ALASKA ENERGY AUTHORITY

# ALASKA ELECTRIC VEHICLE PROGRAM UPDATE

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# Agenda

- Introductions and Background
- NEVI Plan and Program Requirements
- Phase One Update
- Phase Two Planning
- Wrap up and Discussion

# Who We Are

## Our Mission

Reduce the cost of energy in Alaska.

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

Dimond Center EV Car Show and Ride & Drive, Anchorage, AK

# AEA EV Program Goal

Lead the effort to **minimize barriers to EV adoption** in Alaska.

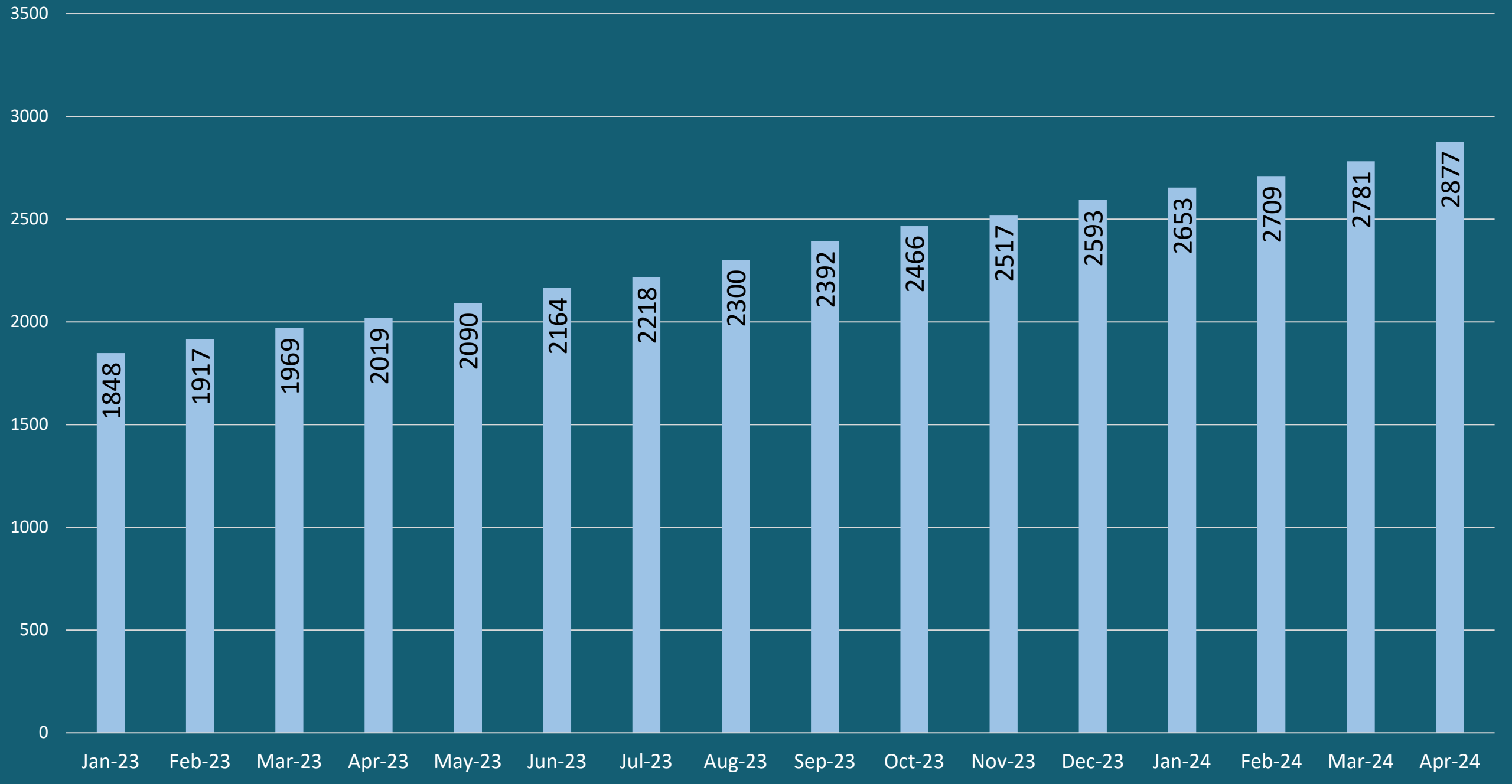
# Volkswagen Settlement Funds: Fast Charging Sites

## Sites Open Now

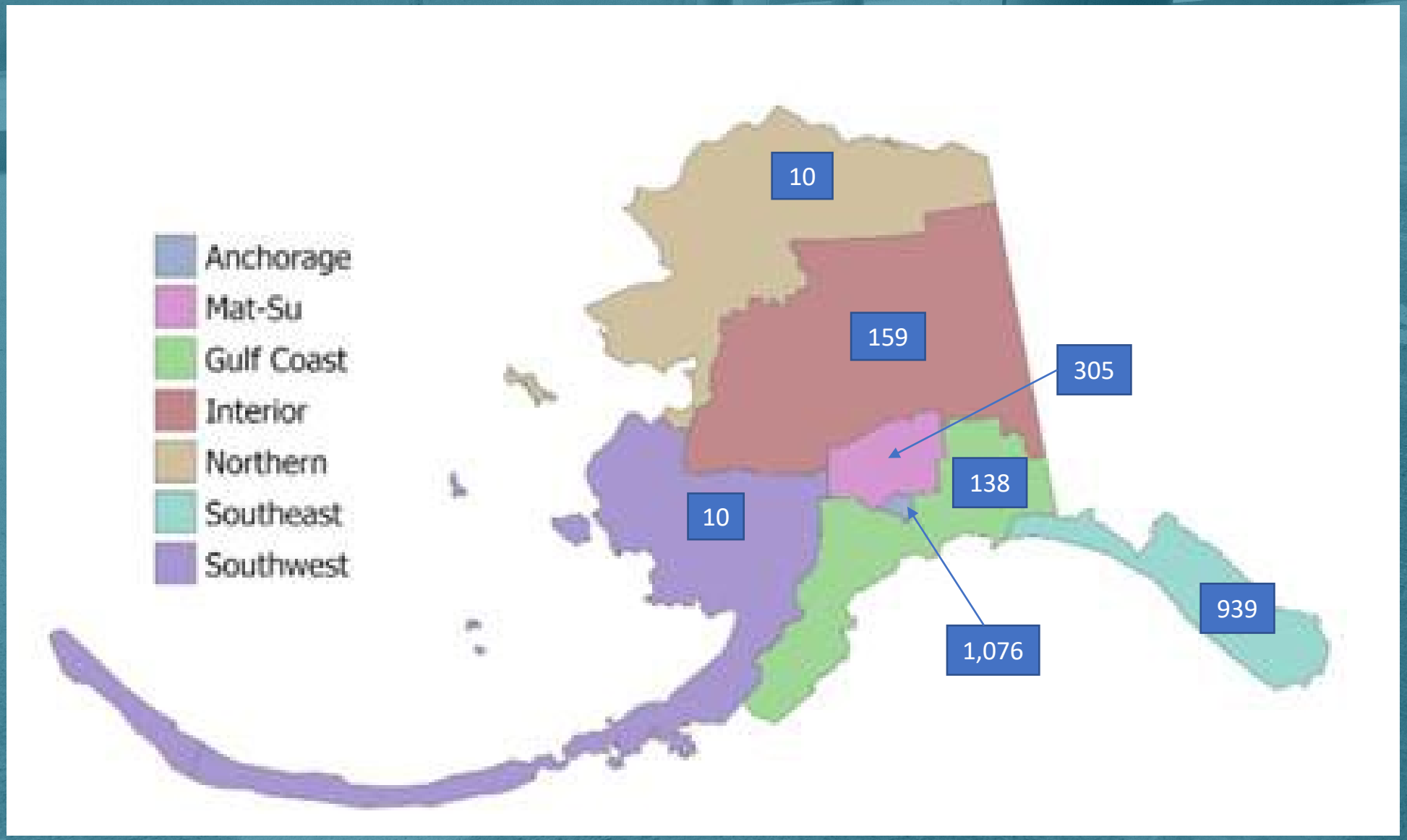
- **Anchorage -** Dimond Center
- **Homer -** AJ's Old Town Steakhouse & Tavern
- **Seward -** Seward Chamber of Commerce
- **Soldotna -** Custom Seafoods
- **Cantwell -** Jack River Inn
- **Healy -** Three Bears Alaska
- **Trapper Creek -** Three Bears Alaska
- **Chugiak -** Three Bears Alaska
- **Cooper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


5

# Registered BEVs in Alaska



# EV Geographic Distribution



# NEVI Background

The National Electric Vehicle Infrastructure (NEVI) Formula Program is a $5 billion program established by the Bipartisan Infrastructure Law (BIL) to build a national network of 500,000 electric vehicle (EV) charging stations by 2030 along federally designated Alternative Fuel Corridors (AFCs).

