EVs in Southeast

SOUTHEAST CONFERENCE

ABOUT SOUTHEAST CONFERENCE

- Southeast Conference was incorporated in 1958, primarily to advocate for the creation of the Alaska Marine Highway System.
- After that success, stayed together to continue to advocate for issues that are key to the southeast region as a whole.
- Looks for consensus for the betterment of the region, which is almost the size of Indiana, with 35 communities and 19 Tribes.
- Members from nearly every community, chamber of commerce, and economic development organization in the region.
- Conduct economic planning through CEDS process and implement CEDS, providing technical assistance and project development support.
- Southeast Conference is the federally designated Regional Economic Development District and the State-designated Alaska Regional Development Organization.

Transportation

Energy

Maritime

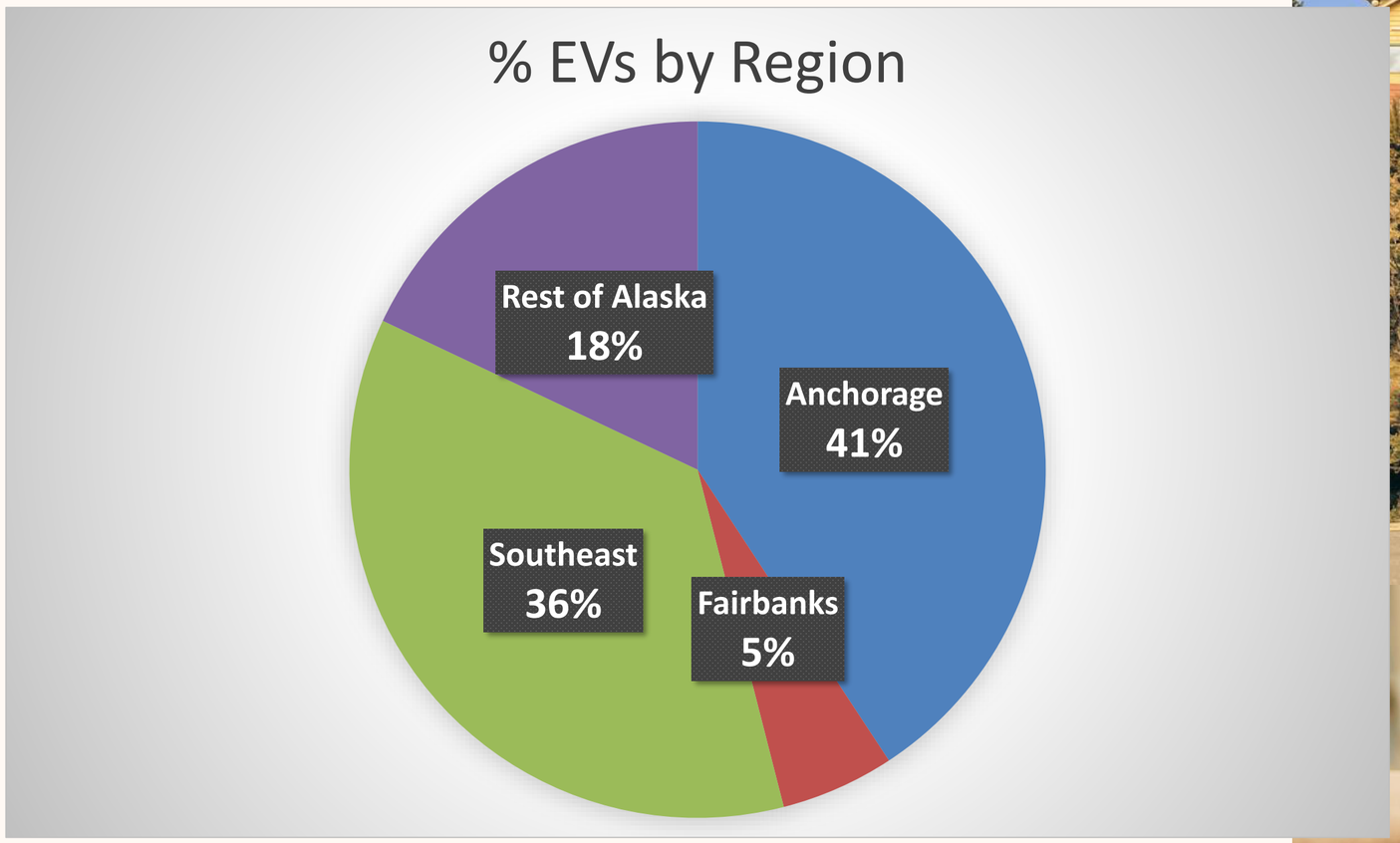
Mining

Promoting strong economies, sustainable communities, and a healthy environment in Southeast Alaska.

