FY 2022 PORT INFRASTRUCTURE DEVELOPMENT PROGRAM GRANT APPLICATION

AMHS Prince William Sound Ferry Terminals

Submitted by ---
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Submitted May 16, 2022

Name of Applicant	Prince William Sound Economic Development District
Is the applicant applying as a lead applicant with any private entity partners or joint applicants?	No
What is the project name?	AMHS Prince William Sound Ferry Terminal
Project description	Ensure the Cordova, Tatitlek, and Chenega ferry terminals can accommodate the AMHS Alaska Class Ferry (ACF) Vessels (M/V *Tazlina* and M/V *Hubbard*). Existing vessels serving these ports will be retired and the ACF vessel cannot be accommodated without reconfiguring or installing a separate facility.
Is this a planning project?	No
Is this project at a coastal, Great Lakes, or inland river port?	Coastal
GIS Coordinates (in Latitude and Longitude format)	The Tatitlek dock construction site is located at 60 degrees 51'33.2 N, 146 degrees 40'33.4 W. Interpolated Longitude (X) Coordinates: -146.675945 Interpolated Latitude (Y) Coordinates: 60.859230. The Chenega dock construction site is located at 60 degrees 03'48.3 N, 148 degrees 00'03.0 W. Interpolated Longitude (X) Coordinates: -148.008336 Interpolated Latitude (Y) Coordinates: 60.063427. The Cordova dock construction site is located at 60 degrees 33'27.4 N, 145 degrees 45'19.5 W. Interpolated Longitude (X) Coordinates: -145.755414 Interpolated Latitude (Y) Coordinates: 60.557598.
Is this project in an urban or rural area?	Rural
Project Zip Code	99574, 99677, 99574
Is the project located in a Historically Disadvantaged Community or a Community Development Zone?	Historically Disadvantaged Community - No Choice Neighborhood - No Empowerment Zone - No Opportunity Zone – Yes Promise Zone - No

Has the same project been previously submitted for PIDP funding?	No
Is the applicant applying for other discretionary grant programs in 2022 for the same work or related scopes of work?	No
Has the applicant previously received TIGER, BUILD, RAISE, FASTLANE, INFRA or PIDP funding?	No
PIDP Grant Amount Requested	$28,248,386
Total Future Eligible Project costs	$28,248,386
Total Project Cost	$31,387,095
Total Federal Funding	$28,248,386
Total Non-Federal Funding	$3,138,710
Will RRIF or ITFIA funds be used as part of the project financing?	No

Table of Contents

I. Project Description

Concise Description of Project, Transportation Challenges, and Solutions

The replacement of the Prince William Sound (PWS) Ferry Terminals will ensure that ferry service is not lost to these coastal Alaska communities – designed originally for a ferry that will no longer operate there. The replacement will meet the standards for future service and ensure passenger and freight continues. This ferry terminal facility is a multi-use tidal ramp and fixed dock facility that accommodates the outdated LeConte class vessels, barges, and landing crafts.

Chenega and Tatitlek are multipurpose, pile-supported dock facilities equipped with a tidal ramp ferry loading facility that can only be used by the Aurora/LeConte class ferry vessels. These tidal ramps require that the vessel's stern be equipped with an integral vehicle apron or ramp. The ACF ferry vessels have a stern door but do not have an integral ramp. Additionally, the ACF vessel is longer and wider than the Aurora, and while it could potentially fit at this existing stern berth, mooring conditions are also not ideal. It is not feasible to retrofit the ship with an integral ramp affixed to the vessel. The ACF vessels (as do the LeConte class) also have port and starboard forward side doors. Loading through these doors requires a shore-based apron system and associated transfer bridge to shore.

Alaska class ferries have stern openings but no internal ramp. The Tatitlek facility is best suited for additional stern berth facilities, making the site ACF accessible. The additional stern berth facilities include a rotating ramp affixed to the shoreside. The rotating ramp must be constructed to not obstruct the Aurora's internal stern ramp during its landing. Both ACFs and Aurora can side-load but do not have internal side ramps affixed to the vessels. Chenega is best suited for a new side-load facility, with a folding ramp affixed to the end of the bridge support float.

Built in 1977, the Aurora may no longer be able to provide service to PWS, and new vessels are needed, requiring either a side-berth or additional stern-berth loading facilities. Thus, the need for an updated design and rebuild is justified based on its impact on delivering critical goods, supplies, and passenger transportation into the communities.

The project includes a:

- New end-loading ferry terminal facility in Tatitlek, including vehicle transfer bridge and bridge support float (or lift bridge support) to replace the existing tidal ramp facility;
- New side-loading ferry terminal facility in Chenega, including pile-supported approach dock structure, vehicle transfer bridge, bridge support float, two mooring dolphins, and
- New side-loading ferry terminal facility in Cordova.

History and Any Previously Incurred Costs + Broader Context

Cordova's original facility was built in 1964. The uplands were expanded/improved in 1997, the terminal building constructed in 1998, and the maintenance building in 2005. The marine structures were completely reconstructed in 2006. The maritime facilities consist of a forty-foot-long approach span (pile-supported), transfer bridge, an intermediate ramp with articulating apron and six berthing/mooring structures for the side-berth, and a 150 foot long approach span (float supported) to an intermediate ramp with articulating apron and six berthing/mooring structures

for the stern-berth. The stern-berth was originally built as a homeport for the Fast Vehicle Ferry (FVF) Chenega; this vessel sold in 2021. Aurora, the only vessel currently able to serve Cordova, uses the side-berth. ACF vessel captains do not wish to use the existing stern berth. The current Cordova stern-berth has a shallow water approach that can cause landing issues for larger ACFs. The proposed side-berth modifications will better fit ACFs' preferred berth, making landing more efficient and reliable.