- Create an interconnected network
- New FHWA Federal Aid program apportioned to state DOT's
- Designated Alternative Fuel Corridors (AFC's)
- Annual Implementation Plan Required

# Alaska NEVI Plan

AEA and the Alaska Department of Transportation & Public Facilities (DOT&PF), submitted their State of Alaska EV Infrastructure Implementation Plan (The Plan) to the United States Joint Office of Energy and Transportation, as required by the Infrastructure Investment and Jobs Act's (IIJA) NEVI Formula Program.

- On September 27, 2022, AEA and DOT&PF secured approval of the initial plan.
- On September 29, 2023, AEA and DOT&PF secured approval of the FY24 annual update.
- FY25 Plan is due to FHWA and the Joint Office on August 1, 2024.

**State of Alaska**
**Electric Vehicle Infrastructure Implementation Plan FY24**

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# NEVI Template From Joint Office

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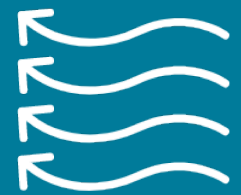
Introduction

State Agency Coordination

Public Engagement

Plan, Vision & Goals

Contracting



Existing & Future Conditions

EVSE Deployment

Implementation

Civil Rights

Equity Considerations

Labor & Workforce Considerations

Cyber Security

Program Evaluation

Discretionary Exceptions



10

# Community Engagement Outcomes Report

*From July 2022 to June 2023 by the numbers*

**409** Attendees

- 167 Working Group
- 95 Technical Sessions
- 69 Workshops
- 78 AML Presentation

**13** Meetings

- 4
- 4
- 4
- 1

**84** Communities*

- 50 In Alaska
- 33 In Lower 48
- 1 International

**9,300** Emails Sent

- 54% Open Rate
- 17% Click Rate

**67** Survey Responses

- 37 Communities

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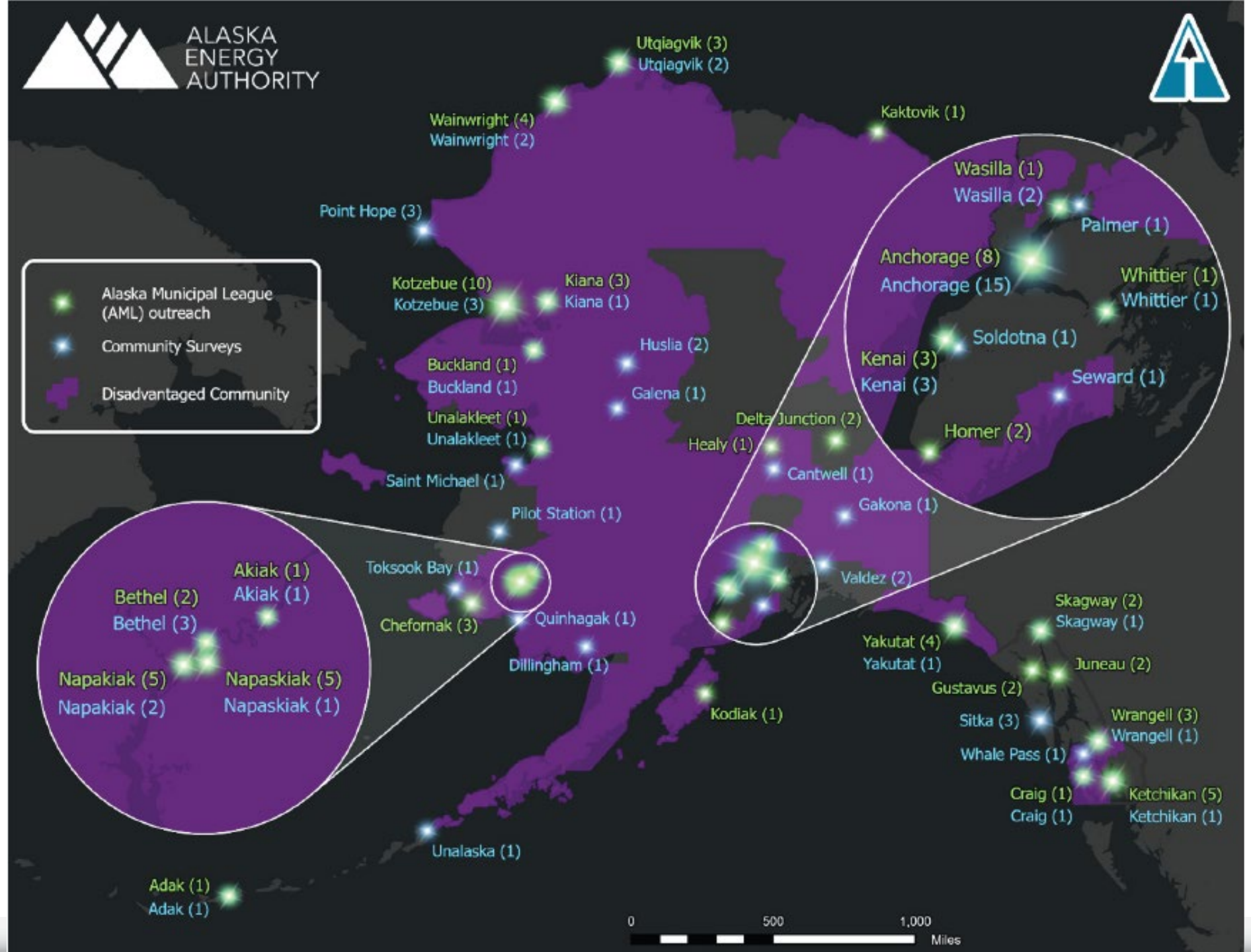
*Meeting attendee location, virtual or in-person, and community survey response locations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Alaska Municipal League (AML) outreach
Community Surveys
Disadvantaged Community
Utqiagvik (3)
Utqiagvik (2)
Wainwright (4)
Wainwright (2)
Kaktovik (1)
Point Hope (3)
Kotzebue (10)
Kotzebue (3)
Kiana (3)
Kiana (1)
Huslia (2)
Buckland (1)
Buckland (1)
Galena (1)
Unalakleet (1)
Unalakleet (1)
Saint Michael (1)
Pilot Station (1)
Toksook Bay (1)
Akiak (1)
Akiak (1)
Bethel (2)
Bethel (3)
Napakiak (5)
Napakiak (2)
Napaskiak (5)
Napaskiak (1)
Chefornak (3)
Quinhagak (1)
Dillingham (1)
Unalaska (1)
Adak (1)
Adak (1)
Wasilla (1)
Wasilla (2)
Palmer (1)
Anchorage (8)
Anchorage (15)
Whittier (1)
Whittier (1)
Soldotna (1)
Kenai (3)
Kenai (3)
Seward (1)
Homer (2)
Delta Junction (2)
Healy (1)
Cantwell (1)
Gakona (1)
Valdez (2)
Kodiak (1)
Yakutat (4)
Yakutat (1)
Skagway (2)
Skagway (1)
Juneau (2)
Gustavus (2)
Sitka (3)
Wrangell (3)
Wrangell (1)
Whale Pass (1)
Craig (1)
Craig (1)
Ketchikan (5)
Ketchikan (1)
0
500
1,000
Miles