Visitors

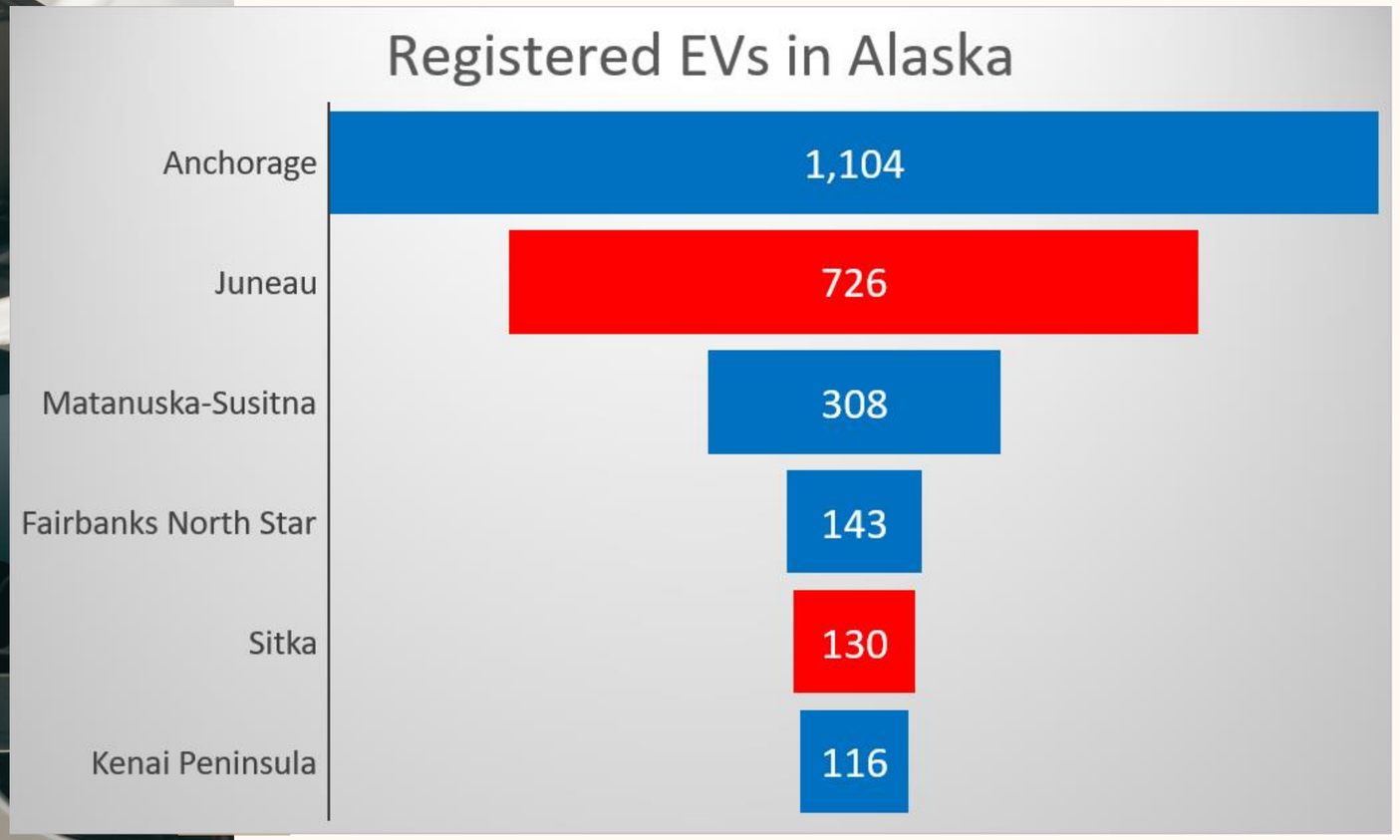
Seafood

Timber

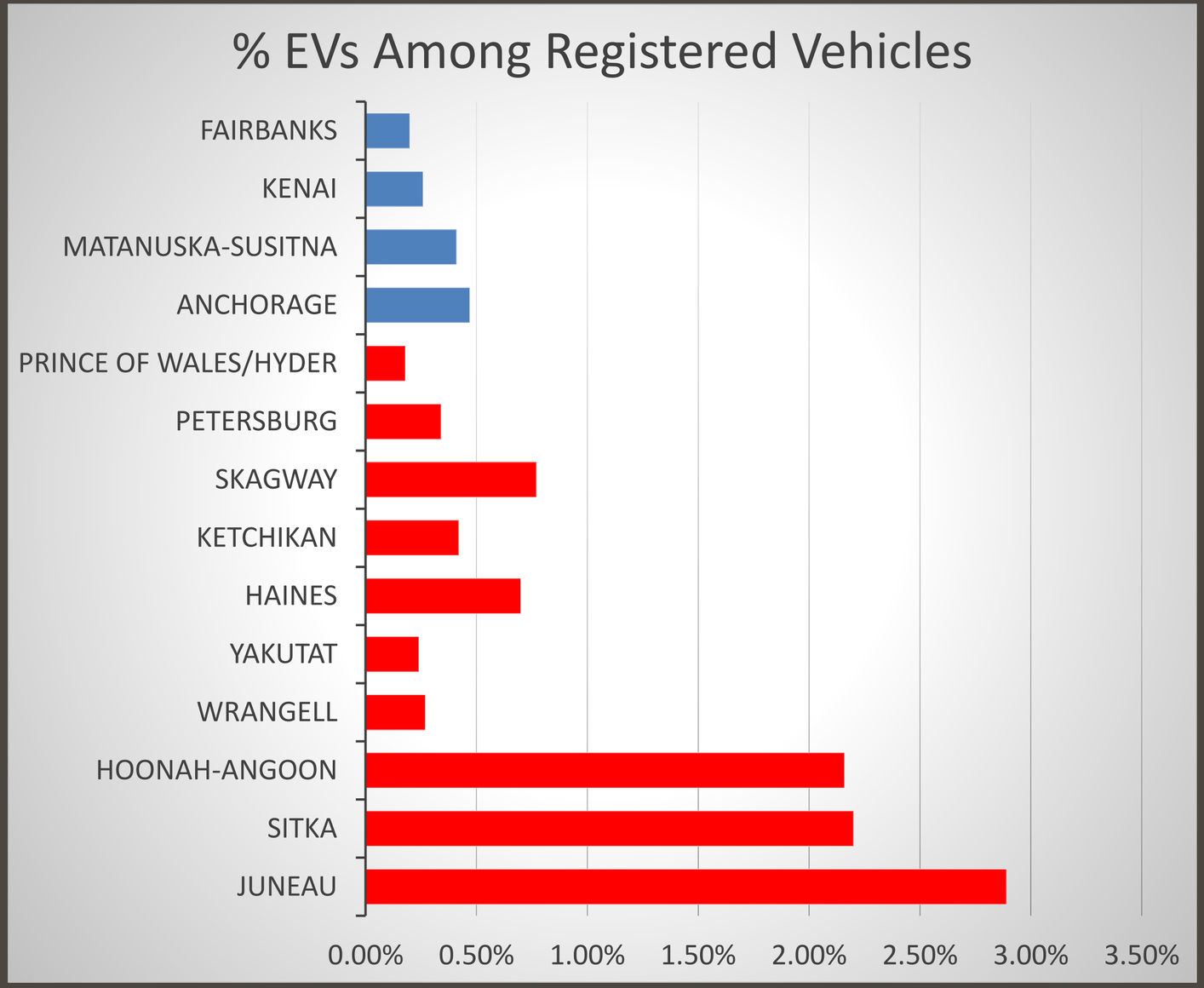


More than one-third of Alaska's EVs are located in Southeast communities.

- 2,948 registered EVs in Alaska
