



THE STATE  
of **ALASKA**  
GOVERNOR MIKE DUNLEAVY

**Department of Transportation and  
Public Facilities**

OFFICE OF THE COMMISSIONER  
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March 9, 2023

The Honorable Bert Stedman  
The Honorable Donny Olson  
The Honorable Lyman Hoffman  
Co-Chairs, Senate Finance Committee

*Delivered via email to [Senate.Transportation@akleg.gov](mailto:Senate.Transportation@akleg.gov)*

Dear Senate Finance Co-Chairs,

The department appreciated the opportunity to update Senate Finance Committee on February 15, 2023 regarding the Investment, Infrastructure and Jobs Act (IIJA), alternatively called the Bipartisan Infrastructure Legislation (BIL) with Acting Infrastructure Coordinator, Mike Anderson.

Sen. Bishop inquired if communities were capped on how much they can receive from the Rural Ports, Docks & Barge Landings (RPBL) program. There will most certainly be a cap on the award size in the single digit millions, however that cap is yet to be decided at this time. Final eligibility and max award information will be rolled out with the notice of funding opportunity (NOFO) later this year. It is exciting for the department to work on this program in cooperation and coordination with the Denali Commission.

Sen. Stedman asked what entities were eligible to apply for PIDP grants. From the MARAD website the eligibility for PIDP grants are “An eligible applicant for a FY 2023 PIDP discretionary grant is a port authority, a commission or its subdivision or agent under existing authority, a State or political subdivision of a State or local government, an Indian Tribe, a public agency or publicly chartered authority established by one or more States, a special purpose district with a transportation function, a multistate or multijurisdictional group of entities, or a lead entity described above jointly with a private entity or group of private entities (including the owners or operators of a facility, or collection of facilities, at a port).”

Sen. Merrick asked how many electric vehicles (EVs) are in Alaska, and where are they located. DOT&PF inquired with the DOA Commissioner’s Office and was informed that

**Vehicles Registered in 2021**

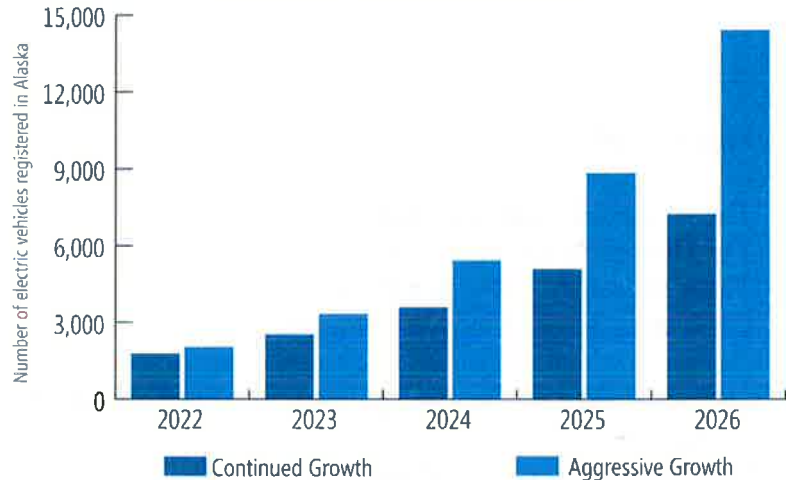
Electric (EV)	1,300
Plug-In Hybrid Electric (PHEV)	500
Hybrid Electric (HEV)	7,300
Biodiesel	7,600
Ethanol/Flex (E85)	50,100
Compressed Natural Gas (CNG)	100
Propane	0
Hydrogen	0
Methanol	0
Gasoline	464,200
Diesel	31,700

Source: Light-duty vehicle registration counts from  
[TransAtlas](#) with data from Experian Information Solutions

the Division of Motor Vehicles does not keep data regarding the location of electric vehicles (EVs) in Alaska. The Department has been unable to locate what city the vehicles are in, however, DOT&PF was able to find the following graphs that help give overall EV stats in Alaska.

Through the Bipartisan Infrastructure Legislation (BIL) National Electric Vehicle Infrastructure (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) 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 ([Alaska's NEVI Plan](#)) submitted on July 29, 2022.