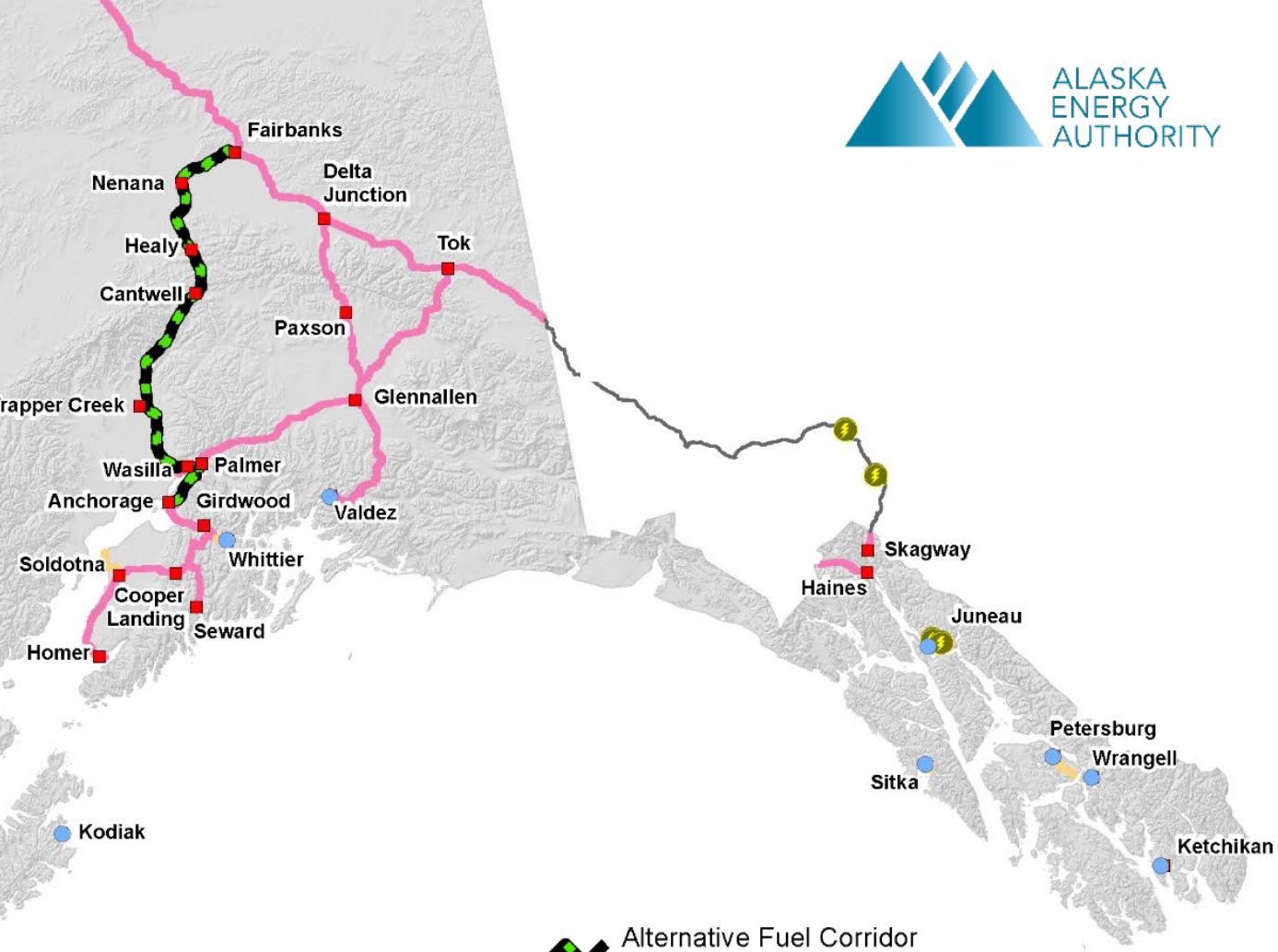


12

# NEVI Requirements

**Funding must be used to build out Alternative Fuel Corridors (AFCs) first**

- Alaska currently has one AFC
- After AFC buildout, funding can be used elsewhere
- Charging stations must be located no more than **50 miles** apart along designated AFC
- Chargers must be located no more than **1 driving mile from AFC**
- Charging infrastructure must be **DC fast-charging**
  - 4 Combined Charging System Connectors
  - >150 kW each
- Justice 40
- 80% Federal Share, 20% Match
- Title 23 Program
- National Electric Vehicle Infrastructure Standards and Requirements, Buy America Waiver



# Eligibility and Funding

**Eligible Applicants**

- Open to a wide range of applicants
- Public, Private, Non-Profit, Tribal, utilities, etc.

**Eligible Projects**

- Projects directly related to EV charging
- Publicly available
- Charging network provider

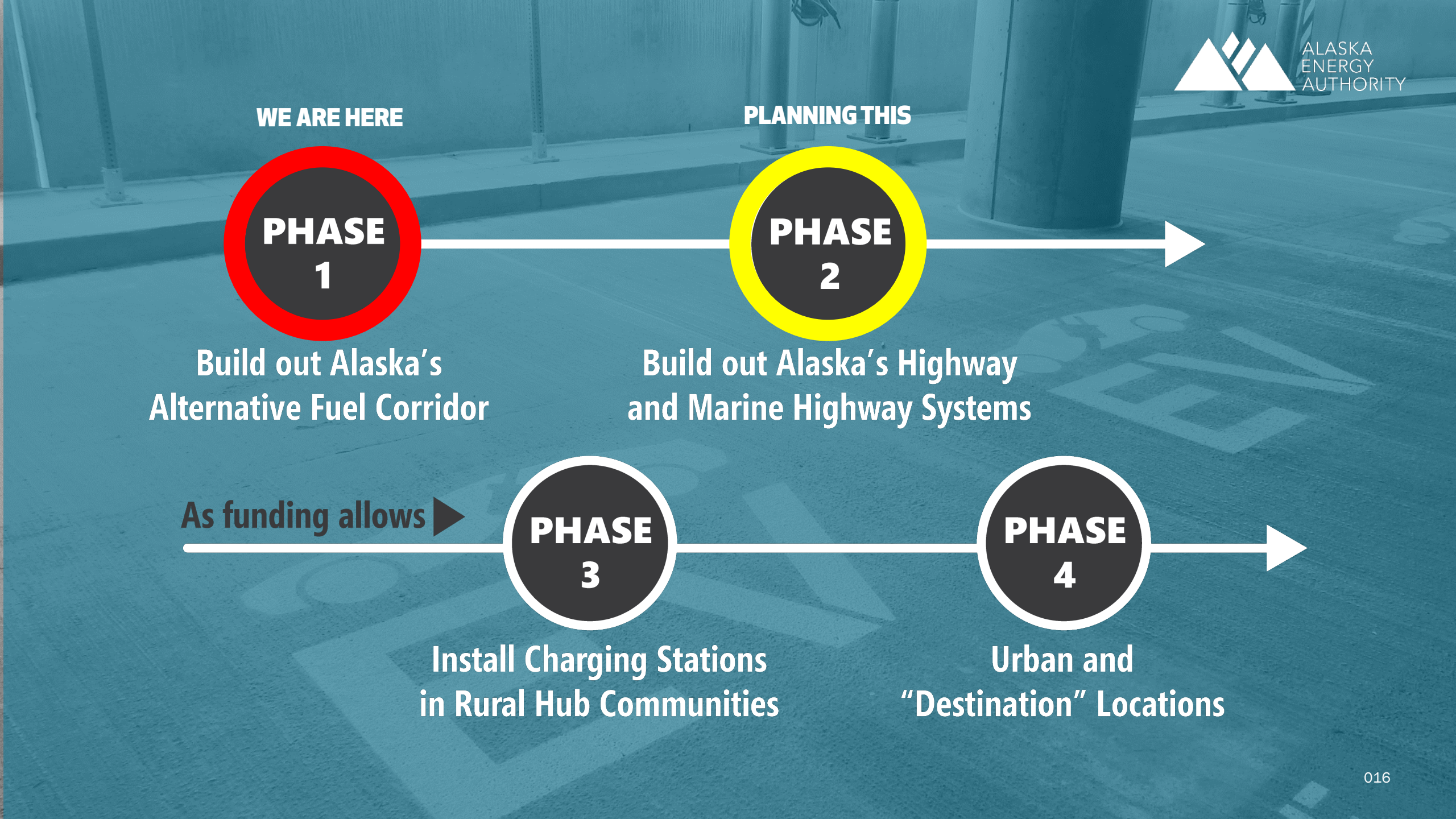
# Eligibility and Funding (cont'd)