- 238 are "unknown/out of state"
- Motorcycles excluded from data



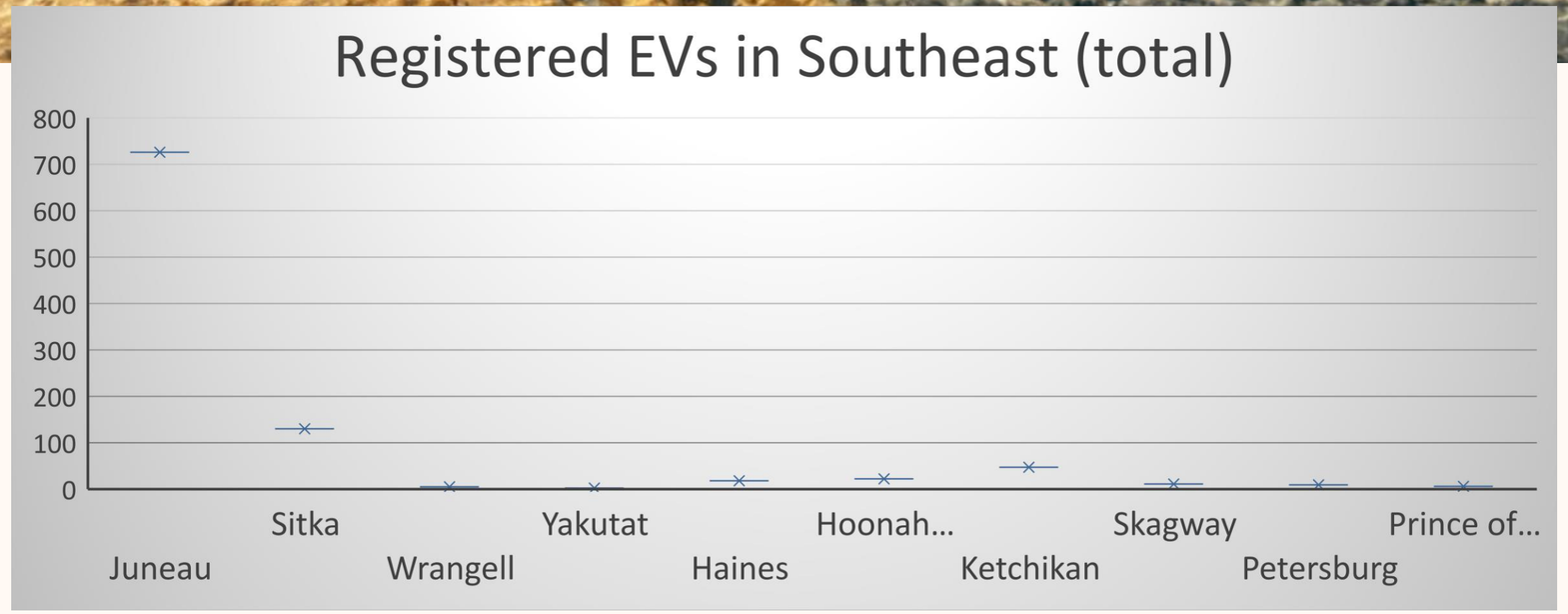
Only six Census areas have at least 100 registered EVs; two are in Southeast.

