

FY 2022 Passenger Ferry Grant Program, Electric and Low-Emitting Ferry Pilot, and Ferry Service for Rural Communities

Applicant and Proposal Profile

Is this a resubmission due to an invalid/error message from FTA? Yes No

Is this application for:

(If applying to two programs, please select both boxes)

- Passenger Ferry Grant Program (FTA-2022-006-TPM-FERRY)
- Electric or Low-Emitting Ferry Pilot Program (FTA-2022-007-TPM-FERRYPILOT)
- Ferry Service for Rural Communities Program (FTA-2022-008-TPM-FERRYRURAL)

If applying to more than one Ferry program, applicants should enter information for the applicable programs on this form but **Must** submit the application package including the Supplemental Form and attachments, to **Each** respective Opportunity ID on Grants.Gov. That is, complete one form, but submit it to each program in Grants.gov.

Section I. Applicant Information

Organization Legal Name:

FTA Recipient ID Number :

Organization Chief Executive Officer:
(Name and Direct Phone Number)

- Applicant Type:
- Designated or Eligible Direct Recipient of 5307 Urbanized Area Formula Funding
 - State or Territory
 - Local Governmental Authority
 - A Federally-Recognized Indian Tribe

- Project Location:
- Large Urbanized Area (200,000+ people)
 - Small Urbanized Area (50,000-199,999 people)
 - Rural (less than 50,000 people)

Description of services provided and areas served:

The Alaska Marine Highway System (AMHS) serves 35 Alaska ports by transporting passengers and vehicles between coastal communities. This service helps meet the social, educational, health and economic needs of Alaskans. AMHS provides year-round scheduled ferry service throughout Southeast and Southwest Alaska, extending south to Prince Rupert, British Columbia and Bellingham, Washington. The system connects communities with each other, regional centers, and the continental road system. It is an integral part of Alaska’s highway system, reaching many communities that would otherwise be cut off from the rest of the state and nation. AMHS also provides a coastal transportation alternative between Anchorage and the “Lower 48” states versus driving the Alaska Highway.

AMHS is designed to provide basic transportation services to communities; transportation that allows community access to health services, commodities, legal services, government services, and social services; transportation that meets the social needs of isolated communities; and transportation that provides a base for economic development. AMHS service is divided into two major systems: the Southeast System (from Bellingham north to Yakutat) and the Southwest System (from Cordova west to Unalaska). The Alaska Marine Highway fleet consists of 9 vessels; six operate in the Southeast System and three operate in the Southwest System. All 9 vessels are designed to carry passengers and vehicles ranging in size from motorcycles to large freight container vans. Trips on AMHS can last

several hours or several days, so passenger services are an important aspect of the state’s transportation service. Most vessels provide food service, shower facilities, observation lounges, and recliner lounges. The larger vessels provide additional amenities, including play areas for children. Four vessels have stateroom accommodations for overnight travel.

One regular use of AMHS is the year-round transportation of container vans. These vans transport time-sensitive cargo such as fresh vegetables, meat, and dairy products from Bellingham and regional Alaska centers to communities served by the system. Local restaurants, grocery stores, individuals, and food distribution businesses have established delivery schedules with AMHS to ensure regular and continuous delivery of perishable goods. Shipping perishable supplies on AMHS is more cost-effective than air freight, and in many cases ensures delivery to communities on a more frequent basis than commercial barge and freight lines. Vans are also used to move fresh Alaska fish and seafood to markets, and to transport U.S. mail and household goods.

The Southwest system serves Prince William Sound, the Kenai Peninsula, Kodiak Island, and the Aleutians. The MV Tustumena provides regular service between Kodiak, Port Lions, Seldovia and Homer. The Southwest routes connect to the continental road system at Valdez, Whittier, and Homer, Alaska. The MV Kennicott provides regular cross gulf sailings. These sailings connect Southeast Alaska with the Southcentral and Southwest regions of the state. The Southeast route is divided into two subsystems: the “mainline” routes which typically take more than one day for the ship to travel and shorter routes where vessels depart their home port in the morning, travel to destination ports and then return to their home port on the same day. The mainline routes carry a high percentage of tourists and vehicles in the summer, and provide service between Bellingham, WA or Prince Rupert, BC, and Skagway or Haines, Alaska. Along the way, the ships stop in Ketchikan, Wrangell, Petersburg, Sitka, Juneau, and Haines. Although Kake and Hoonah are smaller communities, they are also served by certain mainline sailings. The day boat routes connect the smaller communities to regional hub communities for commerce, government, health services, and connections to other transportation systems.

