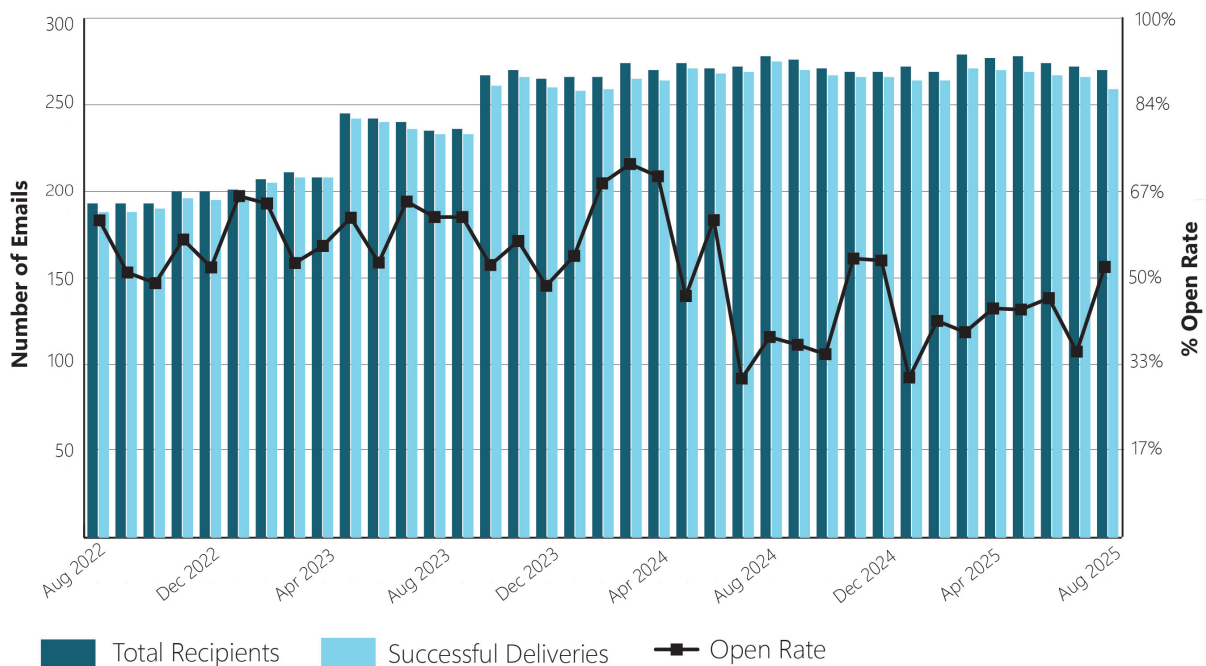


Figure 3. Newsletter stats.



Community Surveys

Community surveys were used to extend stakeholder outreach into rural areas of Alaska to ensure that all 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.