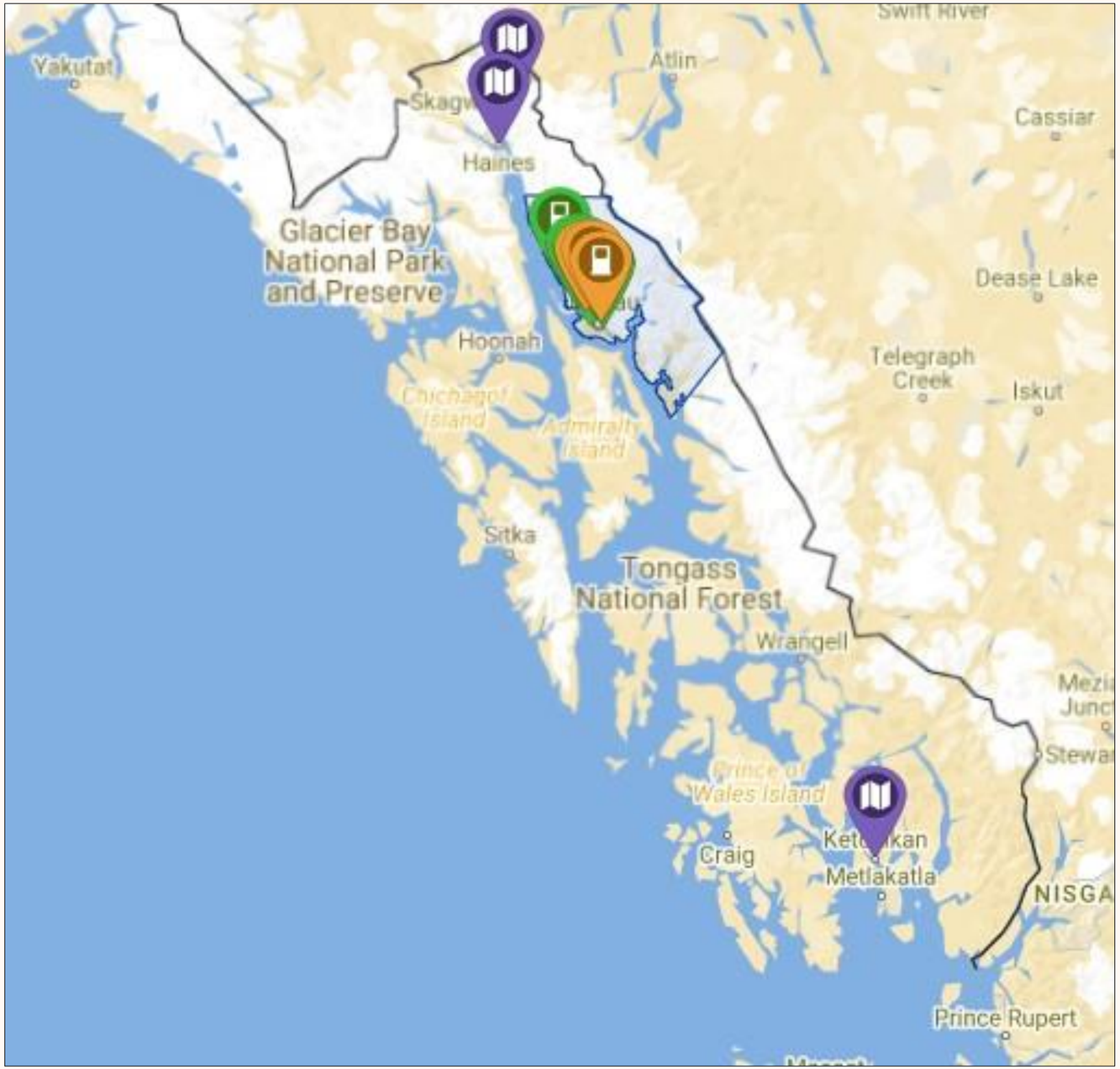


Gustavus (pop. 597) is part of Hoonah-Angoon Census area and has 16 of the 22 registered registeredEVs

Nearly three-quarters of all Southeast EVs are in Juneau.