Section II. Project Information

About the Project

Project Title: Modernization of Four Critical Alaska Marine Highway System (AMHS) Vessels Necessary for Service and Environmental Benefits
(Descriptive title of this project)

Project Executive Summary:

This project addresses needs of four AMHS vessels, improving operational status, service to communities, and environmental benefits. The Columbia is the largest vessel in the AMHS fleet; this project will replace the controllable pitch propeller (CPP) needed as extensive rehabilitation of machinery and structures on an ongoing basis interrupts service to communities. The Matanuska is one of the fleet’s older ships, serving major routes, and modernization will include extensive refurbishment of crew and passenger quarters, replacement of wasted steel, plumbing, electrical, and safety improvements, and other vessel upgrades as recommended in the Fleet Condition Survey and responding to Coast Guard Inspection status and compliance. The Tazlina provides essential service on minor routes, supporting Alaska’s most rural and disadvantaged communities. The retrofit for Tazlina is to refurbish crew quarters, replace the galley, scullery, and mess spaces, and replace all electrical, plumbing, and safety features. The Kennicott is another of Alaska’s fleet serving a major route. This retrofit will include the design and construction to address emissions upgrade requirements, including identifying alternative or new engineering control systems such as installation of a new in-port or onboard vessel use generator; and exhaust upgrades to assure compliance with ADEC/EPA emission standards. Three of these vessels are diesel and one will be a diesel hybrid, and the age of the asset relative to useful life varies – Matanuska (60 of 30), Columbia (48 of 30), Tazlina (3 of 30), and the Kennicott (24 of 30). The Tazlina, while the youngest, needs repurposing to allow for repositioning with the AMHS route schedule, increasing the service range of the vessel. This project would result in reduced greenhouse gas emissions for the Tazlina and Kennicott, as well as reduced particulate and pollutant matter. All four projects can be obligated within 12 months.

Project Statement of Work (one sentence summarizing request):

This bundled project will address shovel-ready projects for vessel improvements that will contribute to more reliable and improved

service, environmental benefits, increased safety and the state of good repair, and continued quality of transit to underserved communities; the modernization efforts will improve passenger experience and operational activities on the Columbia and Matanuska, increase the route options of the Tazlina, and improve environmental considerations of the Kennicott.

Will you need a Buy America waiver? Yes No

- Propulsion Type:
- Battery electric
 - CNG
 - Diesel
 - Diesel-electric hybrid
 - Electricity (including electricity from solar energy)
 - Fuels (except alcohol) derived from biological materials
 - Gasoline
 - Hydrogen
 - Liquefied petroleum gas
 - Methanol, denatured ethanol, and other alcohols
 - Natural Gas
 - A mixture containing at least 85% of methanol, denatured ethanol, and other alcohols by volume with gasoline or other fuels
 - Any other fuel that is not substantially petroleum and that would yield substantial energy security and environmental benefits

If other fuel, specify:

Other

If Other, specify:

- Project Type:
- Facility Rehabilitation
 - Facility Replacement
 - New Facility (expansion)
 - New Vessel (expansion)
 - Number of vessels for service expansion:
 - Vessel Rehabilitation
 - Number of vessels to be rehabilitated:
 - Vessel Replacement
 - Number of vessels to be replaced:
 - Related Equipment
 - Operating (Rural Program Only)
 - Planning (Rural Program Only)
 - Other

If Other, specify:

Climate Change

Please describe the significant community benefits relating to the environment (see NOFO section E.2):

This project results in newer vessel components and technologies that contribute to emission and particulate reduction, as well as overall efficiency. Land use plans in coastal communities include density in relation to ferry terminals. DOT&PF uses EPA’s EJSCREEN in projects; the project is consistent with the region’s Climate Action Plans and will be reflected in the State’s equitable development planning. Ferry service planning accounts for climate and resilience adaptation and mitigation.

Environmental Justice Populations

Is there an environmental justice population(s) located within the service area? Yes No

Describe the environmental justice population(s) and the anticipated benefits resulting from the project for those population(s) (see NOFO Section E.2):

The bundling of this project has been part of the planning process to maximize the benefits to the greatest number of disadvantaged communities. The communities served by this project all face low transportation access and high transportation cost barriers. The vast majority of the communities are not accessible by road so the cost of transporting freight and travel for individuals is quite high. As a public transportation system, the AMHS provides affordable transportation options for people who might not otherwise be able to travel at all. In rural Alaskan towns, a ferry ride is a slower but more affordable way to the city than an air taxi or float plane. In winter severe weather makes air transportation risky and unreliable. Lack of ferry service leads to a host of logistical problems, ranging from broken vehicles to stranded fishing gear and construction equipment. Locals may spend up to four times as much to barge freight if ferries are not available.