## Eligible Project Costs

- ☑ Planning, Engineering and Design
- ☑ Construction and procurement
- ☑ Minor grid upgrades
- ☑ Costs to upgrade existing EVSE
- ☑ O&M and warranties up to five years
- ☑ Data sharing

## Ineligible Project Costs

- ☒ Costs incurred prior to grant award
- ☒ Costs not related to EVSE
- ☒ Construction of building and parking facilities
- ☒ Major grid upgrades
- ☒ Purchase or lease of real estate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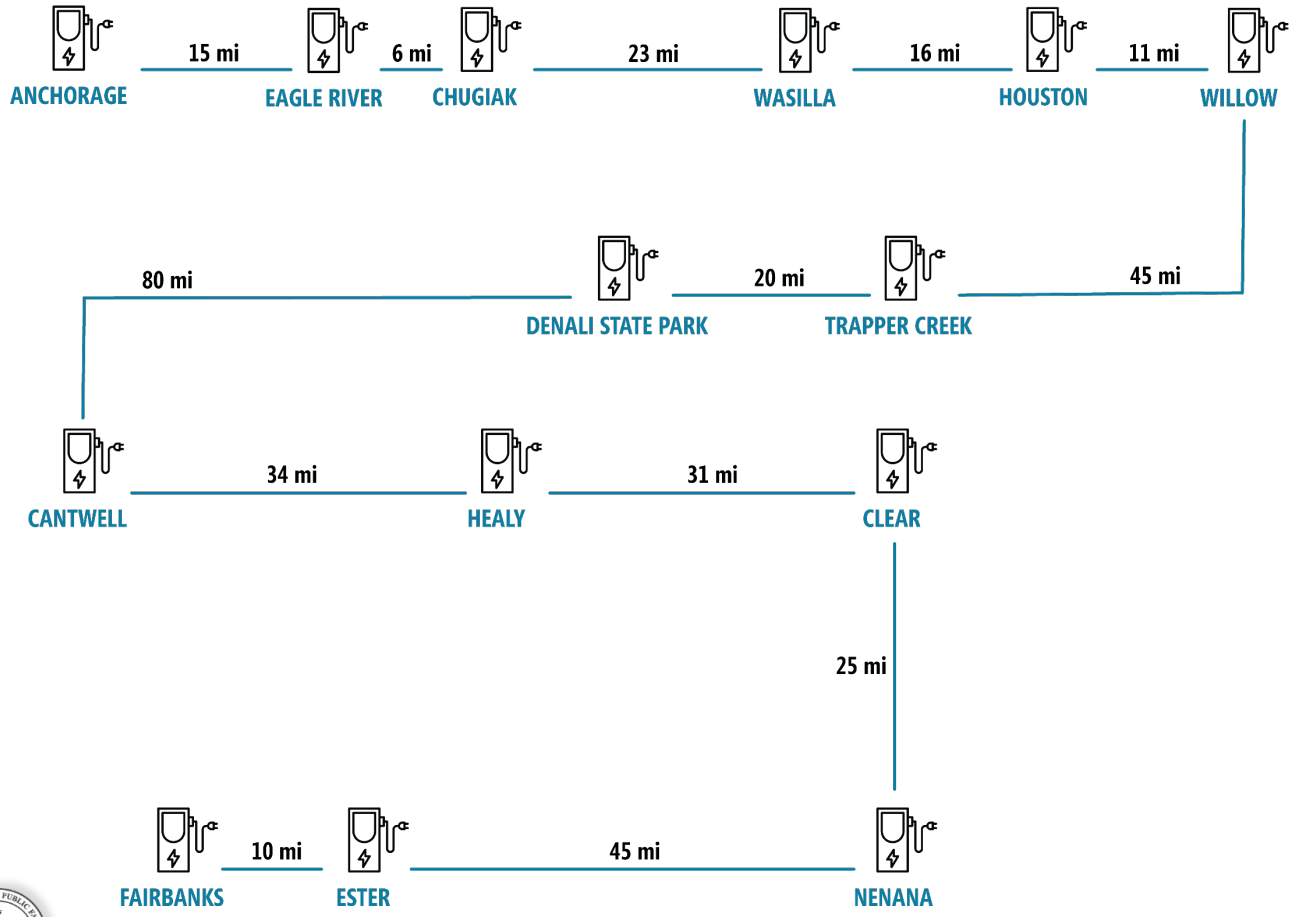
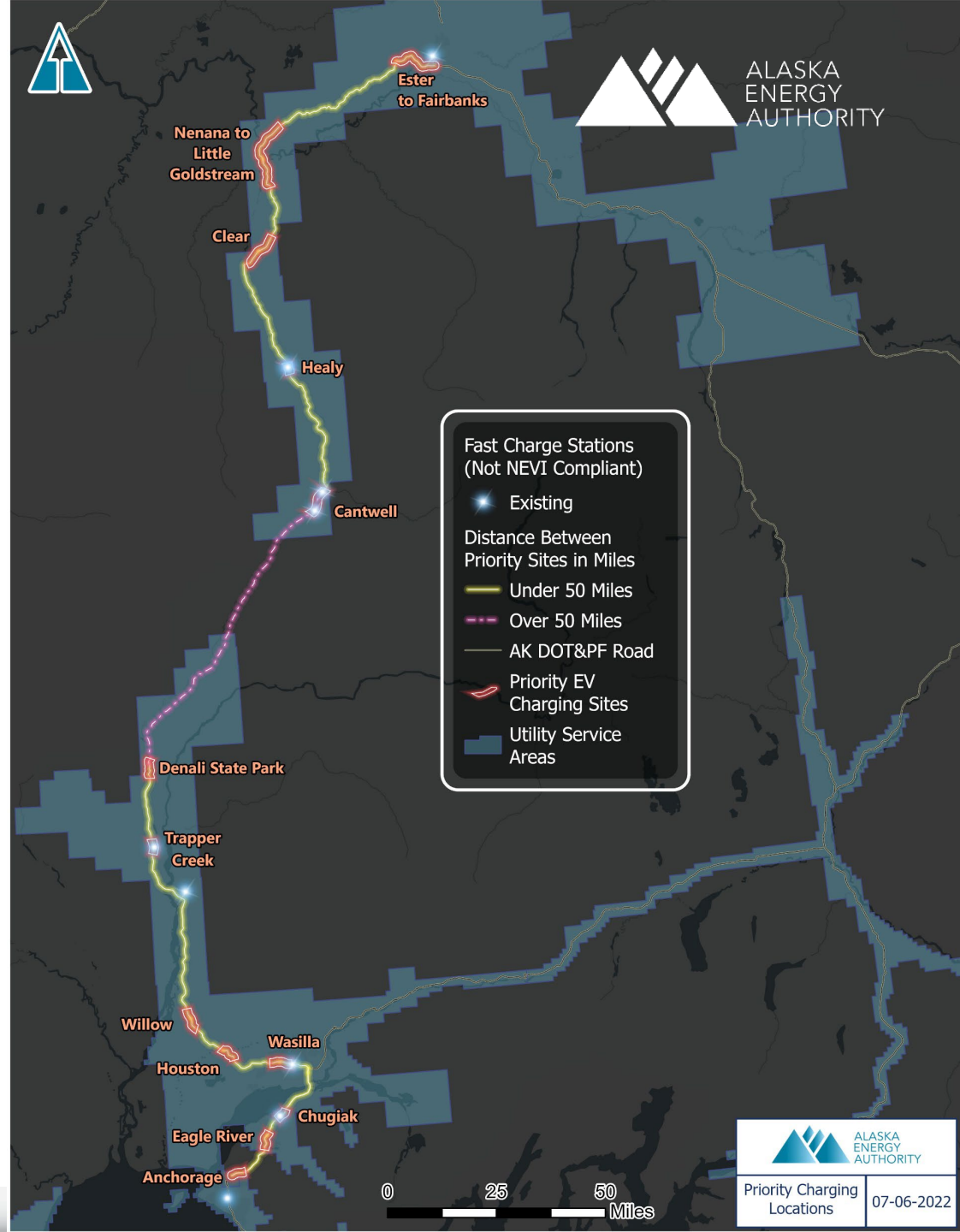
WE ARE HERE
PLANNING THIS
PHASE 1
PHASE 2
Build out Alaska's Alternative Fuel Corridor
Build out Alaska's Highway and Marine Highway Systems
As funding allows
PHASE 3
PHASE 4
Install Charging Stations in Rural Hub Communities
Urban and "Destination" Locations