Table 9. 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/

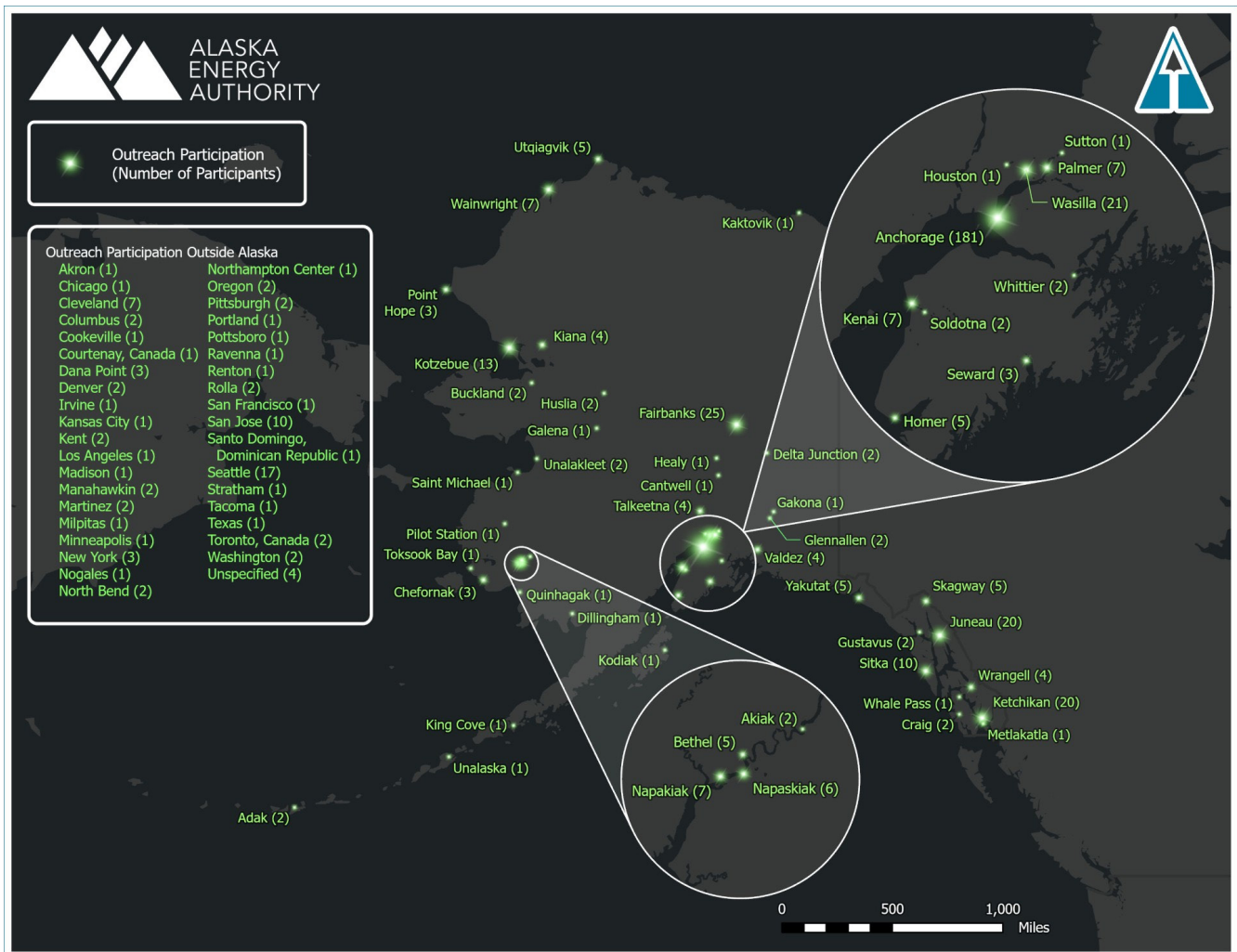


Figure 4. Outreach participant locations.



Outreach Outcomes

Through all of the outreach that has been performed, it has become extremely evident that there is an appetite to install EV charging infrastructure in locations outside of the AFC. Nearly all stakeholders are excited for the new sites on the AFC, and can't wait for their completion so that Alaska can move into Phase 2. There is a strong need for charging infrastructure in many communities across Alaska, from rural to marine to the larger urban areas. Timely completion of the AFC is critical to maintain this excitement.

Copper Valley Electric Association (CVEA) raised concerns about the lack of electrical infrastructure to support chargers during the May 2024 outreach sessions. As a result, coordination and outreach with CVEA has been a more focused effort. The project team plans to travel to Valdez, part of CVEA's service area, during the next round of workshops to continue this dialogue and solicit feedback on what the next phase of buildout might look like in their area.

Beyond Valdez, the team intends to travel to two other communities off the AFC in the near future: Delta Junction and Whittier. Delta Junction is located at the intersection of the Richardson and Alaska Highways and serves as a vital stop for long distance travelers. Whittier is connected both to the main highway system and is a port for the Alaska Marine Highway System, offering a chance to build a charging site that serves a variety of users.

Other communities have attended past outreach events and made sure the project team was aware of the reasons that EV charging is needed in their community. These include providing access to existing EV owners, fostering additional adoption, supporting regional travel and tourism, and leveraging renewable energy sources where available.

Information gathered during previous outreach efforts, as well as insight gained from upcoming Phase 2 outreach will help guide decision making as Alaska moves into the next phase of planning for EVSE off the AFC.