Racial Equity/Barriers to Opportunity

Does the project address racial equity or barriers to opportunity (see NOFO Section E.2)? Yes No

If yes, please describe:

This project promotes racial equity and removes barriers to opportunity. The AMHS is at the heart of Alaska’s equitable approach to ensuring the benefits of affordable transportation. This publicly subsidized system ensures that coastal communities (the majority of which are considered disadvantaged) have high costs and limited service mitigated. Coastal communities’ land use policies and housing take into account distance from the ferry terminal and dock access. The State’s sustainable transportation program and future transportation equity plan take into account the AMHS. This project is essential to continued service to communities that would otherwise be further disadvantaged; the projects proactively advance racial equity and address a barrier to opportunity if they were to otherwise fail. Because the alternative to the projects is no or reduced ferry service, all project costs are considered investments in addressing racial equity or removing barriers to opportunity.

Creating Good-Paying Jobs

Applicants for facility projects, please describe how the project will support creating good paying jobs (see NOFO section E.2):

DOT&PF contracts implement equity-focused policies and labor standards related to all phases of contracting and construction and requires payment of Davis-Bacon wages when applicable. For communities with few opportunities, AMHS provides good career jobs. AMHS employees are represented by three unions. 95% of AMHS employees are residents of 44 communities. Contractors are required to seek out minority and local hires and fully utilize any training programs in the area.

Justice40

Does the project support the Justice40 Initiative? Yes No

Describe how the project supports the Justice40 Initiative and the benefits provided (see NOFO Section E.2):

The project will support the Justice40 Initiative by strengthening the resiliency of a vital transportation system in the face of extreme impacts from climate change and by connecting disadvantaged rural communities to commerce, health and social services, and providing an economical way to bring food and other goods and services in. Communities served by these four vessel retrofits are without reliable and affordable transportation otherwise, given harsh climate and remoteness, which speaks to environmental justice. Transportation planning in Alaska accounts for both environmental justice and climate change, and this project includes design components that result in greater efficiency and contribute to climate change mitigation. Resilience to climate change in the transportation network is particularly important in Alaska, where climate change puts much of the state at increased risk for natural disasters. The AMHS has also been integrated into the state’s emergency response system.

Describe the methodology used to determine the project meets the Justice40 Initiative (see NOFO Section E.2):

Many of the datasets in various Justice40 screening tools are not complete for Alaska and the data that is used is not always applicable to Alaska. Some environmental datasets did not include Alaska, but the Climate and Economic Justice Screening Tool lists a number of communities in high percentiles. Every community on the route is listed as a Medically Underserved area by the EJSCREEN tool. This project will be highlighted within the State’s future equitable development plan. 15 of the 33 served communities on the AMHS route are considered Tribal or Disadvantaged, though other datasets (e.g., USDA or HUD) would consider all communities served as Tribal and additional communities as Difficult Development Areas or climate-impacted. Climate

Action Plans at the local and regional level have identified emission reduction as a goal. DOT&PF project planning is comprehensive process that will involve local stakeholders, as well, to contribute to awareness of disadvantage within communities.

Justice40 Population Impacted

Justice40 Disadvantaged Community Served as Identified in the NOFO Section E.2

Actual or Estimated Annual Ridership Count

Ketchikan (Saxman)	13,295
Haines (Klukwan)	21,035
Seldovia	6,356
Angoon	2,894
Gustavus	3,802
Hoonah	4,161
Kake	452
Petersburg	2,257
Chenega Bay	61
Port Lions	861

What is the percentage of Disadvantaged Communities within the project area? %

Was this estimate generated using the Justice40 online mapping tool? Yes No

Project Budget

Description	QTY	Federal Amount Requested	Federal Match Amount	Other Federal Funds	Other	Total Cost	
Columbia Controllable Pitch Propeller	1	10,986,180	2,746,545	0	0	13,732,725	<input checked="" type="checkbox"/>

Description	QTY	Federal Amount Requested	Federal Match Amount	Other Federal Funds	Other	Total Cost	
Matanuska Safety Improvements	1	29,974,471	7,493,618	0	0	37,468,089	<input checked="" type="checkbox"/>

Description	QTY	Federal Amount Requested	Federal Match Amount	Other Federal Funds	Other	Total Cost	
Kennicott Emissions and Exhaust Upgrades	1	11,104,894	2,776,224	0	0	13,881,118	<input checked="" type="checkbox"/>

Description	QTY	Federal Amount Requested	Federal Match Amount	Other Federal Funds	Other	Total Cost	
Tazlina Crew Quarters Construction and Modernization	1	20,000,000	5,000,000	0	0	25,000,000	<input checked="" type="checkbox"/>

	Total:	72,065,545	18,016,387	0	0	90,081,932	
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Operating Support (Rural Program Only)

Rural Ferry Program applicants requesting operating assistance should complete the following based on the applicant's fiscal year.