# Highway Phases

# Corridor Deployment

## Priority AFC Areas



# Number of Applications Received by Location

| | | | |
|---|---|---|---|
| 4 | Fairbanks | 1 | Willow |
| 1 | Ester | 2 | Houston |
| 5 | Nenana | 3 | Wasilla |
| 3 | Healy | 1 | Chugiak |
| 3 | Cantwell | 2 | Eagle River |
| 1 | Denali State Park | 5 | Anchorage |
| 3 | Trapper Creek | | |

# Phase One NEVI Awards

| PRIORITY SITE | LOCATION | NETWORK PROVIDER | DISTANCE BETWEEN STATIONS |
|---|---|---|---|
| Fairbanks (east) | Westmark Hotel | Jule | |
| | | | 6 miles |
| Fairbanks (west) | Fred Meyer West | Tesla | |
| | | | 50 miles |
| Nenana | Main Street & 1st | Tesla | |
| | | | 66 miles |
| Healy | McKinley Chalet Resort | Jule | |
| | | | 28 miles |
| Cantwell | Jack River Properties | Tesla | |
| | | | 78 miles |
| Denali State Park | McKinley Princess Wilderness Lodge | Jule | |
| | | | 20 miles |
| Trapper Creek | Three Bears | Tesla | |
| | | | 73 miles |
| Wasilla | Cottonwood Creek Mall | FLO | |
| | | | 37 miles |
| Anchorage | Tikahtnu Commons | FLO | |

# Phase 2 Outreach

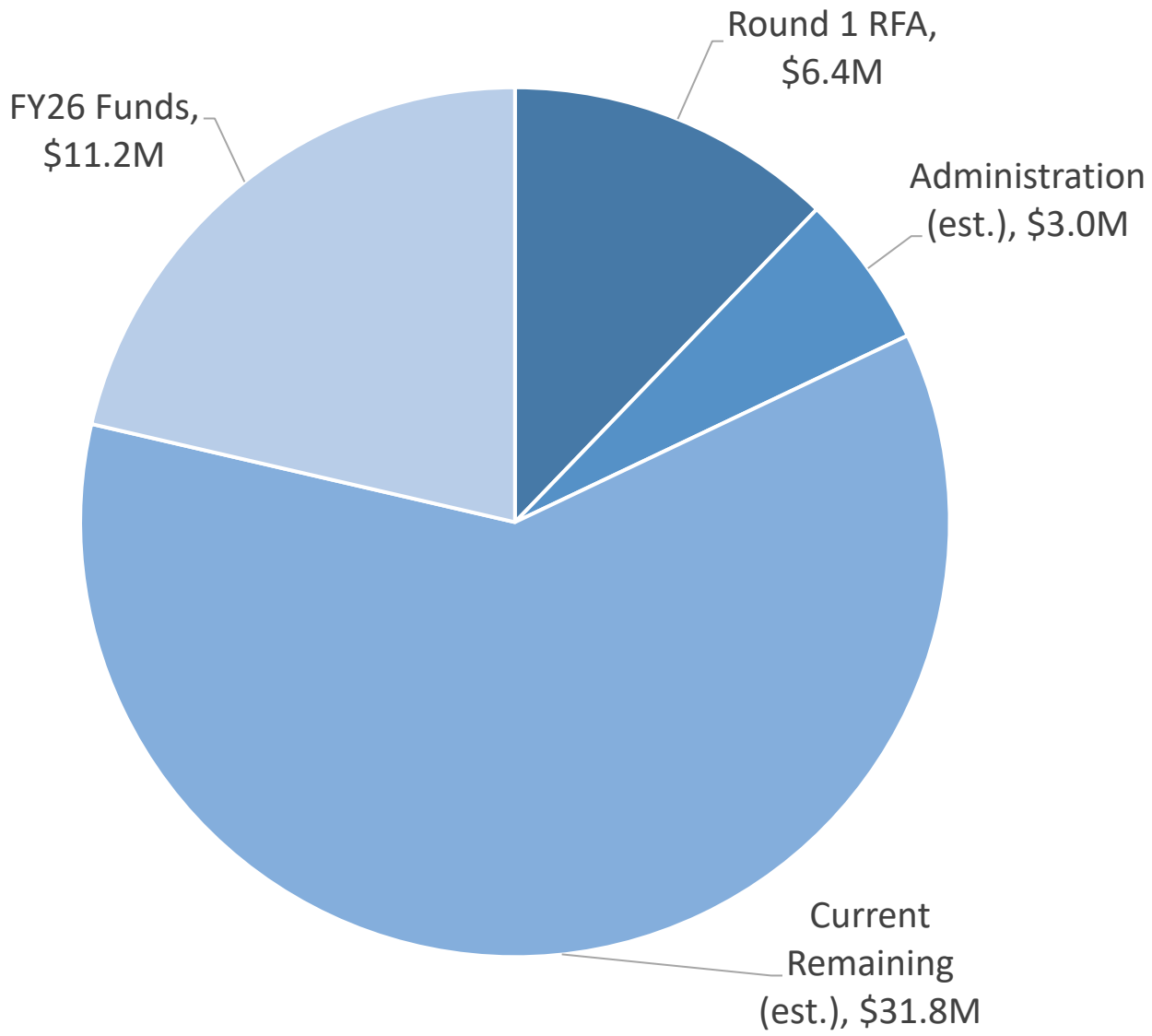
- Ketchikan 5/10/24
- Glennallen 5/14/24
- Homer 5/15/24
- Seward 5/16/24
- Anchorage 5/20/24

# Funding – By the Numbers

- Total AK formula funding: $52.4M
- $6.4M awarded in Round 1 for AFC
- Approximately $43M remaining in program

- $41.3M received from FHWA following FY25 plan
- Approximately $31.8M in current funds remain

- $11.2M to be awarded for FY26 – could be Phase 2 or other



# Site Design

- Requirement of 4 ports
- Flexibility on composition of ports
  - 4 DCFC
  - 2 DCFC, 2 Level 2
  - 4 Level 2
- Propose minimum 2 DCFC
  - Other 2 ports are site's choice
  - Reduce site costs, provide more sites
- Average NEVI federal award: $711,000
  - Could deploy 45 more sites in FY25 with DCFC