The Chenega dock and tidal ramps were originally constructed in 1995 to provide a terminal for the Bartlett. The State of Alaska transferred ownership to the North Pacific Rim Housing Authority (NPRHA) in October 1998. The marine facilities consist of an approach, dock, and two tidal ramps constructed of prestressed concrete panels welded to bridge beams supported by steel pipe piles socketed to the underlying bedrock. The Tustumena (currently in overhaul) has used the east face of this dock for moorage, while the Aurora uses the tidal ramps located along the north face of the dock for stern loading.

The Tatitlek facility is a multipurpose dock structure, originally constructed in 1995 to accommodate the Bartlett. The marine facilities consist of a staging area, an approach, a dock, and two tidal ramps constructed of concrete panels welded supported by steel beams and piles. AMHS has an MOA for the use of the dock for ferry operations. Ownership of the facility was transferred to the North Pacific Rim Housing Authority (NPRHA) in 1999. Like Chenega, the only vessel in the AMHS fleet that can access this port is the Aurora and an identical vessel, the LeConte, which does not currently service PWS. Both vessels have stern openings with internal ramps that fold out onto the tidal ramps, suitable for Chenega and Tatitlek's current stern berth-only facilities.

The elimination of the ferry service into PWS would lead quickly to the economic and population decline of the communities and region. The ferry system serves as the linkage to the region's economic hubs, including the region's hospital system and the road system. A replacement dock is critical to the life and safety of residents of Chenega, Tatitlek, and Cordova, with the commitment of the State to continue service once the asset is replaced with a side-berth approach that will satisfy the needs of vessels with a side-apron.

Currently, passengers and vehicles use the ferry terminal, which would continue with the replacement dock. Commercial and residential users access the ferry system. This is envisioned to continue as long as the AMHS serves Prince William Sound, dependent on this dock replacement.

The dock is a multi-use facility and is used by fishing vessels and freight barges.

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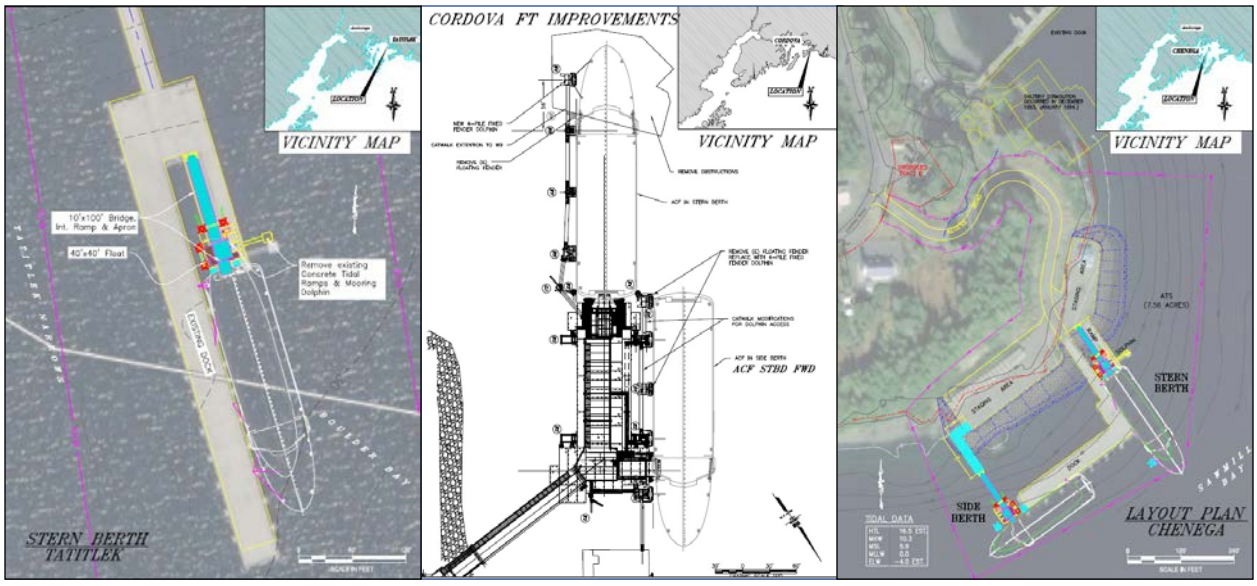
Detailed Statement of Work - Technical and Engineering Aspects, Current Design Status

Prince William Sound Port Improvements

- **Cordova** - Work would include the removal of two floating fenders and replacing them with fixed-fender dolphins and catwalks for improved mooring and line handling along the face of the dock. Work would also include modifications to the stern berth required to accommodate the ACF vessel. This work would consist of a new fixed-fender dolphin farther out and the removal of submerged debris.
- **Tatitlek** – Improvements would include the provision of new end loading ferry terminal structures, including vehicle transfer bridge and bridge support float (or lift bridge support) at the location of the existing tidal ramp ferry facility.
- **Chenega** - Construct a new side-berth ferry terminal facility at the Chenega dock to accommodate the ACF and LeConte class ferry vessels. Improvements would include the provision of a new side-loading ferry terminal structure, including a pile-supported approach dock structure, vehicle transfer bridge, bridge support float, and two mooring dolphins. An end loading terminal (which would be less cost) may also be feasible at the location of the existing tidal ramp ferry berth, but it appears to conflict with existing dock uses.



The project has undergone preliminary design and anticipates future technical and engineering needs, as described in the project schedule. No work has been completed thus far. It is expected that the total duration of the design schedule should occur over three years, begin as soon as June 2022, and be complete in February 2025. Upon selecting a consultant, the preliminary design will be completed over six months, including scoping and site selection, right of way, PIH PS&E, and review. The environmental review will occur over eight months and include scoping, IHA

and Section 7, Section 106, and the final document. The final design will be completed over six months, with construction in year three.

This project in Tatitlek would construct a new end-berth ferry terminal facility at the Tatitlek dock to accommodate the ACF and LeConte class ferry vessels, as noted on the proposed conceptual design. The conceptual design shows an end-berth in the same location as the existing tidal ramps. A side-berth may be possible but would not easily match the configuration of the existing dock structure. An end-berth replacing the tidal ramps seems to fit this location and will allow the existing dock face to be used as a breasting surface. The new end-berth project would consist of removing the existing tidal ramp structures and constructing a new vehicle transfer bridge and bridge support float. Vehicles would drive on and off the vessel from the existing approach dock structure that connects to shore.