	A. Total Operating Cost**	B. Operating Support Provided by the State	C. Fares and Other System Generated Revenues	D. Other Funding Sources*
2017	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2018	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2019	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<i>Anticipated*</i>				Amount Eligible to Apply
2023	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2024	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

*do not include funds anticipated through this application

** Column B+C+D=A for 2017-2019

2017-2019 Average Operating Support Provided by the State or locality:

75 Percent (minimum that must be provided) of 2017-2019 Average Operating Support Provided by the State or locality:

Matching Funds Information

Matching Funds Amount:

Source of Matching Funds:

The State of Alaska DOT&PF is the source of non-federal matching funds. These funds are currently available and have been appropriated to the project. DOT&PF is committed to this match due to the disadvantaged status of AMHS-served communities, as described below.

Disadvantaged Community Status:

The communities of Sand Point, False Pass, Akutan, Chenega, Tatitlek, Seldovia, Saxman, Ouzinkie, Chignik, Kake, and Metlakatla are all federally recognized Alaska Native Villages and therefore have Disadvantaged Community Status.

Environmental Factors:

Environmental data is from the EJScreen Tool and the Climate and Economic Justice Screening Tool. Many communities on AMHS routes face environmental and climate change challenges. Expected population loss rate is high for the following communities: Sand Point, Cold Bay, False Pass, and Akutan are at the 83rd percentile. Klukwan is at the 99th percentile. Homer is at the 81st percentile. Seldovia is at the 98th percentile. Ouzinkie is at the 89th percentile. Chignik is at the 99th percentile. Yakutat is at the 92nd percentile. Diesel particulate matter exposure is high in Ketchikan and Kodiak, where one census tract in each community is at the 99th percentile. Five communities have high proximity to Risk Management Plan (RMP) facilities: Unalaska at the 92nd percentile, Cordova at the 87th percentile, Ketchikan at the 91st percentile in one census tract and 98th in another, Kodiak in three census tracts (81st percentile, 98th percentile, 99th percentile), and Sitka at the 81st percentile in one census tract.

Health Factors:

Twenty-five communities are in Medically Underserved Areas according to the EJScreen tool: Ketchikan, Saxman, Wrangell, Kake, Juneau, Haines, Klukwan, Skagway, Cordova, Valdez, Whittier, Chenega, Tatitlek, Yakutat, Kodiak, Homer, Seldovia, Ouzinkie, Chignik, Sand Point, King Cove, False Pass, Akutan, and Unalaska. EJScreen lists four communities in food deserts: Wrangell, Kake, Klukwan, and Chignik. Other health data came from the Climate and Economic Justice Screening Tool. Four communities on AMHS routes have high rates of asthma among adults, with Klukwan at the 91st percentile, Ouzinkie at the 85th percentile, Chignik at the 93rd, and Metlakatla at the 93rd percentile. Two communities have high rates of both diagnosed diabetes and coronary heart disease among adults: Klukwan is in the 92nd percentile for diabetes and the 96th for heart disease and Metlakatla is in the 94th percentile for diabetes and the 83rd percentile for heart disease. One census tract in Juneau is in the 92nd percentile for low life expectancy.

Socioeconomic Factors:

Socioeconomic data is from the Climate and Economic Justice Screening Tool. Klukwan is in the 90th percentile for low median household income as a percent of area median income, Chignik is in the 88th percentile for the same metric and one census tract in Ketchikan is in the 80th percentile. Four census tracts along AMHS routes are at the 80th percentile or above for linguistic isolation: one census tract in Ketchikan is at the 80th percentile, two census tracts in Kodiak are in the 80th percentile and one census tract in Kodiak is in the 85th percentile. Four communities have very high unemployment rates: One census tract in Ketchikan is at the 85th percentile, Ouzinkie is at the 93rd percentile, Chignik is in the 95th percentile, and Metlakatla is in the 97th percentile.

Supporting Documentation of Local Match:

The Alaska Department of Transportation and Public Facilities (DOT&PF) is the State Transportation Agency that plans, designs, constructs, maintains, and operates transportation infrastructure in the State of Alaska. DOT&PF has a proven track record of utilizing FHWA formula funds, through surface transportation grants, and constructing maritime infrastructure in support of the operations of AMHS, which is a division of DOT&PF.

DOT&PF is committed to the long-term sustainability of the AMHS. The M/V Columbia, Kennicott, Tazlina, and Matanuska are critical links in Alaska's transportation system. These vessels tie together ports, towns, and cities across the system, covering 3,500 service miles, and their service affects the lives and livelihoods of many Alaskans. Refurbishments of these vessels will mean improved quality of service to rural and disadvantaged communities, greater operational efficiency and cost savings, and the health and safety of residents and mariners.

The total project cost is \$90,081,932 Through the Rural Ferry grant program, the State is requesting \$72,065,546 which is 80% of the total eligible project cost.