**Alaska EV Growth Scenarios**



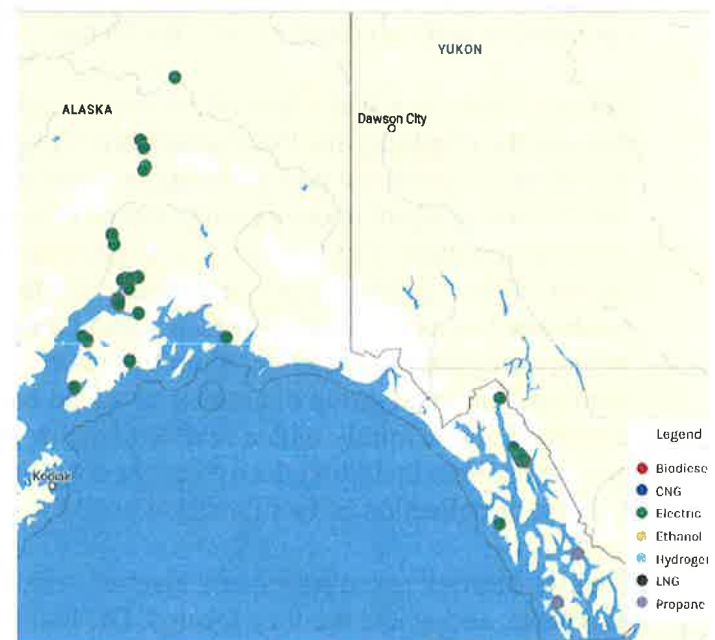
Data on EVs in Alaska is sourced from [Alaska's NEVI Plan](#) and the [Department of Energy's Alternate Fuel Data Center](#).

Senator Stedman asked the department to identify source of electricity generation and location of each EV charging station. The tables and maps below highlight the energy source portfolio in Alaska. Based on the source of electricity generation the comparison table highlights the annual CO2 emissions of various light duty vehicles.

### Fueling Stations

**118** stations in Alaska with alternative fuels

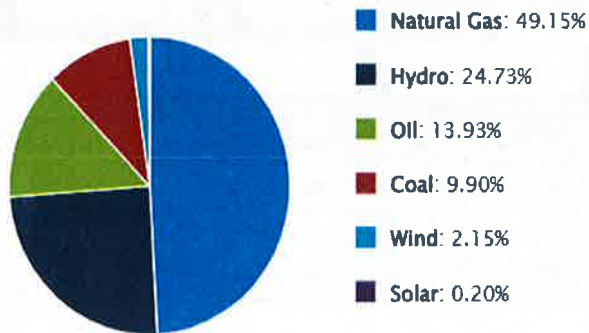
Fuel	Public	Private
<a href="#">Biodiesel (B20 and above)</a>	0	0
<a href="#">Compressed Natural Gas (CNG)</a>	1	0
<a href="#">Electric (EVSE ports)</a>	110	5
<a href="#">Ethanol (E85)</a>	0	0
<a href="#">Hydrogen</a>	0	0
<a href="#">Liquefied Natural Gas (LNG)</a>	0	0
<a href="#">Propane (LPG)</a>	2	0
<a href="#">Renewable Diesel (R20 and above)</a>	0	0



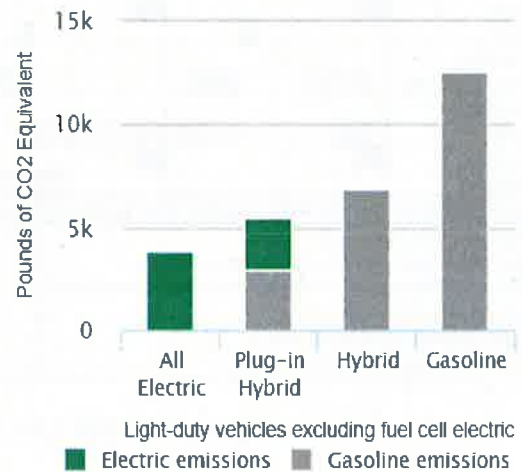
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## Electricity Sources and Vehicle Emissions

Electricity Sources  
in Alaska



Annual Emissions per Vehicle



Source: [Electricity Sources and Emissions Tool](#) based on assumptions with 2021 data from EIA

Senator Stedman asked a series of questions regarding FEMA restrictions as they exist for rebuilding in Western Alaska following Typhoon Merbok. The DOT&PF has requested information from the Department of Military and Veterans' Affairs and they are working on a response that we understand will be provided in a separate supplementary letter to the committee.

Senate Finance staff with keen eyes (Rose Foley) noted that there was an omission on slide 22 of the IIJA presentation with dark blue category. This was a text overflow issue (text was hidden on a second line outside of the chart bounding box. The dark blue label should read "Sustainability" for this slide.