This project in Chenega would likely construct a new ferry-berth ferry terminal facility at the Chenega dock to accommodate the ACF and LeConte class ferry vessels, as noted on the proposed conceptual design. The conceptual design shows both an end-berth and a side-berth. However, the end-berth configuration results in the vessel extending beyond the existing dock face. Therefore, the end-berth would likely need another mooring dolphin constructed offshore of the dock. This mooring dolphin may impede or be in the way of other vessels that use the main dock face for community freight, cargo, and oil spill response equipment.

While both the end-berth and a side-berth will be examined during preliminary design efforts, the preferred alternative is likely a new side-loading ferry terminal. This would consist of a new pile-supported approach dock structure, vehicle transfer bridge, bridge support float, and two new mooring dolphins located off the west end of the existing dock. The pile-supported dock would connect the berth to the shore. Vehicles would drive on and off the vessel from the existing uplands staging area.

In Chenega and Tatitlek, the berth will require electrical power to operate hydraulic motors that rotate the vehicle apron up and down. The vehicle apron can be operated by ship-based personnel and stored in the up position when a vessel is not in port. The end of the transfer bridge is supported by a steel float system that maintains consistent height in relation to the vessel during tidal cycles. This system is more or less standardized throughout the Southeast Alaska ferry terminals and is similar to how ferry loading operations are done in Cordova, Valdez, and Whittier.

In Cordova, this project will remove and replace four existing mooring dolphins with a different style and configuration to better accommodate the ACF. This project will also remove some submerged obstructions in the vicinity of the stern berth and refurbish various structural and utility elements that have deteriorated over time and need work.

The existing Cordova ferry terminal is a large floating structure that contains two berths: a side-berth and an end-berth. AMHS desires to utilize both berths for loading (stern or side) but not simultaneously. These berths will still need to accommodate the Aurora until the vessel is retired. DOT&PF originally constructed the Cordova ferry terminal in 2005 to accommodate the former fast vehicle ferry (FVF) and the Aurora. The FVF vessels are no longer in service. The ACF vessel has a different sponsen line, and the breasting contact points do not optimally

fit either of these berths. The ACF is a larger and heavier vessel than the former FVF vessels. The mooring structures on this facility were not designed for this heavier vessel. The new dolphin structures will also enhance or provide a more straightforward means of mooring line attachments to the ACF vessel. While the existing berth(s) can be utilized in the current status, vessel operations are hampered. The vessel will be more easily and safely secured to the port for ease of arrivals, loading, and departures.

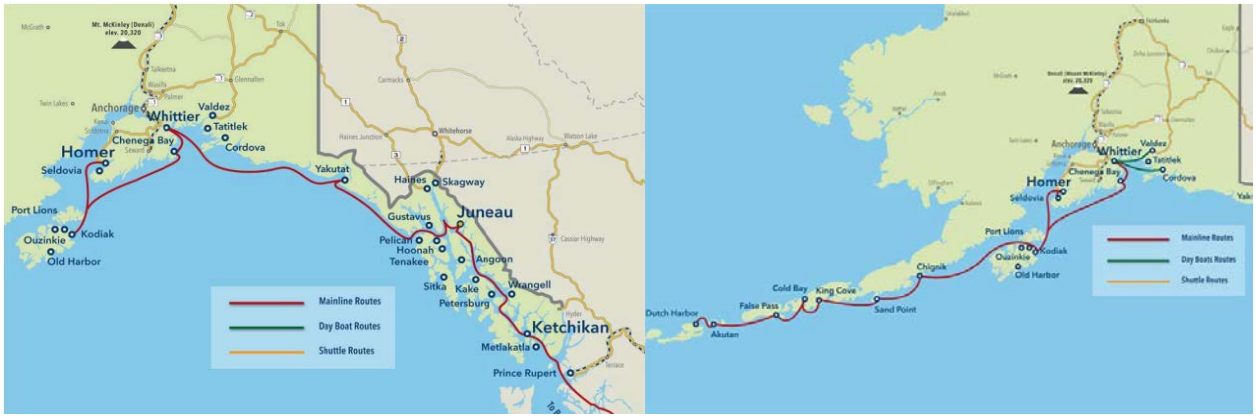
Proof of Legal Ownership

Prince William Sound Terminal Improvement

- **Chenega** - DOT&PF constructed the existing dock structure in 1994. Subsequently, ownership of the dock structure was transferred to the North Pacific Rim Housing Authority. However, North Pacific Rim is transferring its property rights to the Native Village of Chenega. This will be complete by June 1, 2022. DOT/PF still retains ownership of a portion of the upland property rights but is currently working to execute a similar transfer of ownership of these adjacent uplands to the Native Village of Chenega. The offshore tideland property where the subject dock is situated is on a tidelands lease from the State of Alaska, Department of Natural Resources (DNR), and DOT&PF is the lessee or permit holder. DOT&PF is working to re-assign that lease to the Native Village of Chenega. By implementing this project, all property rights for lands and structures are expected to be under the ownership of the Native Village of Chenega. DOT&PF will be sure to retain legal rights to operate and maintain any improvements utilized for ferry service.
- **Tatitlek** - DOT&PF constructed the existing dock structure in 1994. Subsequently, ownership of the dock structure and offshore tidelands lease was transferred to the North Pacific Rim Housing Authority. Federal aid can be used subject to rules and regulations for the construction of public facilities.
- **Cordova** - The subject project is located within submerged tidelands that the City of Cordova owns. DOT&PF has legal agreements on file which convey property rights for the ferry terminal mooring structures associated with this project. Ferry terminal uplands and associated access are located on DOT&PF-owned property.