The State of Alaska commits to contributing twenty percent (\$18,016,386) of the total eligible project cost towards this critical State need. This is equivalent to 20% percent of the Rural Ferry Program grant request. These funds are currently available and budgeted. DOT&PF undertakes this project as a sponsor and experienced project manager building a sustainable AMHS.

DOT&PF has included its match commitment and local letters of support in Appendix C. All project documents are located at <https://dot.alaska.gov/amhob/strategy.shtml> under Item 1.4 "IJA Funding and Discretionary Grants." Appendix A provides maps and routes for the AMHS, and Appendix B is a Technical Volume providing any condition reports or implementation plans.

Project Scalability

Is Project Scope scalable? Yes No

If Yes, specify minimum Federal Funds necessary:

Provide explanation of scalability with specific references to the budget line items above:

Two options for scaling the project bundle are outlined below and provide options for a federal request of \$54,065,546 (first) and \$42,960,651 (second).

The first option for scalability is to bring the Tazlina Modernization to design only. This would reduce its total project costs to \$2,500,000, with a \$2 million Rural Ferry request, and \$500,000 in State match.

The second option is to reduce the Tazlina to design only, and to delay the Kennicott. This would mean to proceed according to budget with Columbia and Matanuska retrofits, bring the Tazlina through design, and consider construction for Kennicott and Tazlina in future years. The total project cost for this scaled bundle would be \$53,700,814, with the Rural Ferry request at \$42,960,651, and State match of \$10,740,163.

Project Timeline (Please be as specific as possible)

Timeline Item Description

Timeline Item Date

PDA Phase 2 Tazlina	10/01/2022
RFP & Design Contract Award Tazlina	01/31/2023
DSR Complete Kennicott	11/01/2022
DSR Complete Tazlina	03/31/2023
PS&E Complete Kennicott	02/28/2023
PS&E Complete Tazlina	06/30/2023
PDA Phase 4 Kennicott	03/15/2023
PDA Phase 4 Tazlina	07/15/2023
RFP & Construction Contract Award Columbia	12/31/2022
RFP & Construction Contract Award Matanuska	12/31/2022
RFP & Construction Contract Award Kennicott	06/15/2023
RFP & Construction Contract Award Tazlina	10/15/2023
Yard Start Columbia and Matanuska	06/30/2023
Yard Start Kennicott	12/31/2023
Yard Start Tazlina	04/15/2024
Project Complete Columbia and Matanuska	06/30/2024
Project Complete Kennicott	12/31/2024
Project Complete Tazlina	05/15/2025

Congressional Districts (Project Location)

Congressional District

AK-001

Section III. Evaluation Criteria

***** Address each of the evaluation criteria as described in the Notice of Funding Opportunity. *****

Demonstration of Need

AMHS has worked diligently to keep its fleet operational as its structure, machinery, and outfitting have aged, up to and including multimillion-dollar refurbishments of vessel. Nevertheless, especially for older vessels, structural and mechanical issues in this period of the vessel's life are widespread. These issues affect the vessel's capabilities as well as its reliability; due to structural issues, each vessel's service has been limited, and the vessel's planned maintenance periods frequently reveal structural and mechanical issues that require longer stays in the shipyard and higher costs than expected. The Matanuska (1963) is 29 years past its useful life and the Columbia (1973) is 19 years past its useful life. The Tazlina is a newer vessel (2018) that is being repurposed to increased the number of ports served and interoperability between ports.

The Matanuska's current retirement is anticipated for 2025, and Columbia soon after; these upgrades will remove the urgency of that retirement and extend their lives considerably. AMHS vessels are surveyed annually. As maintenance issues become insurmountable, a vessel is typically retired or undergoes a refit to extend its service life. The M/V Matanuska has an MCON letter, dated 1 October 2018 which outlines several upgrades that must be completed over the next five years to bring the vessel into modified SOLAS requirements. These include: Smoke detection per 74 SOLAS Amended standards within 5 years; elimination of dead-end corridors within five years. Modifications must meet current SOLAS requirements; and structural Fire Protection by upgrading the structural fire protection began during the 2018/2019 shipyard period.

The International Maritime Organization is implementing new air emission and efficiency requirements for existing ships. These regulations, called the Energy Efficiency Existing Ship Index (EEXI), enter into force on January 1, 2023, and will apply retroactively to all SOLAS ships. Propulsion optimization and other improvements can improve the vessel's attained score versus its baseline. As presently considered, noncompliance with these regulations will result in the loss of SOLAS certificates for the Kennicott and the Columbia.

Finally, the Tazlina was envisioned to make day trips between Juneau, Haines and Skagway (North Lynn Canal). Because of that, it and another vessel, the Hubbard, were built without crew quarters. Maintenance and operational challenges required AMHS officials to reposition vessels in 2019, including to repurpose current vessels for new routes. The Tazlina can only operate on routes that are less than 12 hours. This limits its ability to move to other routes, where it could be an alternative vessel. Adding crew quarters will allow the Tazlina to go to any of the system's ports.