This photo of the remote Glenn Highway was taken during travel to the 2024 Glennallen NEVI Workshop. CVEA, the electric utility in this area, raised concerns about lack of electric infrastructure to support EV charging.



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 application programming interface (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).



A NACS adapter installed at a charging station in Glennallen is attached by a metal cable. Photo courtesy AEA.



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. In FY24, AEA developed the State Energy Security Profile (SESP) as an essential part of energy security planning. These plans described the state’s energy landscape, people, processes, and risks, and included considerations and planning as they relate to EVSE. AEA worked 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. AEA is also leveraging the Joint Office’s sample cybersecurity procurement language in contracting as a way to leverage the collective community deploying NEVI funds. The program covers Identify, Credential, and Access Management (ICAM), Configuration, Vulnerability, and Update Management (CVUM), Secure payment (SP), Secure Communications (SC), and Physical Security (PS).

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.



Appendix A: Existing Conditions



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 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.

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% are considered rural and 65% are 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 vary 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 can drop to -50°F without a wind chill and will climb into the 80s during the summer. Based on the temperature and precipitation averages, Alaska is divided into five climate regions.

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.

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.

Southcentral Alaska is home to most of the state’s population. This area is home to multiple mountain ranges, and the climate is not as extreme as the Aleutian chain. Southcentral, as well as the Bristol Bay area, have 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 southcentral Alaska.

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 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.