II. Project Location

Detailed Geographic Description



Prince William Sound is located at the north end of the Gulf of Alaska, extending over 20,000 square miles and made up of roughly half water and half land. For comparison, the region is similar in size to West Virginia. There are five communities in the sound: Chenega, Cordova, Tatitlek, Valdez, and Whittier. The PWS region has a variety of habitats, including temperate rain forests, boreal forests, glaciers and icefields, and wetlands. The Chugach Mountains border PWS to the north and east, and the Kenai Mountains border it to the west. The Bering Glacier-Bagley Icefield lies to the east of the Copper River Delta. Federally owned lands make up most of the land in PWS, with over six million acres of Chugach National Forest land. Chenega is located on Evans Island in western PWS. Situated on Crab Bay, the community is 42 miles southeast of Whittier, 104 air miles southeast of Anchorage, and fifty miles east of Seward. The area encompasses 28.8 square miles of land and 0.3 square miles of water.

Tatitlek is located on the northeastern shore of PWS. Situated on the eastern side of the Tatitlek Narrows, the community is twenty miles southeast of Valdez and forty miles northwest of Cordova. The area encompasses 10.06 square miles of land. The village sits on a relatively flat one-mile strip of land between Galena Bay and Bolder Bay within the Chugach National Forest. The Chugach Mountains form an impassible range to the north and then lowers into a mountain ridge parallel with the Tatitlek Narrows. Tatitlek is most famously known as the nearest village to the 1989 Exxon Valdez spill that decimated the area's fishing resources.

Cordova is located on the southeastern shore of PWS. Situated on the southeast side of Orca Inlet, the community is 52 air miles southeast of Valdez and 150 miles southeast of Anchorage. The area encompasses 61.4 square miles of land and 14.3 square miles of water. The town sits mostly on steep slopes and wetlands, bordered to the south by the mudflats of the Copper River Delta, with Eyak Mountain rising right above the town center.

Connections to Existing Infrastructure

The ferry system is an essential part of the highway system in Alaska, particularly in Southcentral Alaska. The ferries of the Alaska Marine Highway cover 3,500 miles of coastline, providing service to over 35 communities, including Bellingham, Washington, Prince Rupert, British Columbia, and

Dutch Harbor in the Aleutian Chain. Many coastal communities in Alaska receive year-round service, with mainline vessels serving larger communities and day boats connecting to smaller communities.

Chenega and Tatitlek are dependent upon AMHS ferries and float planes for transportation to and from the community, including transport of food, fuel, and other commodities and goods. Chenega receives regular barge service from Dojer Services, delivering fuel, gas, and propane. Tatitlek has no regular barge service, but can charter on an as-needed basis.

Chenega, Cordova, and Tatitlek are all without road connections to other communities. All three communities have gravel runways for chartered air taxis and seaplane landing spaces. Cordova has a commercial airport twelve miles outside its town center that services two Alaska Airlines flights per day, northbound and southbound. At times, these communities experience severe weather, and flights in and out of town are unreliable. Cordova receives regular barge service from Alaska Marine Lines (a Lynden Transportation company) and Samson Tug and Barge.

The Alaska Marine Highway System is Chenega, Cordova, and Tatitlek's sole road connection to the rest of the world, including larger hub communities that provide urban necessities such as medical care and access to international airports. The PWS ferry system connects with the continental road system at the Whittier and Valdez ports. The Whittier port allows connection to the Whittier access tunnel, providing a route to Anchorage and the Ted Stevens International Airport, which services daily flights to various domestic and international locations.

For small land-locked communities, ferry service is essential for their survival. Ferry service allows for an affordable way to bring in bulk commodities and goods.

Geospatial Data

The project does not have a physical address in Tatitlek, Alaska. The Tatitlek dock construction site is located at 60 degrees 51'33.2 N, 146 degrees 40'33.4 W. Interpolated Longitude (X) Coordinates: -146.675945 Interpolated Latitude (Y) Coordinates: 60.859230.

The project's physical address is 515 Main St, Chenega, Alaska, 99574. The Chenega dock construction site is located at 60 degrees 03'48.3 N, 148 degrees 00'03.0 W. Interpolated Longitude (X) Coordinates: -148.008336 Interpolated Latitude (Y) Coordinates: 60.063427.

The project's physical address is 201 Orca Inlet Rd, Cordova, Alaska, 99574. The Cordova dock construction site is located at 60 degrees 33'27.4 N, 145 degrees 45'19.5 W. Interpolated Longitude (X) Coordinates: -145.755414 Interpolated Latitude (Y) Coordinates: 60.557598

Description of Rural

A "rural area" is an area located outside a 2010 Census-designated urbanized area. The Census Bureau identifies two types of urban areas:

- Urbanized Areas (UAs) of 50,000 or more people, and
- Urban Clusters (UCs) of at least 2,500 and less than 50,000 people.

"Rural" encompasses all population, housing, and territory not included within either kind of urban area. Cordova had a population of 2,609, Chenega a population of 48, and Tatitlek had a population of 41 in the last census, making all three communities rural areas.

Description of Coastal

According to World Port Source, the Port of Cordova's Municipal Dock slip offers 408 feet of moorage with an alongside depth of 25 feet. The Alaska DOT&PF has confirmed Tatitlek and Chenega to have at least twenty feet in depth; this meets the definition of a "coastal seaport" under 33 CFR 329.12, as they can receive oceangoing vessels with a draft of at least twenty feet.

Opportunity Zone Detail

Under the Justice40 Initiative guidelines, Chenega, Cordova, and Tatitlek are not considered historically disadvantaged communities. Chenega, Cordova, and Tatitlek are found within the Chugach Census Area, which has not been designated as an Opportunity Zone. There are 25 designated Opportunity Zones in Alaska, 23 of which are low-income communities with an average poverty rate of 16.75 percent. This tract's Socioeconomic Status Index has a value of 54.2. The Index is on a scale from zero to one hundred, with fifty being the national average.