Senator Stedman requested the department provide a timeline of the replacement of each vessel in the AMHS fleet. DOT&PF is working with the Alaska Marine Highway

Operations Board on specific recommendations, as directed by the Governor and Legislature, on a capital replacement plan for the AMHS fleet. Figure 1 highlights the timeline for the construction of three new vessels including the TRV, MRV, and a low-no emission shuttle ferry. Construction is dependent on funding. Additional vessel replacements are under discussion, but replacements are needed for the Tustumena, Matanuska, Columbia, LeConte, and the Aurora.

GEOGRAPHIC AREAS BY  
STRATEGIC INVESTMENT AREA

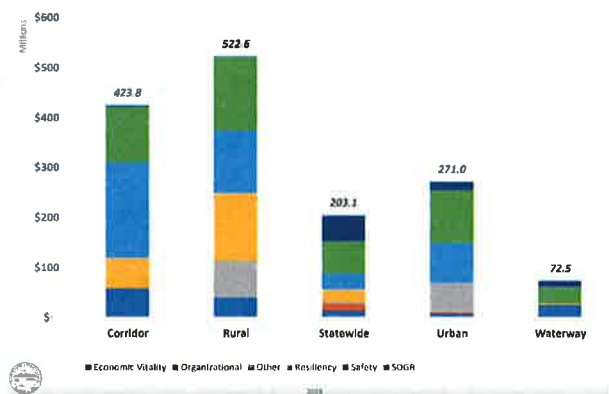


Figure 1: AMHS Five-Year Capital Improvement Program

Life Stage	Opportunity	Value (\$M)	Priority Ranking
New (0-20 Years)	Tazlina	\$4M	High
	Lituya	\$2M	High
	Kennicott	\$33M	High
Midlife (20-30 Years)	Aurora	\$13M	High
	LeConte	\$9M	High
	Columbia	\$17M	High
Post-Midlife (30-50 Years)	Tustumena	\$50M	High
	Matanuska	\$79M	High
	Total	\$41.5M	High
Old (50+ Years)	Aurora	\$4.8M	Medium
	LeConte	\$1.5M	Medium
	Columbia	\$8.1M	Medium
Old (50+ Years)	Aurora	\$2.3M	Medium
	LeConte	\$4.0M	Medium
	Columbia	\$1.9M	Medium
Old (50+ Years)	Aurora	\$5.5M	Low
	LeConte	\$3.5M	Low
	Columbia	\$7.1M	Low
Old (50+ Years)	Tustumena	\$3.9M	Low
	Matanuska	\$9.5M	Low
	Total	\$62.9M	Low

Figure 3 depicts vessel ages in the AMHS fleet and the number of years past the ideal retirement age of 30 years. In general, 30 years is the end of the “prime or mid-life” vessel lifespan; after



this point, vessels are more likely to require additional maintenance. The average vessel age of the current AMHS fleet is 34.1 years old.