Juneau	74%
Sitka	13%
Ketchikan	5%
Others	8%





EV Infrastructure

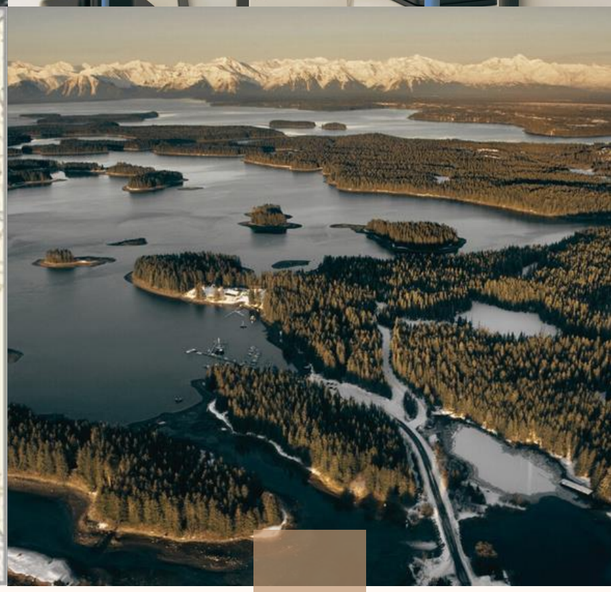
SOUTHEAST ALASKA

Juneau – Ketchikan – Skagway – Haines

Level 2 EV chargers near the public works building in Skagway, Alaska.

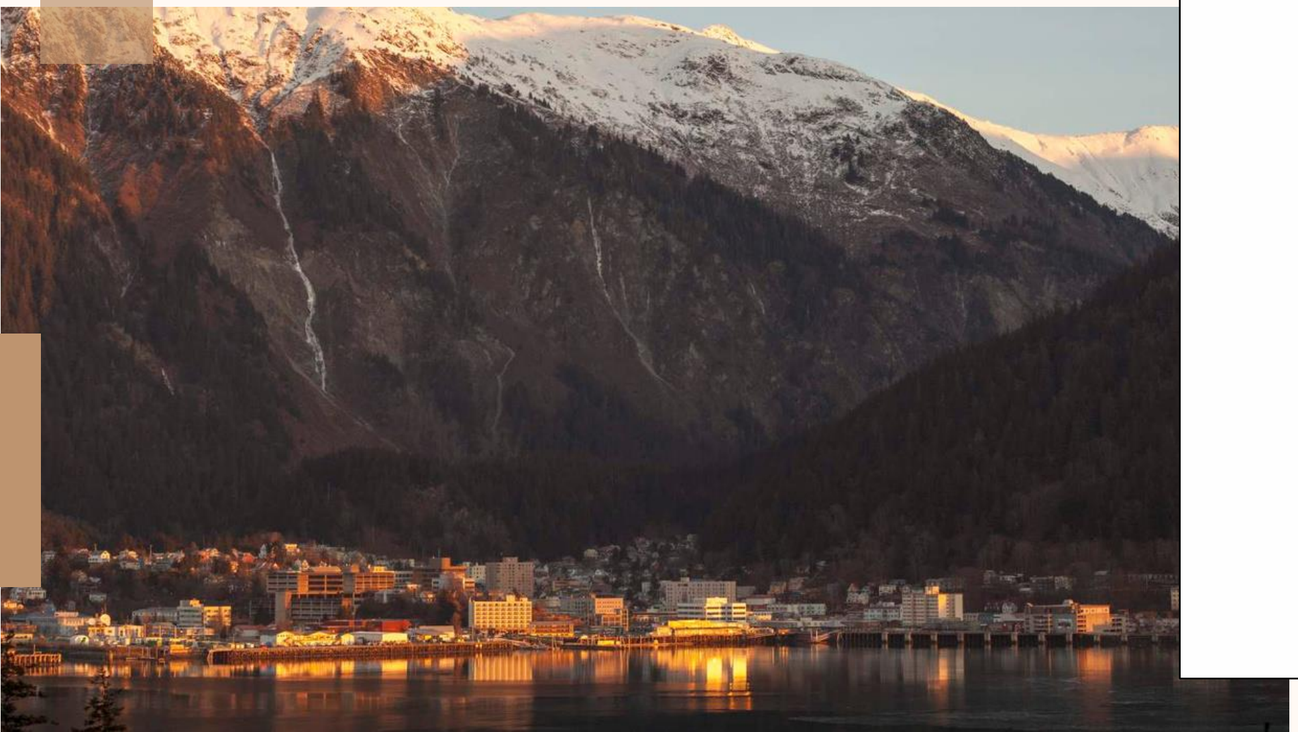
Southeast Alaska Electric Vehicle Charging Station Implementation Program