The Socio-economic Status Index incorporates the following:

- median household income, which in this tract was $79,375;
- percent of households with income below the Federal Poverty Line, which in this tract was 10.0 percent;
- the educational attainment of adults (age 25+), which in this tract, 70.5 percent of adults were high school graduates who did not hold a bachelor's degree, and 25.1 percent of adults held a bachelor's degree;
- the unemployment rate, which in this tract is 13.7 percent, and
- percent of households with children under the age of 18 that are "female-headed" (no male present), which in this tract is 39.3 percent.

III. Grant Funds, Sources and Uses of All Project Funding

Project Budget – Table

Item	Units	Unit Price	Quantity	Total	Non-Federal Share	Federal Share
CORDOVA						
Removal of Structures and Obstructions	LS	$150,000	All Required	$150,000	$15,000	$135,000
Terminal Closure Price Withholding	CS	$0	1	$-	$-	$-
Debris Removal	LS	$150,000	All Required	$150,000	$15,000	$135,000
Transfer Bridge Refurbishment	LS	$70,000	1	$70,000	$7,000	$63,000
Gangway	LS	$50,000	4	$200,000	$20,000	$180,000
Dolphin Cap	Each	$180,000	3	$540,000	$54,000	$486,000
Fender System	Each	$150,000	3	$450,000	$45,000	$405,000
Pile, Furnished	LF	$275	1,800	$495,000	$49,500	$445,500
Pile, Driven	Each	$25,000	12	$300,000	$30,000	$270,000
Cathodic Protection- Pile Anode	Each	$2,000	35	$70,000	$7,000	$63,000
Mobilization and Demobilization	LS	$800,000	All Required	$800,000	$80,000	$720,000
Worker Meals and Lodging, or Per Diem	LS	$150,000	1	$150,000	$15,000	$135,000
Erosion, Sediment and Pollution Control	LS	$15,000	1	$15,000	$1,500	$13,500
Construction Surveying	LS	$25,000	All Required	$25,000	$2,500	$22,500
Vehicle-Skiff	LS	$15,000	1	$15,000	$1,500	$13,500
CPM Scheduling	LS	$10,000	1	$10,000	$1,000	$9,000
Marine Mammal Monitoring	LS	$100,000	All Required	$100,000	$10,000	$90,000
Sound Source Verification	LS	$60,000	All Required	$60,000	$6,000	$54,000
Electrical System Power and Lighting Upgrades	LS	$100,000	1	$100,000	$10,000	$90,000
CHENEGA AND TATITLEK						
Removal of Structures and Obstructions	LS	$900,000	2	$1,800,000	$180,000	$1,620,000
Terminal Closure Price Withholding	CS	$75,000	2	$150,000	$15,000	$135,000
Debris Removal	LS	$150,000	2	$300,000	$30,000	$270,000
Transfer Bridge Refurbishment	LS	$35,000	2	$70,000	$7,000	$63,000
Gangway	LS	$150,000	2	$300,000	$30,000	$270,000
Dolphin Cap	LS	$600,000	1	$600,000	$60,000	$540,000
Fender System	SF	$350	3100	$1,085,000	$108,500	$976,500
Pile, Furnished	EA	$1,200,000	2	$2,400,000	$240,000	$2,160,000
Pile, Driven	EA	$960,000	2	$1,920,000	$192,000	$1,728,000
Cathodic Protection- Pile Anode	EA	$250,000	2	$500,000	$50,000	$450,000
Mobilization and Demobilization	EA	$200,000	8	$1,600,000	$160,000	$1,440,000
Worker Meals and Lodging, or Per Diem	EA	$600,000	2	$1,200,000	$120,000	$1,080,000
Erosion, Sediment and Pollution Control	LS	$150,000	1	$150,000	$15,000	$135,000
Construction Surveying	LS	$500,000	1	$500,000	$50,000	$450,000
Vehicle-Skiff	LS	$375,000	2	$750,000	$75,000	$675,000
CPM Scheduling	LS	$150,000	1	$150,000	$15,000	$135,000

Marine Mammal Monitoring	LS	$300,000	2	$600,000	$60,000	$540,000
Sound Source Verification	LS	$60,000	All Required	$60,000	$6,000	$54,000
Electrical System Power and Lighting Upgrades	LS	$100,000	1	$100,000	$10,000	$90,000

Subtotal				$17,775,000		
Estimating & Construction Contingencies @ 25%:				$4,443,750	$444,375	$3,999,375
Construction Subtotal:				$22,218,750		
15% Design and Permitting:				$3,332,813	$333,281	$2,999,531
20% Construction Engineering				$4,443,750	$444,375	$3,999,375
4.64% ICAP:				$1,391,783	$139,178	$1,252,604
Project Total:				$31,387,095		
PIDP Request:				**$28,248,386**		
Project Sponsor Grant Management:						
Federal Share:						$28,248,386
Non-Federal Match:					$3,138,710	

Budget Narrative - including use of grant funds and non-federal funds,

The total project cost is $31,387,095, ten percent of which will be contributed as non-federal funds by the State of Alaska.

Construction materials are the bulk of the costs (the total for these is estimated at $17,775,000). There is a 25 percent ($4,443,750) contingency built in to take into account potential supply chain disruption or inflationary pressures. The project lead anticipates leveraging regional infrastructure investments to ensure timely delivery. Construction materials include those needed for mobilization/demobilization, vehicles, erosion and pollution control, surveying, meals/lodging, and per diem. The marine facilities include the abutment, trestle, bridge, bridge float, intermediate apron and ramp, float restraints, electrical power, and lighting. The upland improvements include expanding the breakwater, slope protection, safety features, electrical supply, and lighting.

The project assumes 15 percent of the costs ($3,332,813) are utilized for two years of design and permitting and twenty percent ($4,443,750) for construction and engineering. The project will have an ICAP rate of 4.64 percent, or $1,391,783, ten percent of which will be available to the project sponsor for grant management, while the rest is allocated for project management and administration.

Degree of Design Completion used to determine cost

The Alaska DOT&PF Program Development Statewide Planning team developed the project scope and budget in April 2022, utilizing all available data at that time, including cost estimates for other projects currently underway.