The Columbia's most urgent need is to address that its current system will not hold the propellers in zero-pitch while rotating and quickly creates a pitch differential between the propellers causing operational problems. Of the MV Columbia's 50 recommendations in the 2020 Fleet Condition Survey, 14% were in the high category for urgency and cost. Of those, propellers was in the most urgent and costly cross section, with a priority of 1 and an estimated cost of over \$1M dollars.

It is worth noting that each time a vessel enters a maintenance or overhaul period, whether drydocked for intensive capital expenditures or tied up pier-side for smaller scopes of work, there is a high risk of delays, change orders, and increased work scope due to the discovery of additional structural or mechanical issues during planned maintenance. Delays due to discovery work can keep a vessel in the shipyard or tied up at the pier for longer than expected, especially if the discovered issues are severe enough to trigger a USCG no-sail order until they are remediated. This, in turn, reduces the level of service each can provide to the communities they serve.

Demonstration of Benefits

Note: If applying to more than one program, be sure to select "yes" and provide a response to the applicable questions below.

Is this an application to the Passenger Ferry or Rural Program? Yes No

Please describe the benefits of the proposed project per the statutory requirements of the Ferry or Rural Programs (see NOFO Section E(1)(b)(ii)):

The benefits of the proposed project fulfill Rural Ferry Program statutory requirements including: Safety - Matanuska, Columbia and Kennicott upgrades will ensure they maintain their SOLAS classifications, while the Tazlina will be able to safely conduct voyages longer than 12 hours. Good Repair - The Matanuska is the oldest ship, and upgrades to it and the Columbia will extend their life beyond 2025; Tazlina retrofits will address repairs and ensure proper operations; the Kennicott's exhaust system upgrades will improve its current condition. Community Development - Retrofits to these vessels will ensure that they continue to serve communities that depend on them. Improve Quality - This project will result in fewer maintenance and rehabilitation delays. Support Passengers - The following are comparisons of passengers to vehicles; Matanuska 11,547 compared to 10,187; Kennicott 11,516 compared to 12,043; Tazlina 7,009 compared to 3,318; Columbia 27,774 compared to 14,127.

Is this an application to the Low-Emitting Program? Yes No

Please describe the benefits of the proposed project per the statutory requirements of the Low-Emitting Program (see NOFO Section E(1)(b)(ii)):

Planning and Local / Regional Prioritization

This bundled project is supported by regional Comprehensive Economic Development Strategies (CEDS) and local Comprehensive Plans. Numerous support letters have been provided by impacted communities. Two of the three projects are included in Alaska's STIP, and all are consistent with other State plans.

Consistent with Regional and Community Plans:

Southeast Conference's CEDS stresses that a strong ferry system is essential to regional economic development, quality of life and community wellbeing in Southeast Alaska. Their priority transportation objective is to minimize impact of budget cuts to AMHS and develop sustainable operational model. This objective includes: Design a new strategic operating plan for AMHS, Lower State's general fund subsidy percentage, Fleet Renewal Plan, and AMHS Value Outreach. Skagway, the northern terminus of Southeast Alaska's part of the AMHS, advocates for consistent ferry service. Their Comprehensive Plan notes that the ease and cost of resident travel are negatively affected when ferry service is down, especially in the winter. Haines Borough's Comprehensive Plan calls for ongoing advocacy for daily summer and frequent winter AMHS ferry stops in important for tourism and residents. Cordova's number one Transportation Goal identified in their Comprehensive Plan is to secure reliable and affordable air and ferry service due to their limited access to and from the community.

Consistent with STIP, DOT&PF Strategic Planning and AMHS Prioritization:

STIP. Two of these bundled projects are in the STIP. The AMHS Alaska Class Ferry Tazlina Cre Quarters is Need ID 33978 and Design for AMHS Kennicott Emissions and Exhaust Upgrades is within the Ferry Refurbishment project Need ID 18358. The Matanuska project is in a repair plan and could be added to the STIP if awarded.

Sustainable Transportation Program:

DOT&PF's draft Long Range Term Plan "Alaska Moves 2050" drives strategic goals for the DOT&PF family of plans. Focus areas impacting AMHS are identified to make progress toward the long-term strategies, including Sustainability. DOT&PF Strategic Themes (and the respective AMHS Focus areas) include: Safety (Vessel Repair); State of Good Repair (Preservation and Maintenance of Terminals and Vessels); Economic Vitality (New Service Vessels, New Terminals); Resiliency (Fleet Modernization, Vessel Replacement, Terminal Upgrades); Sustainability (Vessel Hybrid Conversion, terminal Electronification, Electric Shuttle Ferry Construction, Energy Efficient Operations Strategies); Mobility/Access (Increased Service, ADA accessibility). Developing sustainable transportation infrastructure involves a multi-modal lifecycle approach that considers environmental quality, economic development, and social

equity.