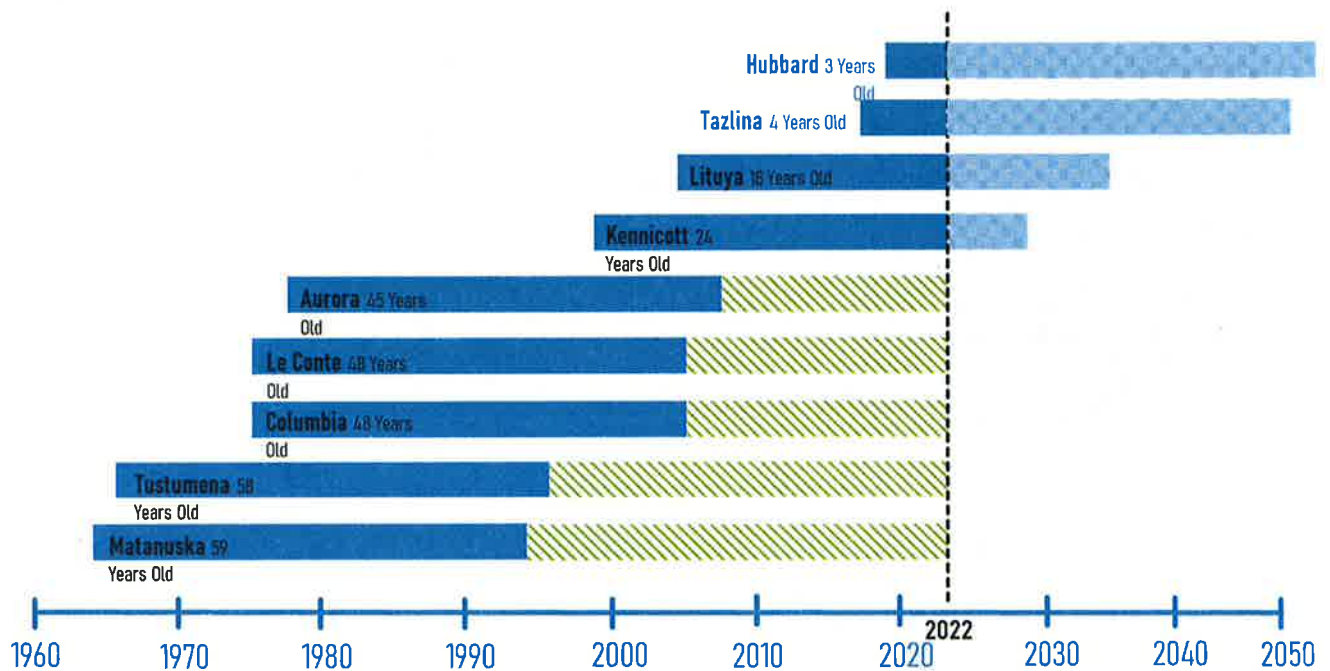


Figure 3: AMHS Fleet Age Compared to Prime of Thirty Years

Senator Stedman then asked the department to provide an update on the Matanuska and Columbia vessels that should include information about the asbestos and corrosion findings. Staff worked diligently to craft the two reports responsive to that request. Please find “Attachment 01 - 20230307 Matanuska Status Update” and “Attachment 02 - COL ENG ERR Columbia Oily Water Overboard Discharge” enclosed with this letter.

Senator Hoffman asked about AMHS modernization projects for areas such as Kodiak, Aleutian and Western Alaska docks and terminals. AMHS vessels currently visit thirty-seven coastal communities (43 port facilities). The ownership and configuration of the facilities vary widely; they include state and foreign-owned ferry terminals, city-owned freight wharves, and privately owned fish processing docks. The above water components of each facility are inspected biennially (SE on odd years, SC & SW on even years,) and underwater inspections are performed on a five-year cycle.

The Federal Transit Administration (FTA) recently awarded DOT&PF \$45,478,414 to increase the sustainability of five current rural AMHS port operations, ensuring service continues into three disadvantaged communities and improving the safety and efficiency of operations from two hub communities that are essential to regional operations; the project will upgrade dock infrastructure in Juneau and Cordova, and replace current docks in Pelican, Tatitlek, and Chenega, without which service may cease.

There are over a dozen active ferry terminal projects (Table 1) currently in progress, from scoping through construction. Figure 1 depicts the approximate timeline for these projects. Currently, there are no active projects in Kodiak or along the Aleutian Chain.

Figure 4: AMHS Ferry Terminal Capital Improvement Program

AMHS 5-Year Ferry Terminal Capital Improvement Projects Schedule (As of Feb 2023)																								
	CY 2023												CY 2024											
	Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Angoon																								
Auke Bay																								
Cascade Pt.																								
Chenega																								
Cordova																								
Gustavus																								
Kake																								
Ketchikan																								
Pelican																								
Prince Rupert																								
Saxman																								
Skagway																								
Tatitlek																								
Construction	Design	Scoping	*Capital Improvement Projects & New Construction Projects are subject to funding and parts availability																					