Funding commitments for non-Federal funds, and any restrictions on use

The State of Alaska DOT&PF has committed to providing ten percent of the non-federal match, which will be considered local matching funds.

IV. Merit Criteria

A. Achieving Safety, Efficiency, or Reliability Improvements

Describe Improved Safety, Efficiency, or Reliability

This project will improve the safety, efficiency, and reliability of the movement of goods through a port. A significant portion of the freight transported by the ferry system from these communities is frozen seafood, and the bulk of residential goods through these docks. This project will allow the continuation of that important export from the communities to market and improve the reliability of its transport. The PWS ferry dock improvements provide a solid platform to move freight to or from communities and provide greater safety for freight movement.

a. Loading and unloading of goods at a port.

How will this project improve the community's capacity for freight movements?

This project will enable the communities to continue to rely on the ferry system for the bulk of its freight needs. The dock is the lifeline to the region's economic hub, and almost all goods come through via this infrastructure.

The new dock, too, will include improved lighting and safety features, which will assist in the potential hours of operation.

In the past, communities have had to go for extended periods without AMHS ferry service. When this happens, communities either go without or find a boat that might be going into a hub community or on the road system. Currently, due to AMHS vessel lay-ups, communities will go six months without AMHS ferry service, which affects residents' ability to get out for medical appointments and get supplies. However, planes can be weathered out for up to three weeks during the winter months because of rain and snowstorms and freezing fog conditions; the AMHS ferry is very much a welcome sight. This project ensures that PWS has this continued and scalable service.

Identify existing inefficiencies and desired improvements

The existing dock is serviceable only to the extent that the LeConte and Aurora remain operational, which will be retired shortly. They have already proven unreliable in recent years, sometimes leaving passengers and freight stranded. The dock must be replaced to allow for accessibility by other vessels in the AMHS fleet, which have already been identified and committed to by the Alaska DOT&PF.

Include Metrics to support expected improvements - volume of goods, vessels, etc

Historical vessel traffic in PWS has averaged 361 port calls per year.

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
CDV	334	312	288	286	315	290	258	315	245	246
TTL	54	42	32	28	37	26	6	38	25	28
CHG	40	53	47	42	51	38	27	40	33	35
Total	**428**	**407**	**367**	**356**	**403**	**354**	**291**	**393**	**303**	**309**

In 2014, embarking passenger traffic in Cordova totaled 12,034 passengers, Chenega 113 passengers, and Tatitlek 58 passengers.

Without a dock replacement and considering the only ferry that could serve the current dock is being retired, freight via the ferry system comes to a halt. Therefore, the expectation supporting this project is that (1) freight and vessel traffic will stabilize post-pandemic, (2) the trend toward increased activity will resume, and (3) this project will allow for that to occur and for PWS communities to remain viable

Demonstrate how this will strengthen supply chain, including at regional level

PWS is part of the AMHS and America's Marine Highway System. The vessels that serve it are part of a complex web of marine highway usage and service, and the same vessel serves the three communities – Chenega, Cordova, and Tatitlek as part of the route through the region.

b. Movement of goods into, out of, around, or within a port.

Does the project improve the speed, safety, or throughput of cargo movement?

This project improves the speed, safety, and throughput of cargo and passenger movement because, without a facility that can accommodate future AMHS ferry vessels, only plane or private marine charter services would be available to move people and goods into and out of PWS communities. If this project is not completed, the loss of PWS communities' connection to the AMHS would almost certainly threaten the communities' viability as a permanent place. There would be little to no freight movement without the AMHS ferry service. The AMHS ferry service greatly expedites the movement of freight/cargo. The improved terminal facility enables Tatitlek, Cordova, and Chenega to be served by an ACF class vessel. The ACFs carry 53 more passengers and up to 17 additional twenty-foot vehicles. The ACF travels at an average of two knots faster than the LeConte.

How will this benefit daily operations of port and strengthen role within region and supply chain?

Without this project, daily port operations will be discontinued, and the communities would diminish within the region. In addition, the supply chain would be disrupted in both directions, as goods could no longer make it regularly into the communities or quickly become unaffordable, and seafood could no longer be shipped out.

Relevant metrics to demonstrate improvement - time in port, idling, cargo laydown area

There is no economically viable alternative to a dock for moving large shipments of goods into and out of a remote port. Substantively regular service is required for efficient logistics in goods movement and personal mobility. Chartered marine services are substantially more costly than the regular ferry service that the State of Alaska could provide through AMHS. The economic viability of PWS is, in effect, a binary outcome set not easily definable through quantitative metrics.

AMHS has identified several metrics to track performance improvements over time for informed decision-making. These include operating service weeks, passengers/vehicles per population, sailings/port calls, on-time departures, overhaul completions, utilization rates by route, cost per week of service, fare box recovery per route, and maintenance cost per vessel.

c. Operational improvements, including projects to improve port resilience.

The U.S., the State of Alaska, and communities need resilient, diverse, and secure supply chains to ensure our economic prosperity and national security. Ports are key components of our regional and national supply chains. This project will improve the resilience of port operations to enable the communities of Chenega, Cordova, and Tatitlek to better anticipate, prepare for, withstand, respond to, and recover from natural or human-made disruptions.

Resilience to natural or human-made disruptions

Ferry service is critical to the life, health, safety, and prosperity of residents of PWS. The pandemic highlighted just how fragile our region's supply chain is, even as the State's fiscal condition threatened reductions in service to communities like Tatitlek, Chenega, and Cordova. The ability of the region and these communities to withstand shocks, and bounce back, is dependent on adequate infrastructure. This is a baseline requirement for economic and community activity, without which human and natural disasters will easily overwhelm our communities.

A new dock will be built to higher safety standards and will better withstand a natural disaster. This will allow communities to access any needed emergency aid and services and provide an evacuation route for residents if needed. This is extremely important in a landlocked community without a runway.