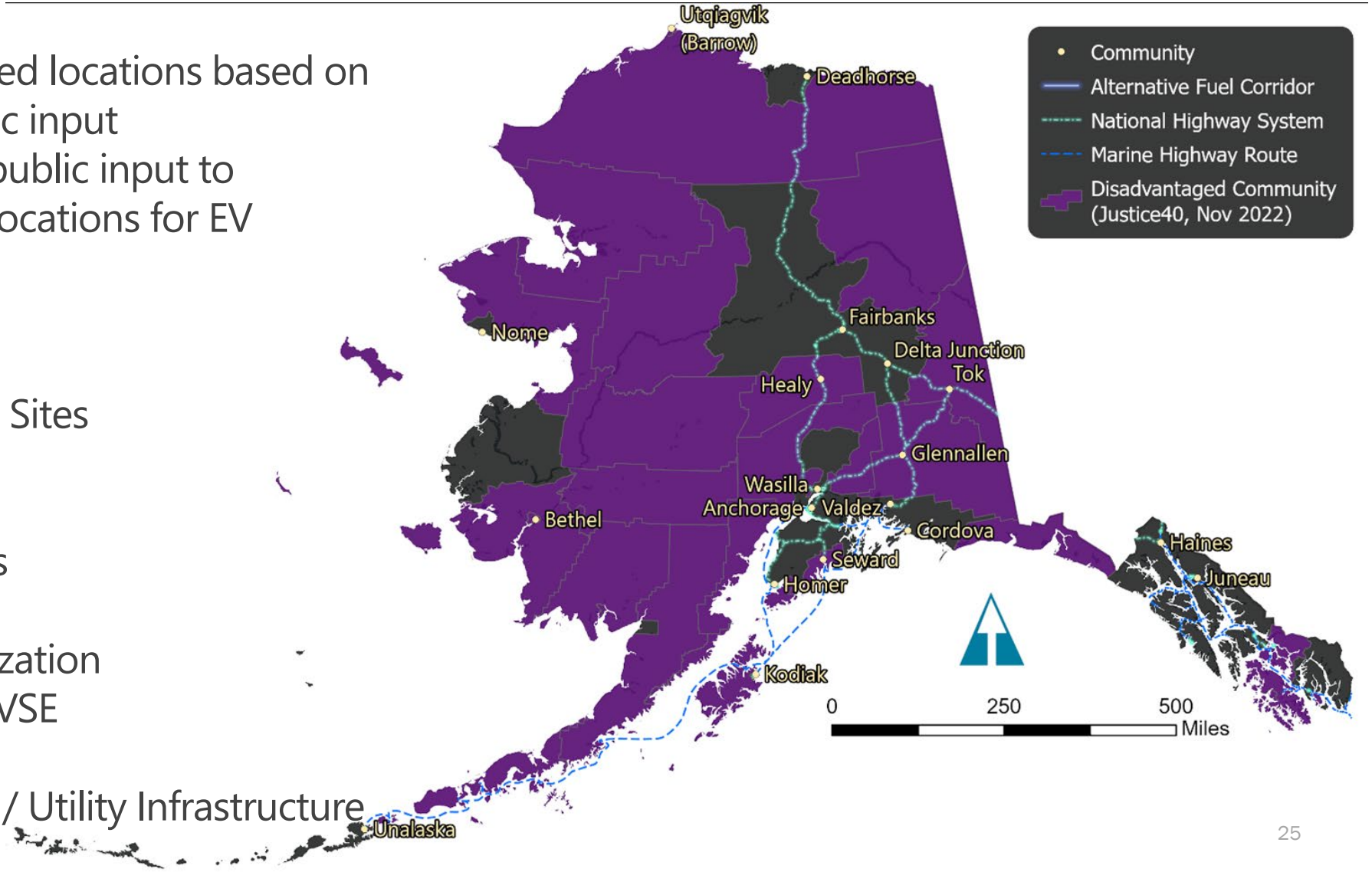
# Funding – How to Allocate?

- Create buckets of funding for Highway and Marine Highway systems

- What is appropriate to split the federal share?
  - 80%/20%: $25.5M/$6.4M
  - 70%/30%: $22.3M/$9.6M
  - 60%/40%: $19.1M/$12.7M
  - 50%/50%: $15.9M/$15.9M

# Site Prioritization

- Phase 1 (AFC) prioritized locations based on gap analysis and public input
- Phase 2 will leverage public input to prioritize community locations for EV charging
- Community inputs
  - DAC (y/n)
  - Distance Between Sites
  - Number of EVs
  - Flood Zones
  - Roadway Volumes
  - Existing Stations
  - Existing EVSE Utilization
  - Known Planned EVSE
  - Cost of Site
  - Power Availability / Utility Infrastructure