Table 1: Active AMHS Ferry Terminal Capital Improvement Projects

Project	Project Number	Scope	Cost Estimate (\$m)	Phase
Angoon Ferry Terminal Improvements	SFHWY00466	Scope includes installation of marines structures to accommodate the Alaska Class Ferry vessel and modifications to intermediate ramp/apron lift system controls to improve reliability.	\$3.80	Design
Auke Bay East Berth Terminal Improvements	SAMHS00419	This project is structured in multiple phases. Current phase scope includes replacement of marine structures at the East side berth.	\$11.20	Design
Auke Bay Terminal Building and Electrical Improvements	SAMHS00279	Scope Includes remodeling of terminal building and shore-tie power improvements to the East side berth	\$1.30	Construction
Cascade Point Ferry Terminal		Scope includes construction of new end berth facility at Cascade Point to accommodate the Alaska Class Ferry vessel.		Scoping
Chenega Ferry Terminal Improvements	SFHWY00461	Scope includes installation of transfer bridge and marine structures to accommodate the Alaska Class Ferry vessel.	\$12.60	Design
Cordova Ferry Terminal Improvements	SFHWY00465	Scope includes installation of marine structures and modifications to existing berth to accommodate the Alaska Class Ferry vessel.	\$6.20	Design
Gustavus Ferry Terminal Improvements	Z681280000	Scope includes pile supported lift towers for new bridge hoist system and separation of ferry and public harbor access.	\$12.40	Construction
Kake				
Ketchikan Ferry Terminal Improvements	Z674660000	Scope includes improvements to side fendering system, addition of marine structure access gangway, and electrical improvements.	\$3.30	Construction
Pelican Ferry Terminal Improvements	SFHWY00462	Scope includes construction of new ferry berth to accommodate the Alaska Class Ferry vessel.	\$13.60	Design
Prince Rupert Ferry Terminal Acquisition & Refurbishment	Z685310000	Scope revised to include renegotiation of lease agreement with Prince Rupert Port Authority to incorporate the necessary improvements to berth AMHS vessels into new agreement.		Design
Saxman Ferry Terminal		Scope includes construction of new end berth facility at the Saxman seaport to accommodate the M/V Lituya.		Scoping
Skagway Ferry Terminal		Scope includes construction of new berth at the Skagway Ore Peninsula site. Funding agreement in place to develop preliminary design.		Scoping
Skagway Ferry Terminal Modifications	Z696240000	Scope being revised to reduce the work focused on mooring chain replacement and minor transfer and pedestrian bridge improvements.	\$2	Design
Tatitlek Ferry Terminal Improvements	SFHWY00460	Scope includes installation of transfer bridge and marine structures to accommodate the Alaska Class Ferry vessel	\$10.60	Design
Yakutat Ferry Terminal		Scope includes construction of new dedicated AMHS berth with roll on-roll off capabilities. This project has yet to be programmed in the STIP.		Scoping

## Shoreside 2021 Fleet Condition Survey

Shore Facilities Conditions Survey Reports are completed by DOT&PF's Southcoast Region Marine Engineering Section; the most recent report was completed in 2021. The primary purpose of this survey is to provide an overview of the present condition of the terminals to ensure the safety of the structures, aid planners in programming for future development, assist maintenance personnel with upkeep, and alert AMHS managers of operational constraints. The above water

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components of each facility are inspected biennially, and underwater inspections are performed on a five-year cycle. The ownership and configuration of the facilities vary widely, they include state and foreign-owned ferry terminals, city-owned freight wharves, and privately owned fish processing docks. A rating results from each inspection (Table 2).

*Table 2: Shore Infrastructure Condition Survey 2021*

Terminal	Rating (out of 9)	Ownership
Akutan	5	Aleutians East Borough
Chignik	9	Trident Seafoods
Cold Bay	5	Aleutians East Borough
False Pass	7	Village of False Pass
King Cove	5	Aleutians East Borough
Kodiak (Pier 1)	9	City of Kodiak
Kodiak (Pier 2)	7	City of Kodiak
Old Harbor	9	City of Old Harbor
Ouzinkie	9	City of Ouzinkie
Port Lions	9	City of Port Lions
Sand Point	5	City of Sand Point
Unalaska (Dutch Harbor)	9	City of Unalaska

Senator Hoffman requested a consideration as to who should operate the Port of Alaska; the Municipality of Anchorage (MOA) or the State of Alaska (SOA). This very discussion occurred several years ago between DOT&PF Central Region and MOA at the request of Mayor Berkowitz. Both parties put forward differing considerations and requirements that did not result in agreement on direction. The primary point of difference was ownership responsibilities. That was the last communication staff is aware of on the topic. A new conversation with the current MOA leadership could be conducted if interest from Mayor Bronson was expressed.

Senator Olson asked if the Diomedes ice runway is still being advanced, and what funds are used for that effort. In checking with our Northern Region staff, they confirmed that previously the village/city utilized a state dozer to construct a runway on the ice annually. For the past ten years or so, conditions have not been cold enough to allow for suitable sea ice thickness to support runway construction.

Please let my office know if there is anything more the department can provide your office through our legislative liaison, Andy Mills, [andy.mills@alaska.gov](mailto:andy.mills@alaska.gov), 907-465-8124.

Sincerely,



Ryan Anderson, P.E.  
Commissioner, DOT&PF

Enclosure

cc: Andy Mills, Legislative Liaison, DOT&PF  
Laura Stidolph, Legislative Director, Office of the Governor