Prince William Sound communities are located near the ocean entrance to the Gulf of Alaska; a significant amount of vessel traffic transits the area to or from the Pacific Ocean into the Gulf. This includes fuel barges, cruise ship traffic, fishing vessels, pleasure crafts, charter sportfishing vessels, and public safety vessels, should there be an oil spill or vessel accident. These communities are a close port to operate from, and have a reliable dock to access will greatly assist this process.

If there was a significant disaster that consumed the communities, people could be evacuated from the ferry dock area and/or emergency services could be brought in on the AMHS ferry to with emergency services. Emergency services can be brought in, and people can be safely taken out, depending on the nature of the disaster.

Description of operational improvements and how they will improve freight related resilience

project will install a new ferry berth to accommodate the new ACF. The existing facility is a multi-use facility that is equipped with a tidal ramp stern-loading ferry berth than can only accommodate the Aurora. This vessel will soon be out of service, and replacement will be by the ACF vessel. The community of Chenega will no longer be able to be routinely serviced by AMHS unless this new ferry berth is constructed. Loss of service will pose undue hardships to residents and local businesses for freight, vehicle, and passenger ferry service. The new ferry berth will allow continued AMHS service well into the future.

Identification of critical goods and materials that will benefit

Lack of ferry service leads to a host of logistical problems, ranging from broken vehicles to stranded fishing gear and construction equipment. For a vehicle that needs service beyond what's available in these communities, locals may spend up to four times as much to barge it if ferries are not available.

Local grocery stores and restaurants are supplied mainly by the ferry. Cuts to the ferry system fundamentally alter these towns, slow their economies, and pull away businesses and families. Ferry cancellations threaten more than 350 PWS fishermen, many of whom live on the road system and use the ferry to get gear to and from Cordova in April and October. When ferry service is lacking, locals must decide between flying, when available, or not going to conferences, school district events, or medical appointments. Expectant mothers, who cannot have their babies in these communities due to a lack of birthing facilities, often take their cars on the ferry to Anchorage, where the medical protocol is to wait to go into labor starting a month before their due date. The relocation is already an expensive proposition; not having a car makes it more isolating and costly still.

Future of resiliency for port operations – types of events anticipated

There are no natural hazards anticipated, based on no activity historically. While coastal, the threat of a tsunami is very low.

The most serious threat to the future of resilient port operations is the sustainability of AMHS and responsiveness to available vessels and community needs. This project provides a path for the community to at least control what it can to ensure that the infrastructure fits the available vessels. Continued advocacy and partnership with the State can provide sustainable future service.

Specific benefits of projects – reduced vessel and truck turn time, enhanced capacity, fewer accidents, etc.

Specific benefits of this project include public safety, ferry reliability, and maintaining a consistent level of existing ferry service. Without these improvements, the communities may no longer receive ferry service when the current AMHS vessel (Aurora) is taken out of service.

While Cordova, Chenega, and Tatitlek are roadless communities, the specific benefit of the ferry dock replacement is the ability of the city's residents and business owners to send and receive goods and travel reliably and efficiently. A viable ferry dock that can accommodate AMHS-assigned vessels will benefit PWS by allowing communities to survive, fulfill the role in Alaska's economy that it was designed for, and continue to thrive and grow as a place.

In Cordova, specific benefits of this project include public safety, schedule reliability, and maintaining an efficient level of ferry service. The mooring structures need replacement because they do not optimally fit the ACF vessel. The new mooring dolphins will also be designed stronger than the existing structures to handle the expected berthing and mooring loads appropriately. Should one or more elements of these existing structures fail during a ferry berthing, damage to the vessel or the ferry terminal structures could occur. Failure of one or more of these mooring dolphins may result in safety for the crew and passengers and a very costly need for vessel or ferry terminal repairs.

The improved terminal facility enables these PWS communities to be served by an ACF class vessel. The ACFs carry 53 more passengers and up to 17 additional twenty-foot vehicles. The ACF travels at an average of two knots faster than the LeConte.

d. Environmental and emissions mitigation measures.

Will the project result in reducing or eliminating port-related pollutants?

Possibly. The reason for the ferry terminal's replacement is that older and non-viable vessels are being phased out. Generalized port-related pollution may be lower when newer vessels with lower fossil fuel emissions are used, and the replacement facility is designed to current standards. The chance of isolated pollutant releases will also be lower. These potential beneficial effects have not been quantified and could be offset if the frequency of ferry service to PWS grows considerably.

Include specific benefits, including quantifiable impacts on emissions or environmental conditions

Environmental benefits primarily include reliability that would be associated with routine ferry service. Loss of ferry service will result in the need for additional and costly small air plane service and freight by private boats or other commercial transporters who can dock at this port or elsewhere in the community.

Reducing CO_2 emissions from vessels in coastline transport using electricity from renewable sources has the potential for community development while protecting biodiversity and nature. In the event electric ferries are introduced in the future, which this port project anticipates, it is understood that compared to marine diesel, the use of electric ferries leads to a reduction of CO_2 emissions by up to ninety percent, including significantly lower Nox, Sox, and particulate matter (PM) emissions, and operating costs by up to eighty percent (Vidas, Cukrov, Sutalo, and Rudan, 2021). In addition, AMHS will be tracking the Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CCI), starting no later than January 2023, which can support better quantification of environmental impacts for decision-making.

Environmental benefits primarily include reliability in service. Not executing this project may result in less-than-ideal security for mooring the vessel and more difficulties securing the vessel mooring lines to the existing structures. This could result in additional vessel waiting times or additional time to conduct approaches and departures. Extra vessel time will result in additional engine running time and more emissions to the air due to increased engine operations.

B. Supporting Economic Vitality at the Regional or National Level

Information related to a project's impact on economic advantage must include evidence of improvements the project will generate as reflected in commitments, plans, or other documentation.

The PWSEDD Comprehensive Economic Development Strategy 2020-2025 highlights the need for critical infrastructure as its first goal and priority objective. Improving regional infrastructure is critical to the region's economy. With three of five communities in the region unconnected to Alaska's road system, the PWS region is highly dependent on marine transportation. Each community in the PWS region has a dock facility to receive AMHS vessels and barge service.