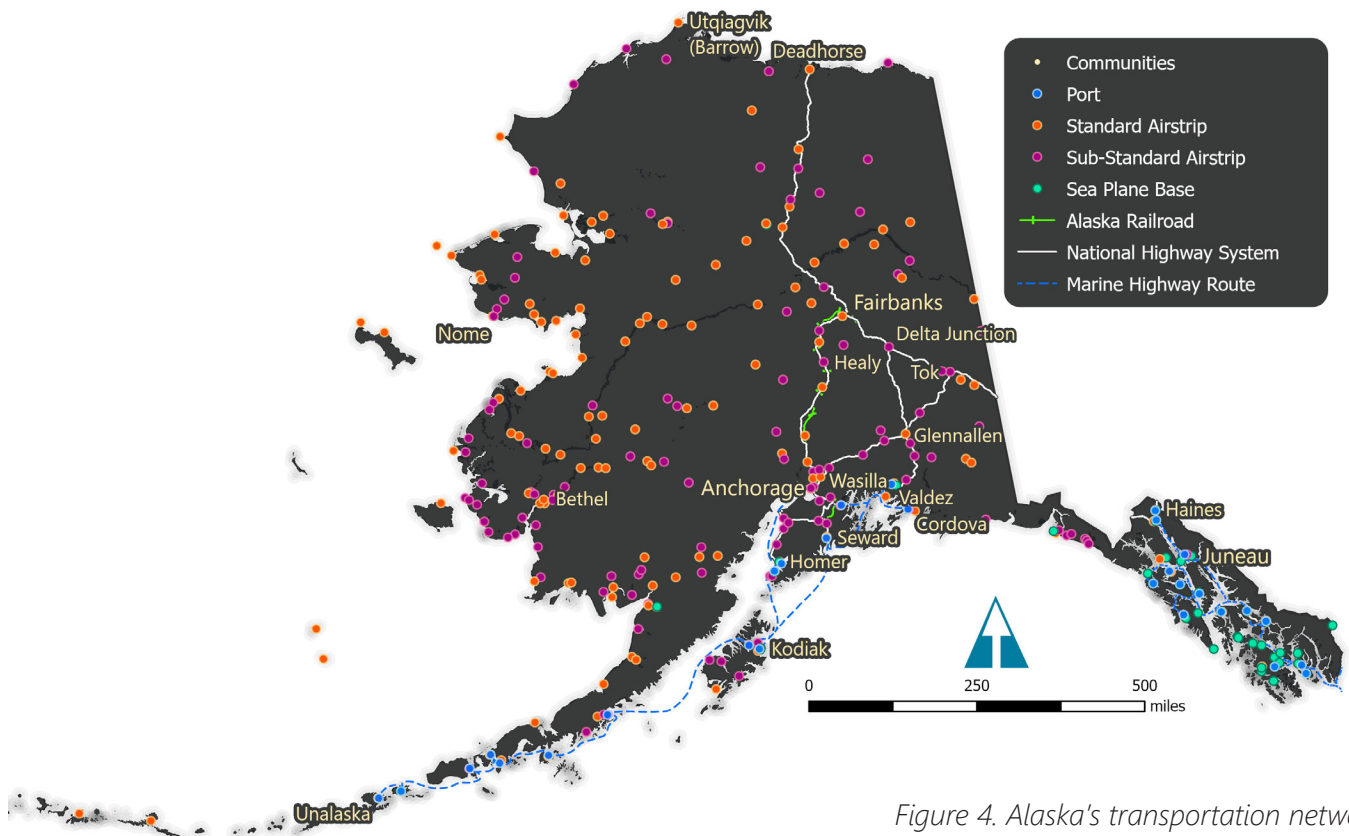


Figure 4. Alaska's transportation network.



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.

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).

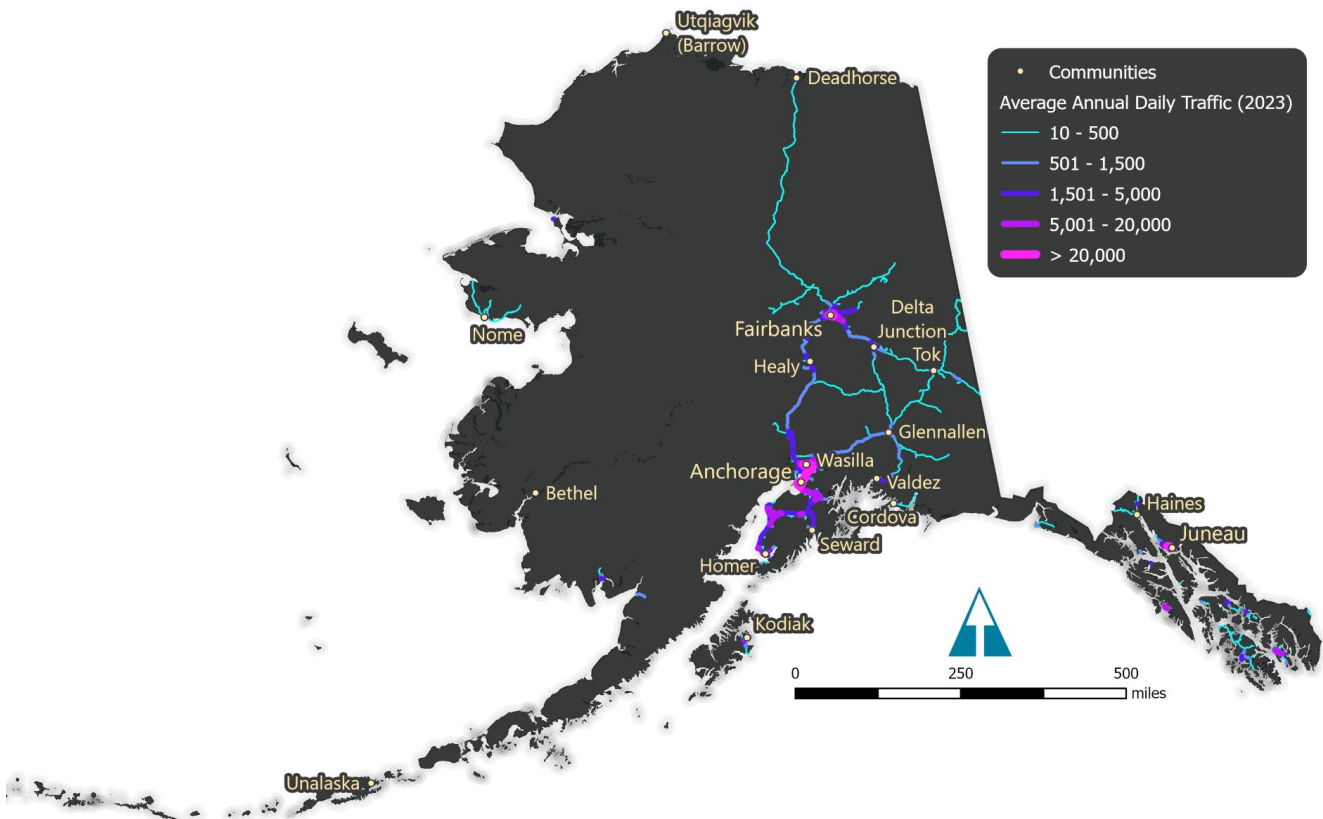


Figure 5. Alaska's AADT.