# Seward Highway

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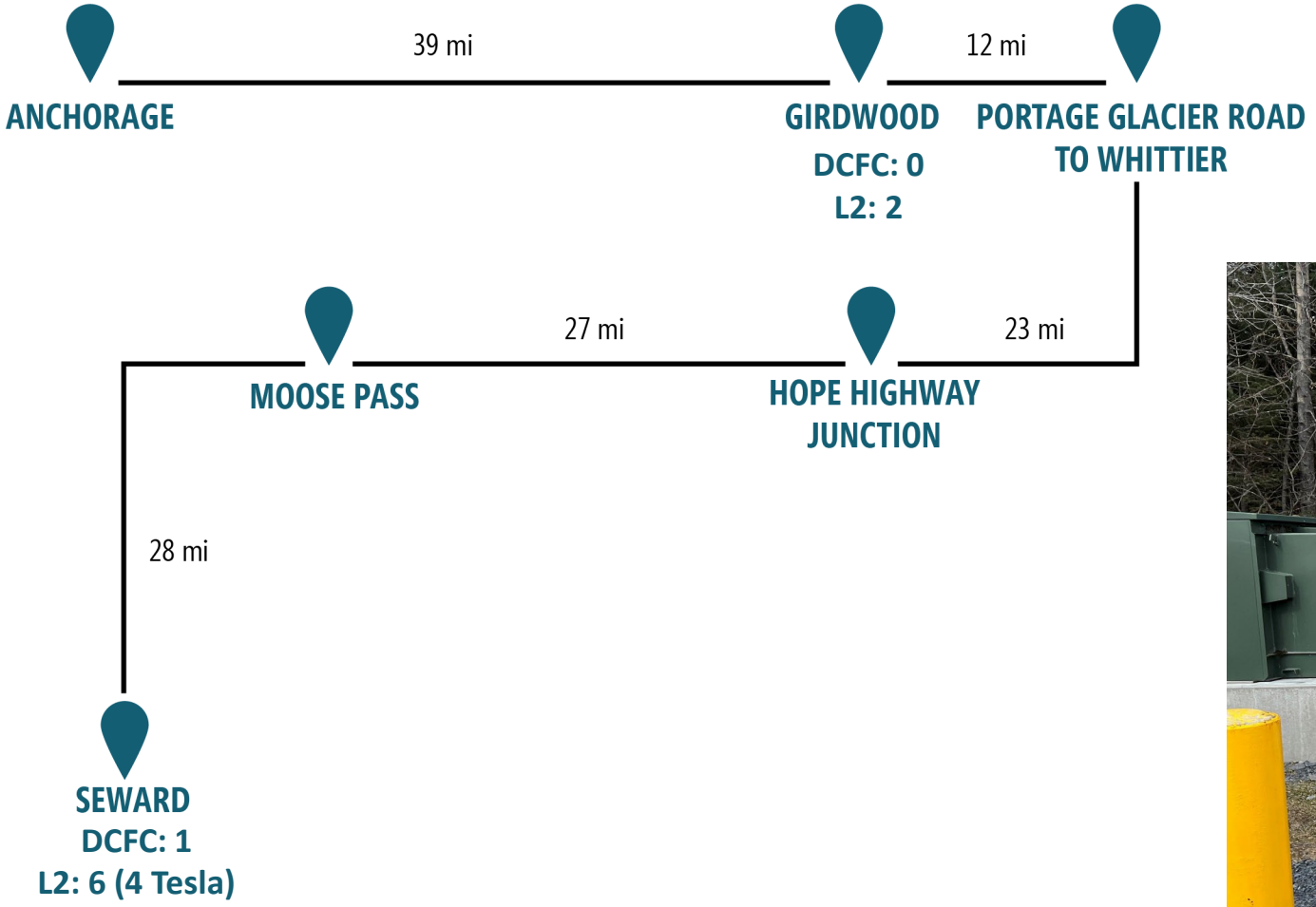
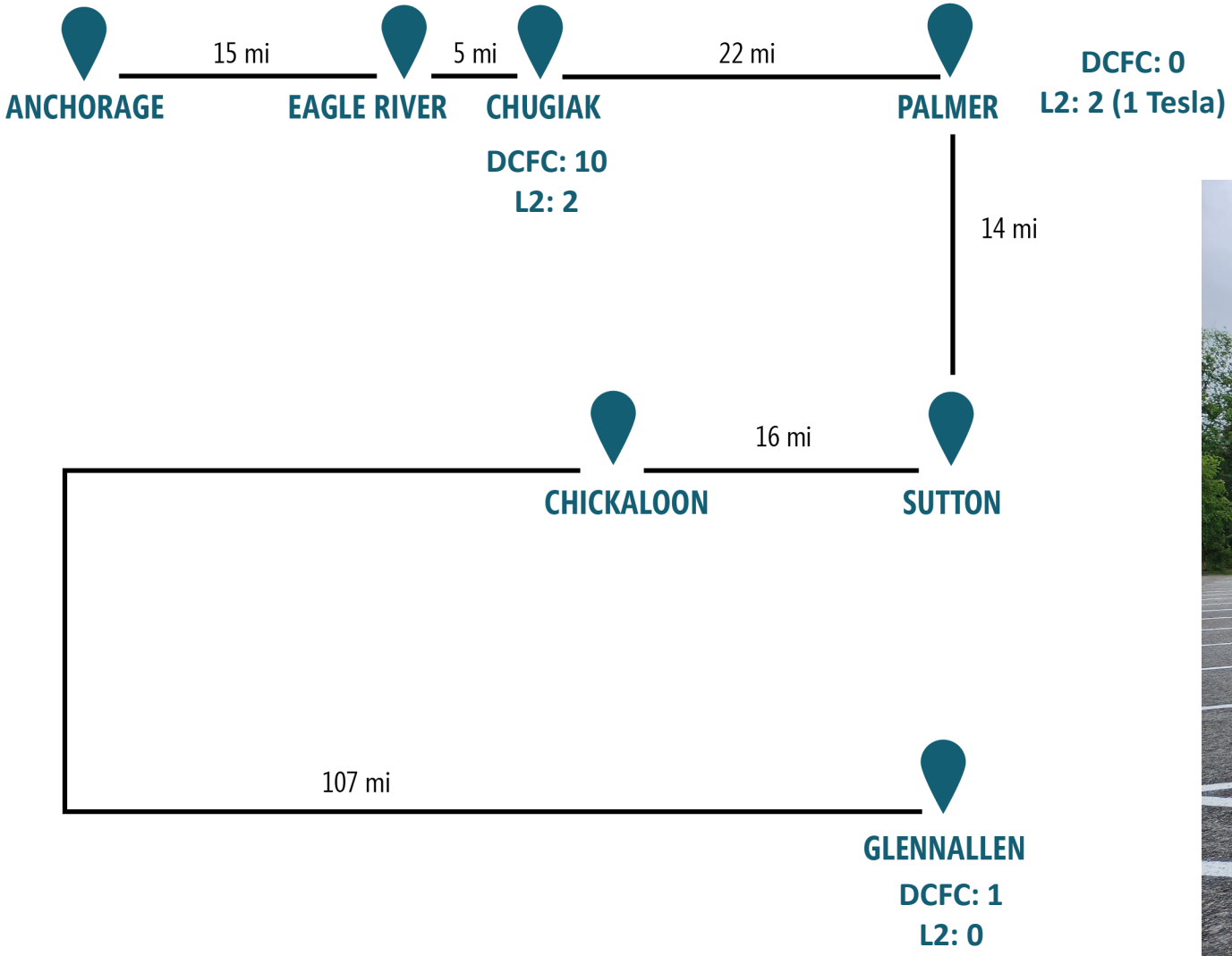
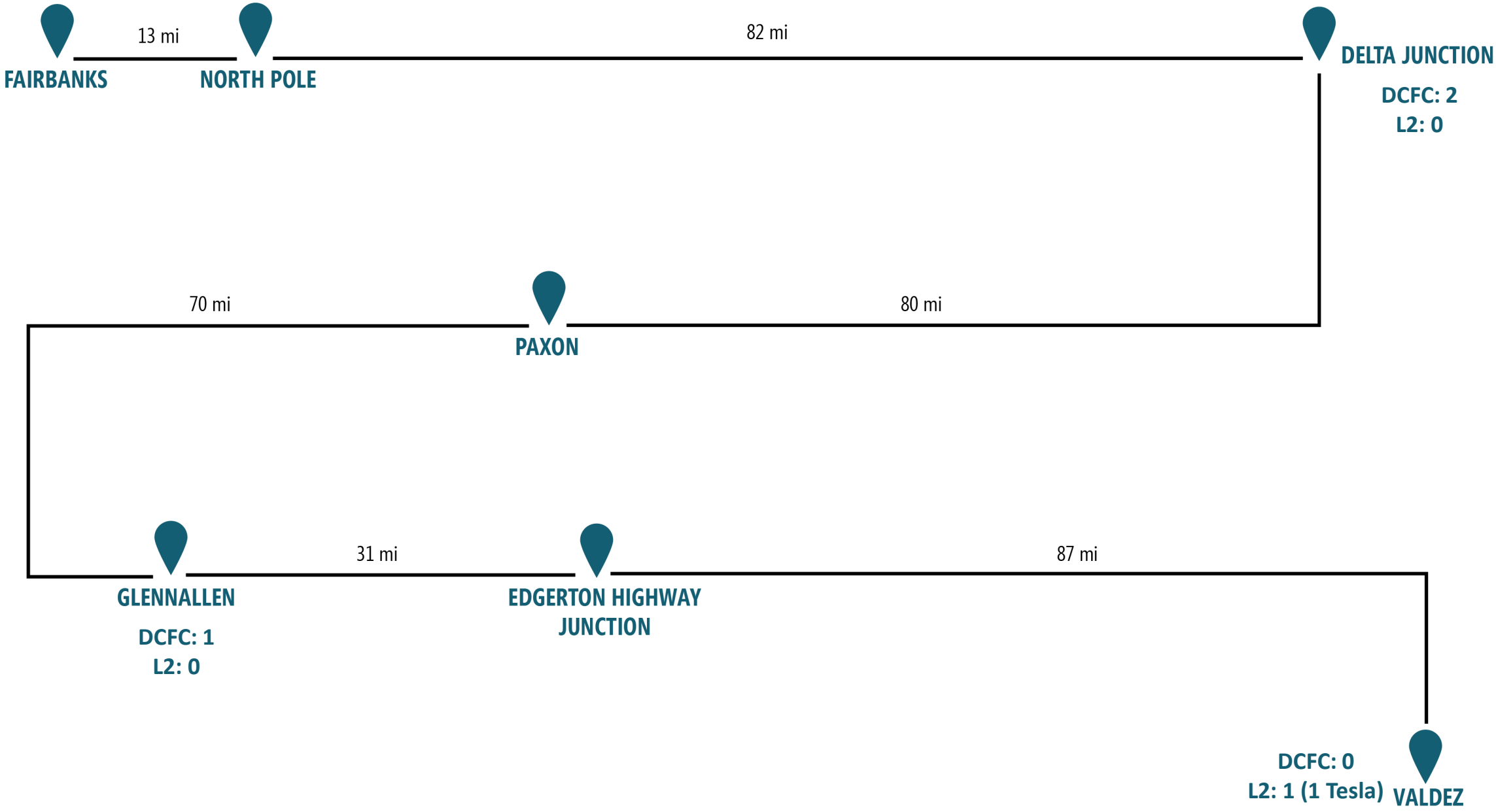