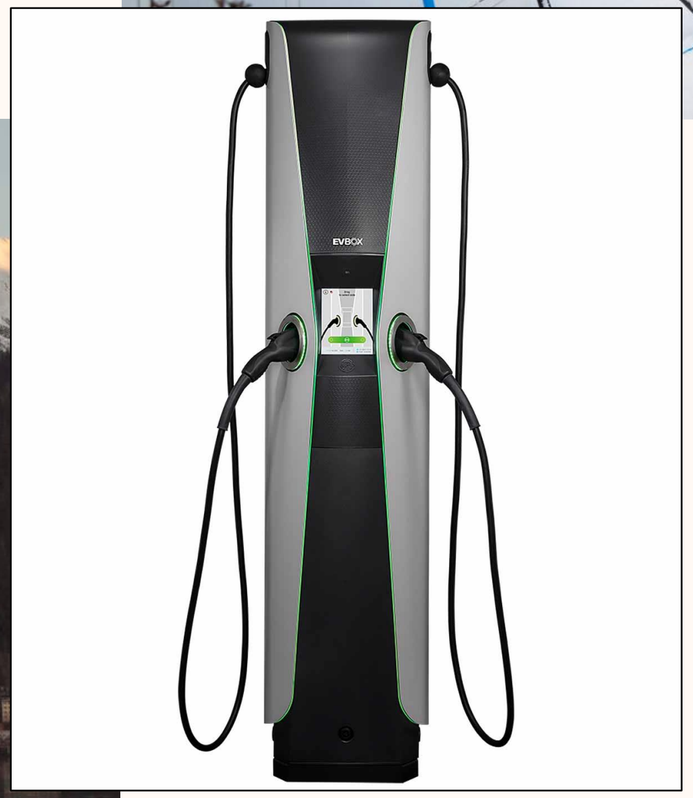
- ❑ Southeast Conference program targeting communities without public EV charging
- ❑ Funding provided by Alaska Energy Authority using Volkswagon Settlement Funds
- ❑ 80/20 match for charger, installation, site preparation and signage
- ❑ Goal: Support the construction of 6 to 10 Level 2 EVSE charging stations

By the end of 2024 …

- 4 public charging units at 2 locations in **Ketchikan** (Ketchikan Indian Community)
- 2 public charging units at 1 location in **Haines** (Bigfoot Auto)





EVBox Iqon

Vendor: Ecokruz

- 30 amps
- 7.2 kW
- 240 volts
- Wifi
- Payment transactions

Program Challenges

- Introducing new technology in regions with no current EVSE infrastructure
- Concern over who pays for electricity
- Anxiety about uptime requirements
- Lack of licensed electricians to install

Case Study

JUNEAU

Case Study

JUNEAU

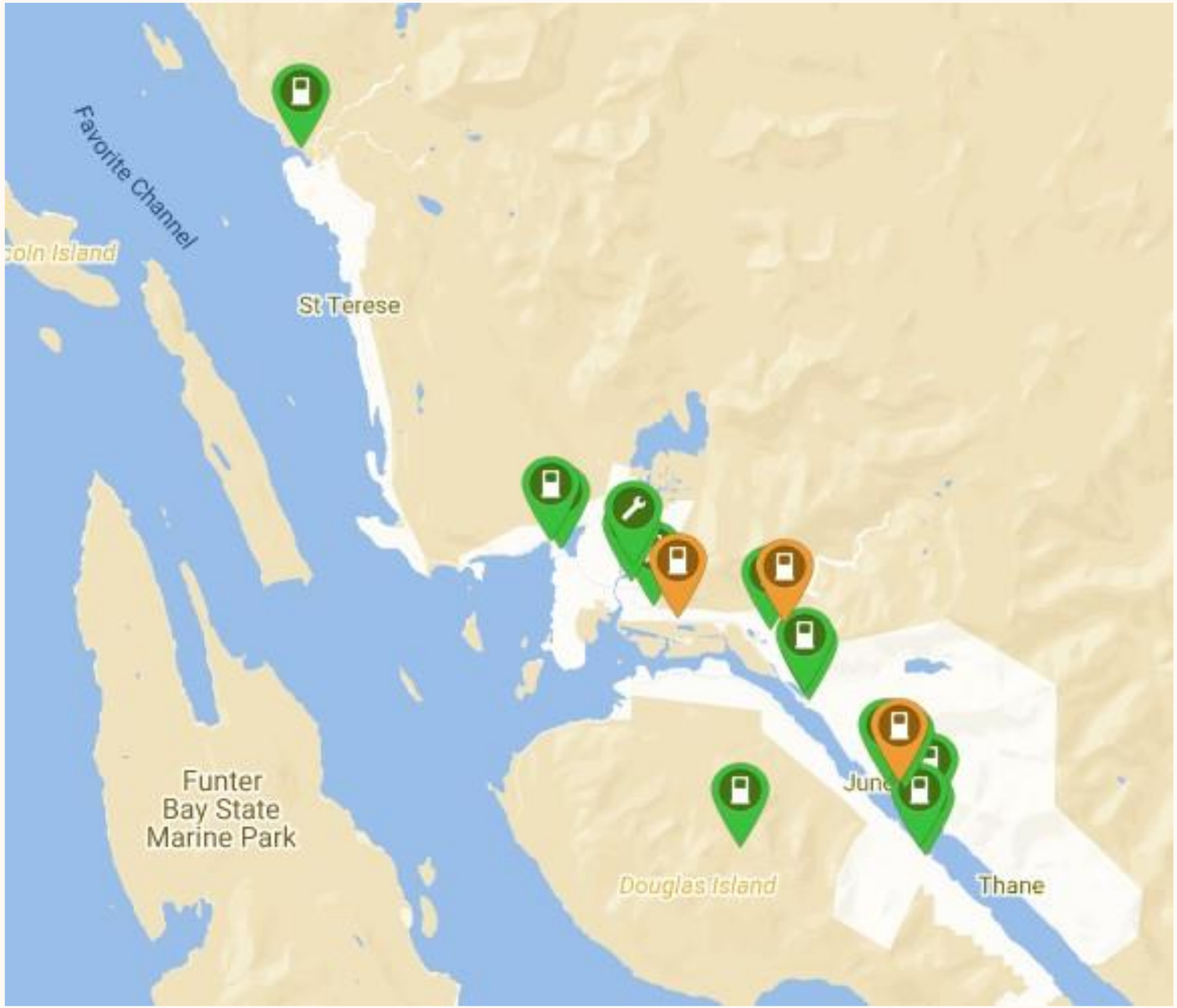
Southeast Alaska Renewable Energy Seed Cluster