Based on travel pattern data, key locations for automotive transportation occur in more populated areas including Anchorage, Fairbanks, the Matanuska Valley, 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)
- 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.



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 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 10. Grid 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	1569.8	1569.8	1569.8
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.

Existing Locations of Charging Infrastructure Along AFCs

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 50 kW 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.

The longest gap 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.

In all, Alaska has 63 public EV charging station locations with 149 EV charging ports according to the Alternative Fuels Data Center records.



Appendix B: Trends Evaluation



Trends Evaluation Future State of EV Adoption in Alaska

As of May 2025, there were 3,916 EVs registered in Alaska. The EV adoption in Alaska is trending upward as indicated by a 27% increase in registrations year over year compared to May 2024. The EV penetration rate is 0.69%, which still lags behind the national average, but is also increasing. AEA has also started tracking the trends with Plug-in Hybrid Vehicles (PHEVs) which saw a 34% increase year over year with 1,345 total registered PHEVs in the state. Sport Utility Vehicles (SUVs) and pickup trucks account for 80% of new vehicles purchased in Alaska. 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. As of May 2025, electric SUVs make up approximately 45% of the EVs in the state and the pickup trucks are 12%, both increasing rapidly. For comparison, SUVs comprised of 17% of all EVs in May 2024 and pickup trucks comprised of 5.8% of all EVs. Tesla continues to hold the majority of the market; however, its share has decreased from 53% to 36% since 2022. The next highest penetration manufacturers were Chevrolet, Nissan, and Ford with 15%, 13%, and 12%, respectively.

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.