Ferry-related Focus Areas:

Sustainable Transportation Research: FHWA Low-No Emission Ferry Research, Renewable Diesel Research, and Automation through Digitization; AMHS Fleet Modernization: Tustumena Replacement Vessel Construction, Low-No Emission Shuttle Ferry Construction, Shoreside Charging, Ferry Retrofits; Statewide Equipment Fleet Modernization: Statewide Fleetwide Modernization and Rolling Stock Electrification.

Modernization Topics:

Low-Cost Transportation: Alternative Energy Corridors EV Infrastructure, Port Parking Community EV Infrastructure; Energy Efficiency: DOT&PF Facilities Energy Efficiency Upgrades, LED Streetlight Conversions; Healthy Environment: Tracking Transportation Emissions, Cruise Line and Port Facilities Electrification; Equitable Transportation: Promoting equity within and between successive generations.

Sustainable Transportation Program Goal:

Help communities thrive through transportation investments that promote independence, efficiency, low-cost transportation, and a healthy environment.

Local Financial Commitment

The Alaska Department of Transportation and Public Facilities (DOT&PF) is the State Transportation Agency that plans, designs, constructs, maintains, and operates transportation infrastructure in the State of Alaska. DOT&PF has a proven track record of utilizing FHWA formula funds, through surface transportation grants, and constructing maritime infrastructure in support of the operations of AMHS, which is a division of DOT&PF.

DOT&PF is committed to the long-term sustainability of the AMHS. The M/V Kennicott, Tazlina, and Matanuska are critical links in Alaska's transportation system. Together they knit together ports, towns, and cities across the system, and their service affects the lives and livelihoods of many Alaskans. After years of reliable service, each has rehabilitation necessary to continue to be of service. Each vessel is designed to interface with the formidable array of docks and tidal ranges in the region it will serve, even as the modernizations means that they will be increasingly interoperable. The AMHS Vessel Modernization program is a critical component to sustainability for rural, disadvantaged communities in Alaska that are not connected to the road system.

The total project cost is \$90,081,932 of which the DOT&PF is requesting \$72,065,546. The State of Alaska is committed to contributing 20% - \$18,016,386 - of the total eligible project cost towards this critical State need as the non-federal match for this Rural Ferry Program grant request.

DOT&PF undertakes this project as a sponsor and experienced project manager building a sustainable Alaska Marine Highway System.

DOT&PF has included its match commitment and local letters of support in Appendix C. All project documents are located at <https://dot.alaska.gov/amhob/strategy.shtml> under Item 1.4 "IIJA Funding and Discretionary Grants." Appendix A provides maps and routes for the AMHS, and Appendix B is a Technical Volume providing any condition reports or implementation plans.

Project Implementation Strategy

Can this project be obligated within 12 months? Yes No

The bundling of these four projects provides an efficient way to manage design and construction. The project implementation strategy for each describes the work involved and milestones.

Kennicott implementation includes:

- Development of a Design Study Report (DSR), preparation of Plans, Specifications, and Estimates (PS&E) for construction, provision of bidding support, and ultimately construction support for upgrades required to address emissions upgrade requirements.
- PS&E developed from the approved and vetted DSR, and create a functional construction project to accomplish the following:

identify alternative or new engineering control systems such as installation of a new in-port or onboard vessel use generator; and exhaust upgrades to assure compliance with ADEC/EPA emission standards.

- Incorporate all ancillary installations necessary to support the required generator and emissions upgrades.
- The project's construction phase will provide, install, and commission new propulsion/electrical generation controls for main & auxiliary engines; replace outdated Allen Bradley VETS PLC with new supportable PLC system and replace Limit switches in their entirety.
- Ancillary upgrades may include switchboard and electrical system installation/upgrades, exhaust stack installations/modifications/upgrades, fuel and urea tank installations, vessel/terminal structural modifications, hull/shell plate modifications, sea chest and anode installations, vessel stability analysis, and dry dock.
- The project will include all discovery work, and other maritime USCG/ABS regulatory requirements associated with the installation.

Matanuska implementation includes:

- Developing the initial PH2-Design Study Report to create plans, drawings and specifications as required for the following work:
- Designing for the refurbishment and renovation of the passenger accommodation staterooms including wet spaces/restroom/showers,
- Replacement of wasted steel, electrical refurbishments, complete pipe/plumbing and electrical replacements, fire and smoke detector wiring replacements, lead, chromium and asbestos abatement, preservation of exterior and interior structure,
- Vessel upgrades as recommended in the 2018-19 Fleet Condition Survey, the ABS current and future survey status, Coast Guard Inspection status and compliance with existing and pending regulations, stability assessment, and sea trials.