Electric Vehicle Initiative (2011)

Goals

- Increase awareness
- Identify & remove barriers to EV adoption by promoting infrastructure
- Develop support services for EV servicing in Juneau

8 public charges installed by 2014



EV Infrastructure

JUNEAU

37 Public Charging Stations at 21 locations in town

Downtown
- Rock Dump
- Marine Parking Garage
- Downtown Transit Center
- State Library, Archives & Museum
- KTOO Public Radio
- Twin Lakes
- Edward Jones

Douglas
- Treadwell Arena
- Douglas Library
- Eaglecrest Ski Area

Mendenhall Valley
- Valley Transit Center
- Fred Meyer
- Kootznoowoo Plaza
- Mendenhall Valley Public Library
- University of Alaska Southeast
- Statter Harbor
- Eagle Beach Recreation Area

Lemon Creek
- Alaska Electric, Light & Power
- Alaska Brewing Co. Taproom

Public Utility Support

ALASKA ELECTRIC LIGHT & POWER

- AEL&P supplies power to 18,000 unique customers
- RCA approved “experimental” off-peak rate in 2017
  - Off-peak: **10pm to 5am**
  - **$0.06/kW** in winter
  - **$0.05/kW** in summer
- Currently 228 “Rate 93 Program” Customers
  - 128 charger rentals, $10.74 / month
  - 12 Commercial rentals
  - Chargers are Level 2 (220 volts)
- “Rate 93 Program” is separately metered

Looking Forward

AEL&P

- Adoption of smart chargers
- Grant application to develop equipment with point-of-sale system
- EV charging at multi-family homes
- Leverage existing billing and metering software systems
- Deploy at pilot sights in partnerships with THRHA
- Key fob activated

Lessons Learned

AEL&P

- ✓ Right-size equipment for the community
- ✓ Simple equipment is easy and cheap to replace (swapping units takes 20-30 minutes)
- ✓ Get ahead of demand to reduce range anxiety
- ✓ Incentivize at-home charging during off-peak hours

Southeast Conference

Beneficial Electrification

CPRG (Heat Pumps)

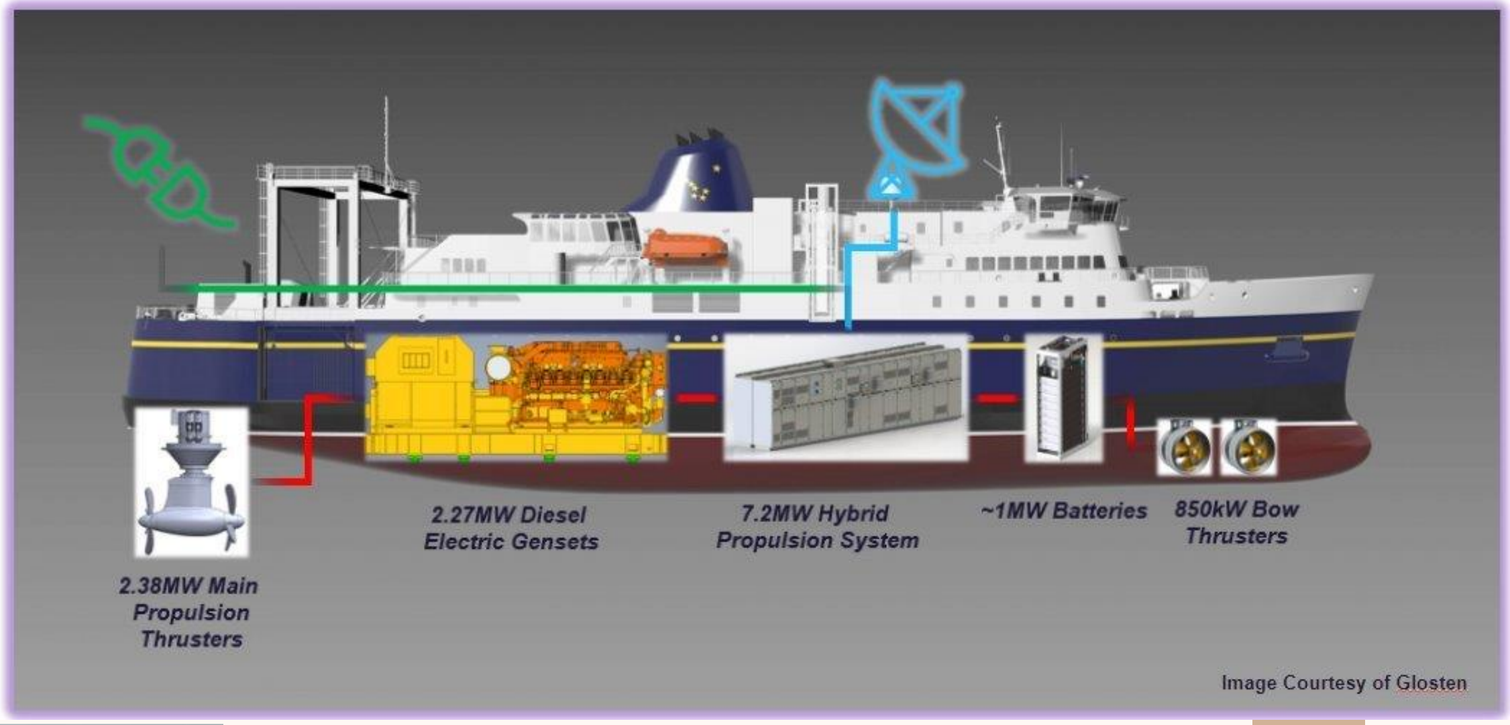
- $38.6 million award
- 6,000 heat pump installations
- Sliding scale incentives based on income ($4,000-$8,500)
- Residential buildings from Ketchikan to Kodiak
- Partnership with Alaska Heat Smart
- Program launch: Spring 2025