Alaska EV Growth Scenarios

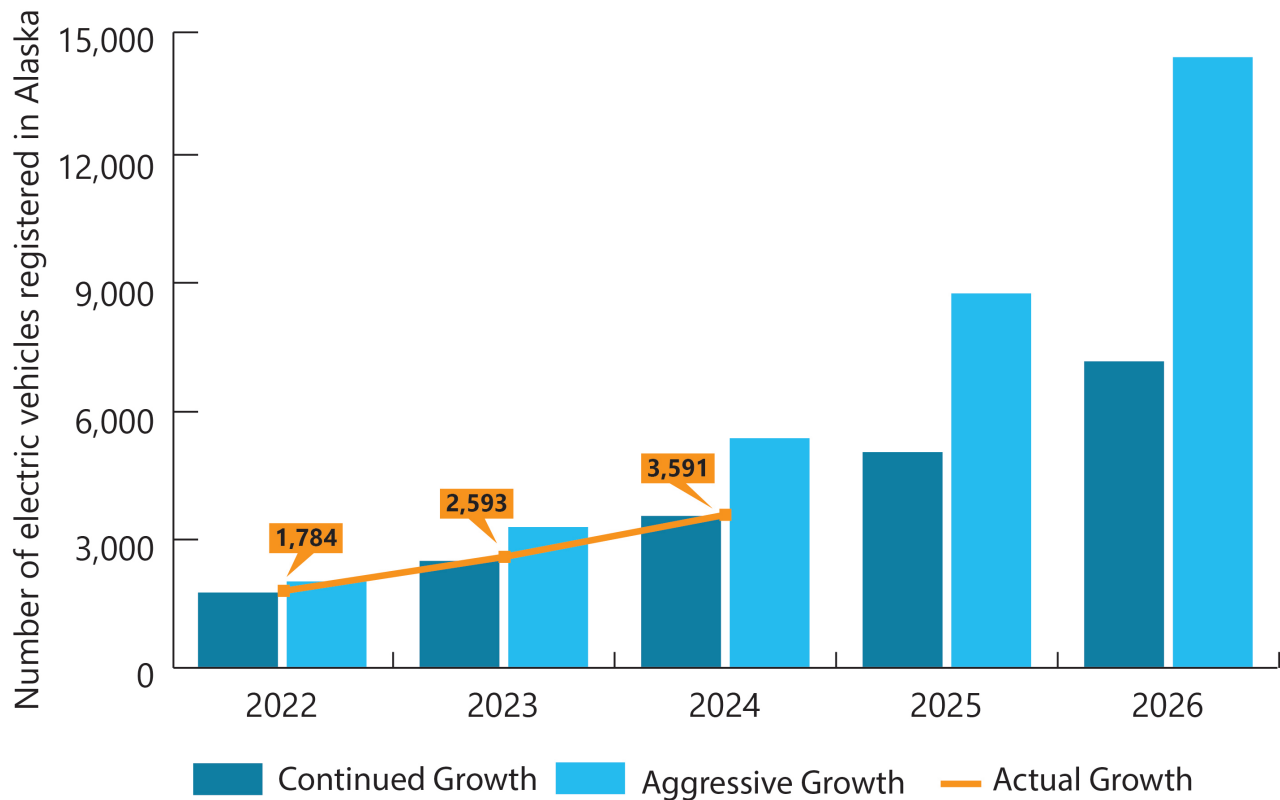


Figure 6. EV growth scenarios.



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.

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

A graph showing continued and aggressive EV growth scenarios in Alaska. The aggressive growth scenario shows about 14,000 EVs by 2026 while the continued growth shows about 7,500 by 2026. Under this scenario, the penetration rate of EVs in Alaska would be 2.02%, up from the previous 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 projected 4,212 registered EVs through May 2025, and the actual number is 271 registrations short of that. However, when factoring in PHEVs, there are over 1,000 more vehicles than projected registrations.

EV registrations have seen a steady growth since AEA began reporting the numbers 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 and currently contains 37% of the state's EVs. However, Juneau, Sitka, and the Hoonah-Angoon Census Area lead EV penetration rates with 3.72%, 2.66%, and 1.98%, respectively. Skagway is the only other borough or census area that tops 1% EV penetration. In all, a total of 931 EV registrations have been added year over year, bringing the total number very close to 4,000 registrations. The 27% growth of EV registrations is outpacing the overall vehicle registrations increase of 1.9% year over year.



Alaska EV Registration by Manufacturer

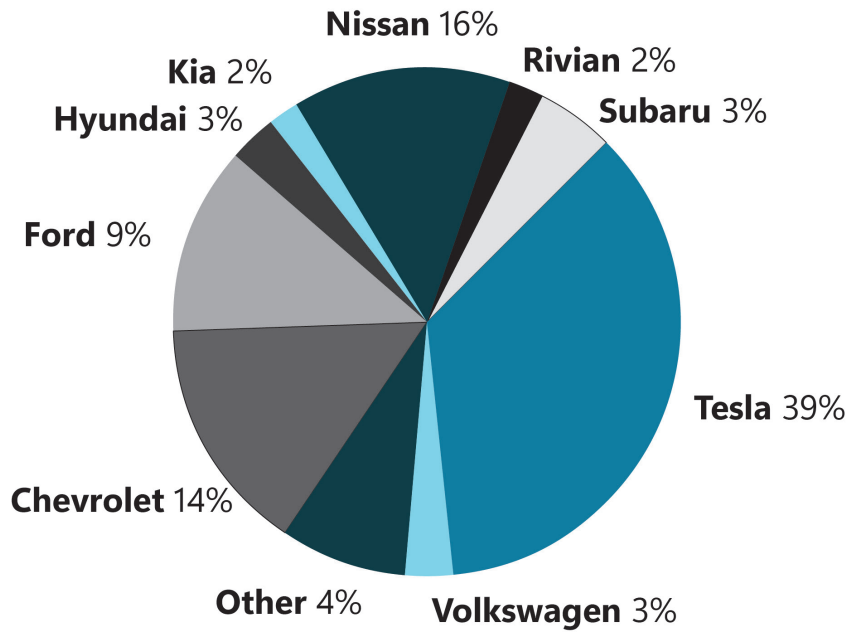


Figure 7. EV registration by manufacturer.