Tazlina implementation includes:

- Construction modifications to the M/V Tazlina to incorporate sleeping quarters for up to 24 persons, add 8 single person staterooms on the Bridge Deck, and 8 two-person staterooms on the Upper Deck.
- Additional work includes the installation of a Galley, Scullery, and Mess spaces on the Upper Deck; a new Fan Room on the Bridge Deck; and extension of the existing Port Stair Tower to the Bridge Deck to serve the new accommodations.
- Construction will include removal of existing furniture and equipment, linings, ceilings, piping, electrical wiring, fixtures, and other outfitting in the Pump Room and Passenger Upper and Bridge Decks.
- Following removals, the vessel shall be modified by addition of new structure, piping, toilet/shower modules, electrical wiring and fixtures, ceiling, linings, deck coverings, furniture, galley equipment and fixtures necessary to accommodate the revised vessel arrangement.

Columbia implementation includes:

- Engineering, administration, and mobilization for the installation of a new CPP System; replacement of the existing Fire Detection System; upgrades to the existing Alarm and Monitoring System; dry docking;
- Removal and disposal of existing asbestos materials (ACM), lead containing paint (LCP), chromate and dichromate, and PCB's encountered during performance of the work; installation of suitable replacement materials for removed ACM, LCP, and PCB; structural, outfit, mechanical and electrical modifications associated with the modifications.

Technical, Legal, and Financial Capacity

DOT&PF owns, operates and/or maintains ferry terminals in 35 Alaskan communities. AMHS has operated since 1968. DOT&PF has a dedicated marine design group and environmental staff who have delivered dozens of terminal improvement projects, including up to six per year. DOT&PF has maintained a marine engineering team since Statehood in 1959 – primarily dedicated to supporting the AMHS ferry system. They have directly designed or managed consultant designs and conducted numerous refurbishments, replacements, repairs, and maintenance on nearly every ferry terminal facility in the State and many other ports, harbors, and seaplane facilities. Most of these projects utilized federal aid through FHWA. They have successfully delivered many federal aid marine projects supporting AMHS over the years, including 86 projects totaling over \$308,000,000 since 2002 alone. DOT&PF has designed all of the existing ferry terminal facilities. We have standard mooring dolphin and other marine facility designs on file. The marine engineering team also inspects every ferry terminal and associated transfer bridge structure in the State. They are highly experienced and intimately familiar with this particular project's local conditions and needs. DOT&PF's project development staff comprises 75 persons, including materials and geotechnical engineers, environmental and right of way professionals who can navigate and achieve the required support products according to all Federal regulations and requirements. DOT&PF and its marine design group are knowledgeable about federal requirements, including Build America stipulations. The terminal design is based on a standard DOT&PF design modified to meet site geology and terminal configurations.

Alaska DOT&PF was granted primacy over its NEPA Assignment Program through an MOU with FHWA signed Nov. 3, 2017 to assume responsibilities under NEPA and all or part of FHWA's responsibilities for environmental review, consultation, or other actions required under any Federal environmental law with respect to one or more Federal Highway projects within Alaska. The assigned responsibilities are subject to the same procedural and substantive requirements as applied to FHWA.

Alaska DOT&PF's Equal Employment Opportunity Plan (2022) includes a review of personnel designations, employment practices information, employment practices assessment, monitoring and reporting systems, and additional resources. DOT&PF participates in the federal Disadvantaged Business Enterprise (DBE) program and meets the federal requirements. DOT&PF has a vibrant Disadvantaged Business Enterprise Program and a DBE Utilization Goal of 8.63 percent for federally funded projects. According to a 2019 study, M/W/DBE firms were awarded contracts totaling \$418.8 million, 17.68 percent of construction dollars. MBEs were awarded \$298.8 million in contracts, 12.61 percent of construction dollars.

DOT&PF has authority under 23 U.S.C. 140 to implement and conduct a compliance program that addresses Equal Employment Opportunity (EEO) and Affirmative Action (AA) for employment on federally assisted construction contracts. DOT&PF maintains a Civil Rights Office committed to ensuring equal opportunity for all businesses and personnel on DOT&PF projects. The bidding and contract documents include specific provisions to implement equity-focused policies related to all phases of contracting and construction. The contract provisions address nondiscrimination, equal employment opportunity, reasonable accommodations for employees with disabilities, and non-segregation of facilities.

DOT&PF provides reasonable accommodations to applicants and employees who need them because of a disability or practice or observe their religion absent undue hardships. DOT&PF has created a Diversity, Equity, and Inclusion (DEI) Team whose members work with the different department training systems.