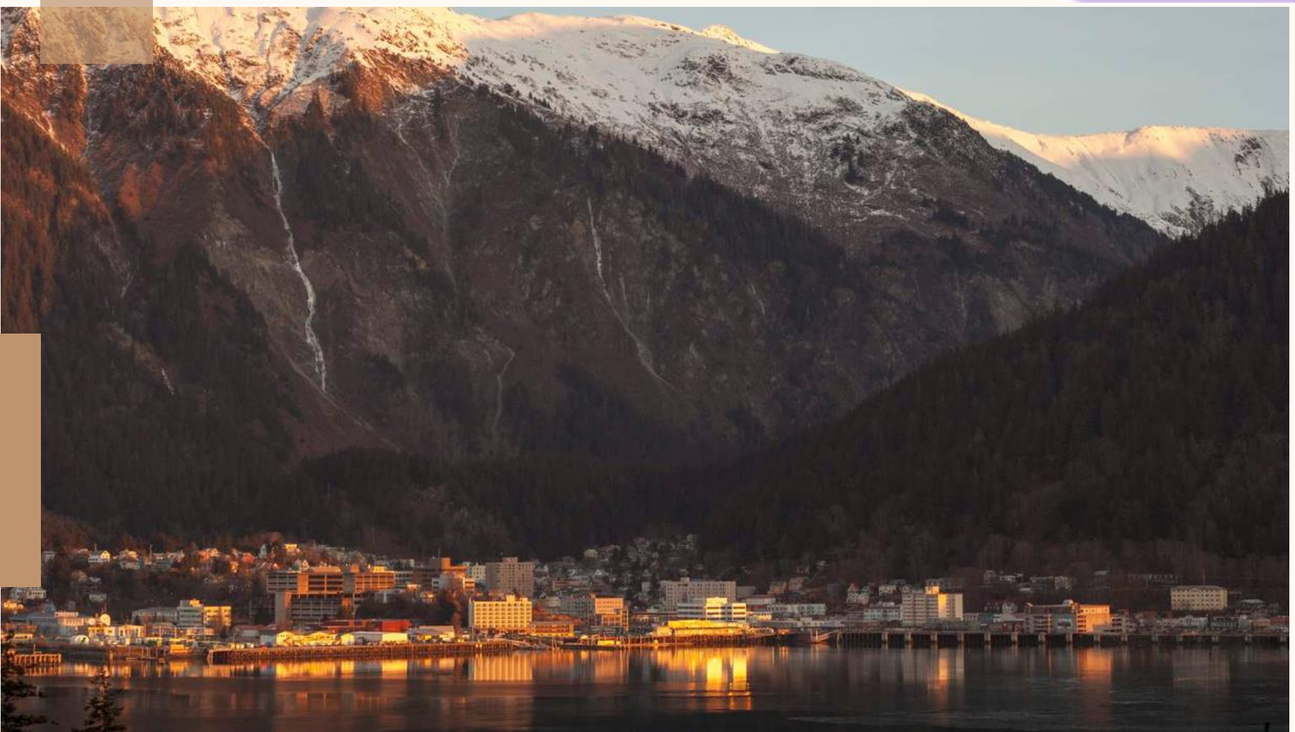
Energyshed

- DOE funded
- 6 communities in Southeast Alaska and 6 in Northwest Arctic Borough
- Energy system inventory
- Community prioritization of energy projects
- NREL technical and economic assessment of priority projects
- Launch Alaska selects 3-4 projects to bring in $10M for implementation

Low/No Emissions Ferry

- New Construction
- $53.2M in FY26
- 15 knots
- 250 passengers





Arctic Energy Ambassadors

- 12 individuals selected for 2-year terms
- Leadership, resource and knowledge sharing

REDA

- Small businesses
- Grants up to 50% of projects ($500,000 max)
- Solar, small hydro, heat pumps, refrigeration