Alaska EV Registration by Region

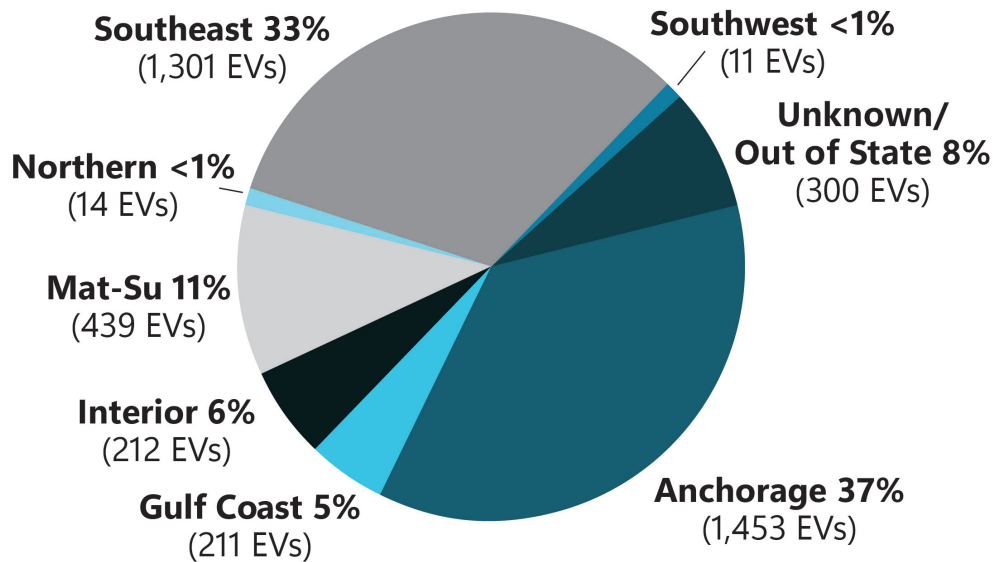


Figure 8. EV registration by region.



Year-Over-Year Growth of BEVs by Region

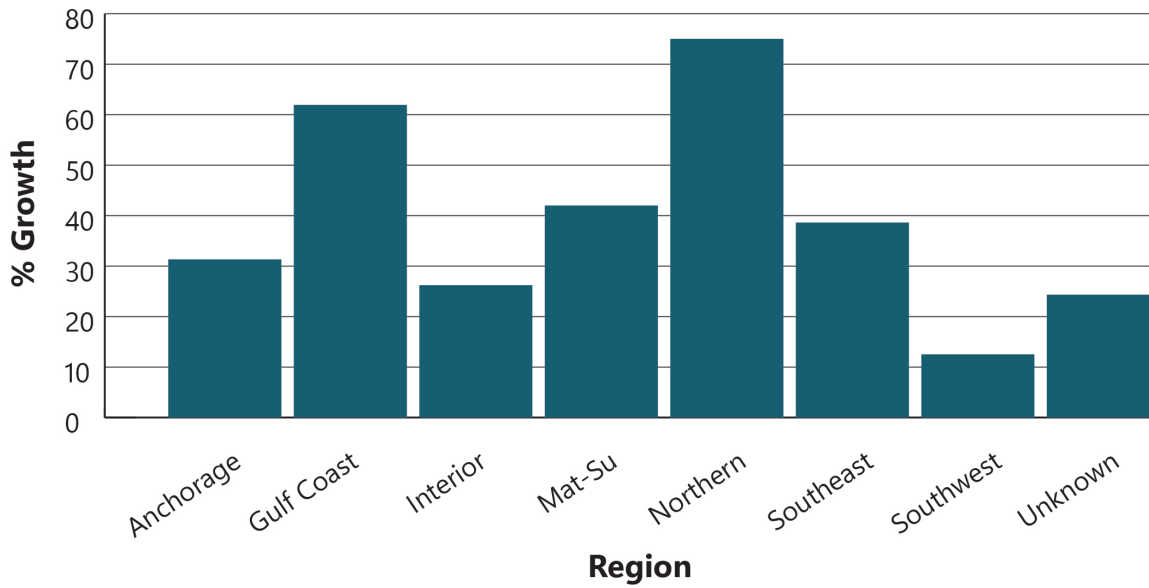


Figure 9. Year-over-year growth of EVs by region.