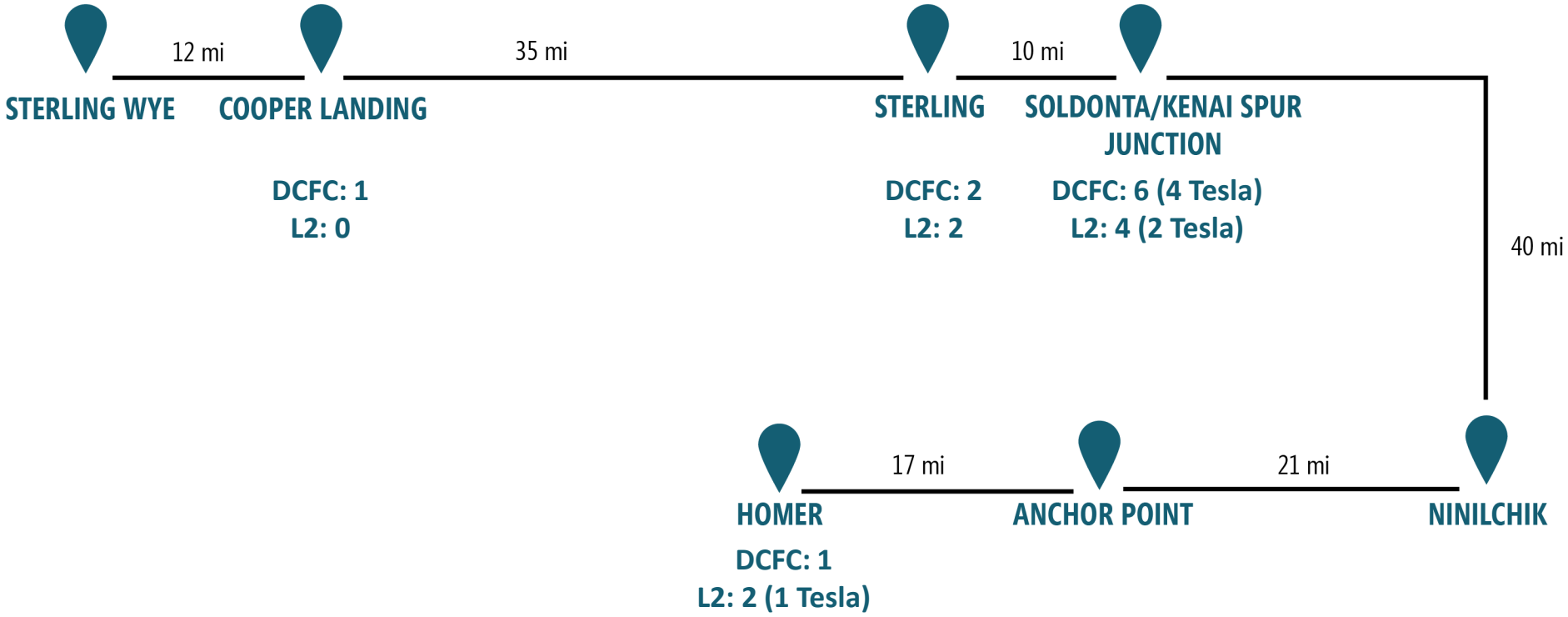
# Glenn Highway



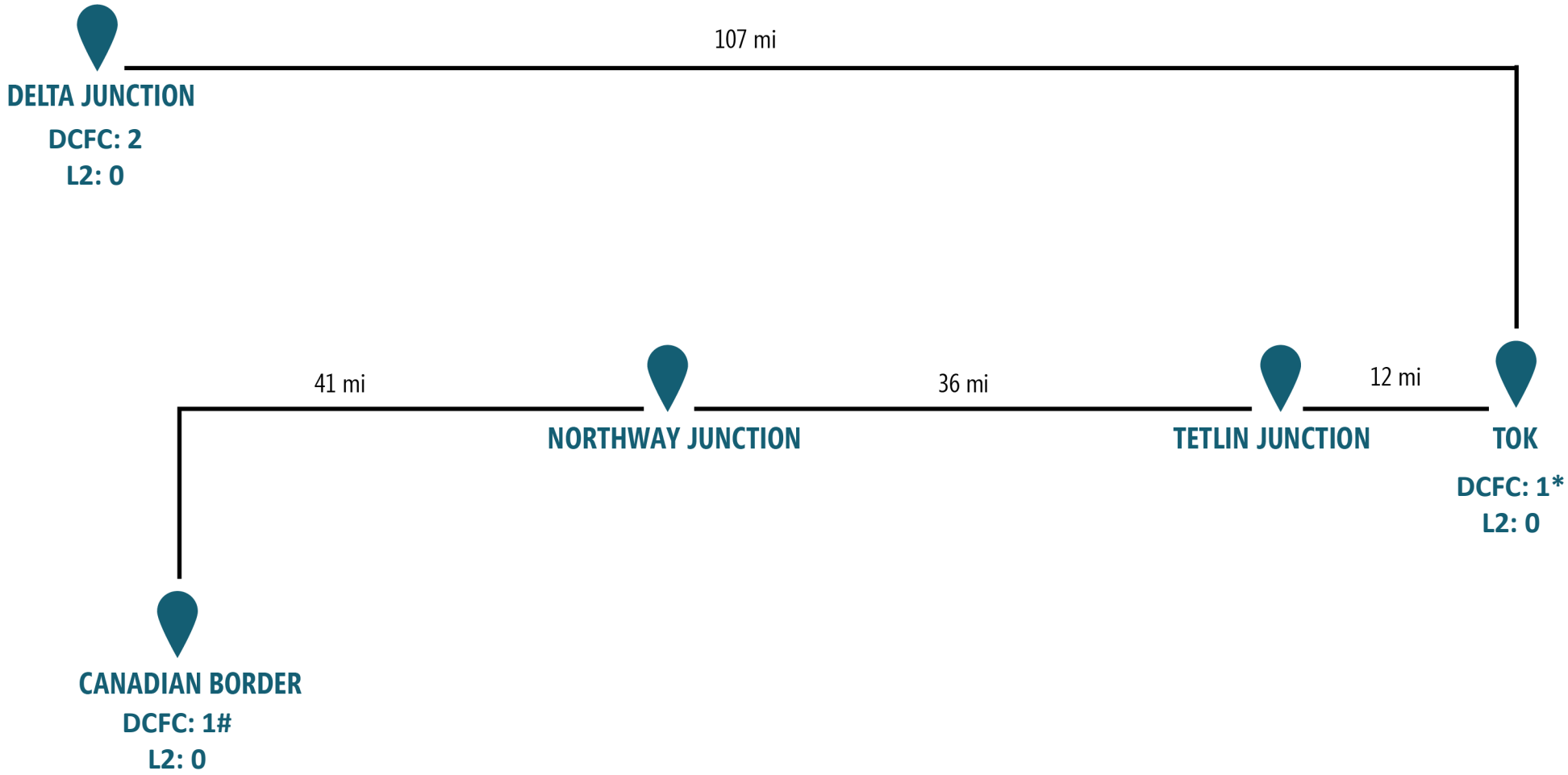
# Richardson Highway



# Sterling Highway



# Alaska Highway (east of Delta Junction)




* Located in Tok Transportation and requires scheduling. 24 kW
# Station in Beaver Creek, Yukon, Canada, 20 miles across border

# Alaska Marine Highway System

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

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# Alaska Energy Authority


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