Statewide BEV and PHEV Registrations

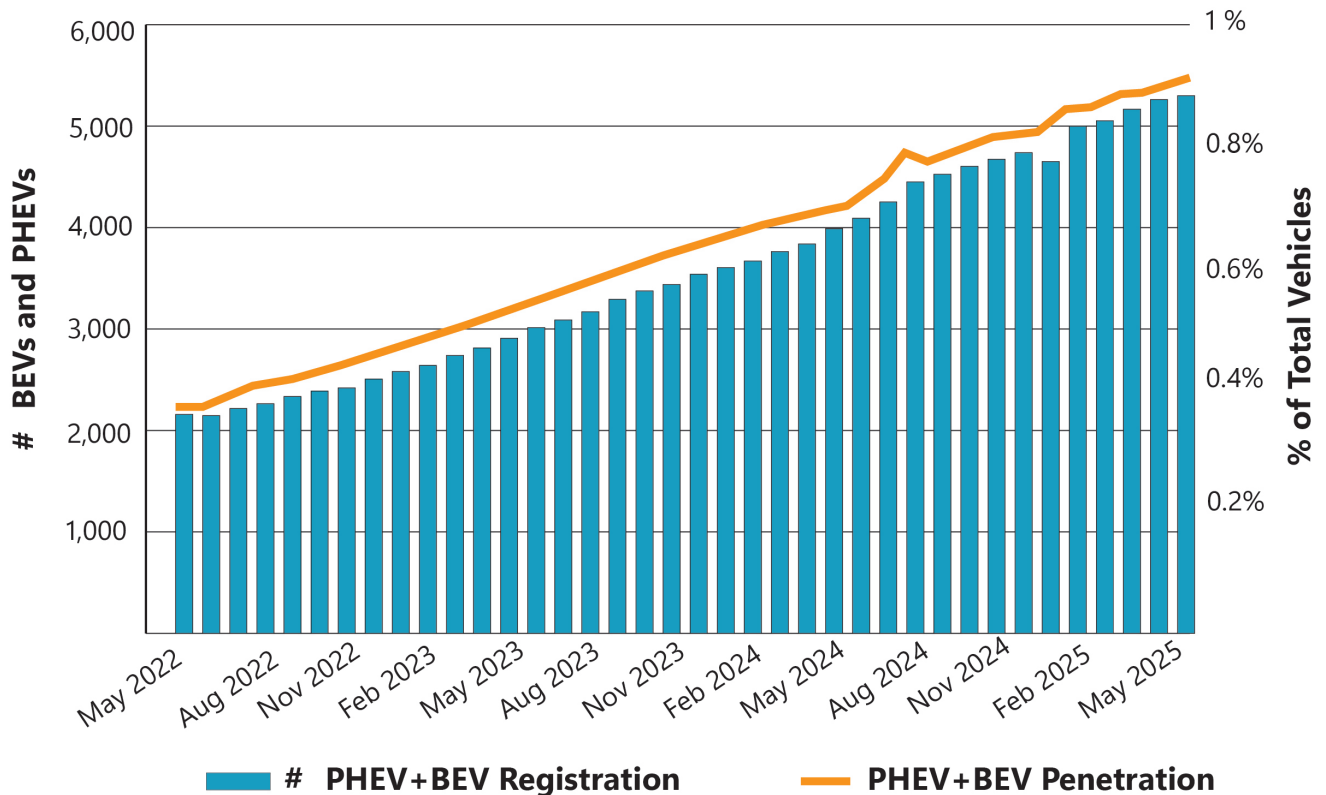


Figure 10. Statewide BEV and PHEV registration numbers.

State of Alaska
Electric Vehicle Infrastructure Implementation Plan
September 2025

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



ALASKA
ENERGY
AUTHORITY