Vision Statement: Prince William Sound is an alliance of vibrant, coastal communities collaborating to build on and sustain our blue economy through responsible economic development of our natural and cultural assets.	
Goal A: Improvement and Development of Critical Infrastructure	
Goal: Improve regional connection by enhancing transportation and utilities infrastructure. Enhance infrastructure to build resilience to climate change, increase economic development opportunities, and enrich the way of life in Prince William Sound.	**Priority Objective 1:** Develop regional transportation infrastructure **Priority Objective 2:** Increase broadband internet access and capacity **Priority Objective 3:** Increase housing quality and affordability **Priority Objective 4:** Enhance recreational infrastructure throughout the region **Priority Objective 5:** Increase energy efficiency and integration of renewable resources

Enhancing economic advantage

This project will ensure that commercial and residential activity can continue by using the most effective mode of transportation in PWS, thereby removing barriers to entry for potential growth. The ferry system – and dependence on the correct terminal in each community – is crucial to delivering government services, infrastructure development, and efficient access for labor, resources, and customers.

The Alaska Marine Highway System has significant economic impact on Chenega, Cordova, and Tatitlek's residents and businesses– freight is transported much faster than barge service, and is much cheaper than air freight on a dollars per pound basis.

Several seafood companies in Cordova rely on AMHS for shipping fresh seafood, a time sensitive product that must be transferred to the road system as quickly and efficiently as possible. The ferry offers an essential alternative to air freight, which can be expensive and lacking sufficient capacity and refrigeration. Ferry use lowers transportation costs, allowing seafood processors to pay local fishermen more for their product.

By delivering groceries, construction equipment and supplies, seafood processing equipment, and heavy, bulky or time-sensitive goods, AMHS fosters the development of local businesses and reduces dependency on out of state goods and services. Providing Chenega, Cordova, and Tatitlek residents with improved access to the lower priced goods and services of larger communities has a tremendous effect on the cost of living. AMHS also brings in visitors who may not otherwise visit due to the lack of road access. Visitor spending supports a variety of local businesses, such as restaurants, tour companies, and retail stores.

Ferries can accommodate large numbers of passengers for community, cultural, and student events at a much lower cost than air transport, allowing for more frequent travel. This travel facilitates interaction between people from different communities and cultures that would be much less frequent without AMHS.

AMHS is also a valuable employer, particularly in Cordova, providing an important source of year-round jobs. In 2014, AMHS employed 19 Cordova residents, and provided $1,873,000 in payroll and benefits. Additionally, AMHS operations are supported by local purchases of fuel, maintenance, and office supplies in each of these port communities. In 2014, AMHS spent $4,430,000 in Cordova on operational costs, with fuel accounting for just over half of spending.

Without these new dock improvements, negative economic impacts may include increased cost of living, reduced seafood shipments, loss of AMHS spending with local businesses, decline in health care quality, and less event-related travel. These impacts are broad and far-reaching, affecting a diverse range of residents, businesses, and organizations. The economies of our smaller and more isolated coastal communities are particular dependent on AMHS and would be hit hard by a decrease in service.

Provide valid and relevant metrics or analysis, that the average, or per unit, cost of the project's component(s) subject to an increase in scale will decrease (or at least not increase).

This project will maintain the current AMHS rate structure for services in and out of PWS, ensuring avoidance of higher costs. The cost of no action would likely result in an increase per unit as contingency plans are executed to maintain service levels at an alternate port outside the region that, at a minimum, would include increased leasing costs.

Increasing the efficient access of labor, resources, and customers

This project will improve physical access for employees, customers, and resources to and around the port. Larger pools of potential employees will help address equitable opportunities for hiring and promotion within the port.

AMHS is the primary transportation method for communities such as Tatitlek, Chenega, and Cordova, with limited barge service and limited air access. This project will result in the continued use of this transportation, and potential growth, for employees, customers, goods, and services in and out of these communities. This project will mean that businesses can operate effectively and employees can access needed regional healthcare and shopping. This project will also be consistent with local and State hiring practices in its construction, and volunteers within the communities will supply the operation of the terminal.

Improving the physical process for transporting goods and commodities

This project is critical for the continued improvement of transporting goods and commodities for residents and businesses of Chenega, Cordova, and Tatitlek.

Improving port resilience, including the critical goods and materials impacted by the project and how the project reduces or eliminates potential points of failure

Barge service is available on a charter basis to the seaside communities of Southeast Alaska, and Existing docks are limited by their ability only to serve ferries that load and unload from

the rear of the vessel, a configuration not typically found on newer, more efficient side-loading vessels. AMHS currently owns just two rear-loading vessels, the Aurora and the LeConte; both are older vessels. Prince William Sound receives ferry service mainly from the LeConte, although the schedule has been unpredictable in recent years due to frequent maintenance problems. The LeConte is 235 feet long and 57 feet wide, with a gross tonnage of 1,328 and a service speed of 14.5 knots. The LeConte was designed to carry 225 passengers and has a vehicle capacity of 660 linear feet, equal to approximately 33 twenty-foot vehicles. Built in 1974, the LeConte is in the later years of its service life.

Sustainable development strategies

As the LeConte approaches the end of its service life, PWS communities must plan to maintain its vital link to the rest of the world. The new ferries will require a side-berth. Thus, the need for an updated dock design and rebuild is justified based on its impact on transportation, including delivery of critical goods, supplies, and passenger service to the communities. If the project is not completed, a time will come when Chenega and Tatitlek will be unable to dock any ferries at all, crippling the communities and bringing their industry and economy to a halt. Prince William Sound ferry infrastructure supports the growth of small businesses, tourism, commercial fisheries, renewable energy initiatives, and the related skilled workforce. None of this is possible without a regular and reliable ferry service.

Competitive Advantage

Without this project, PWS communities' current competitive advantage – being so close to a healthy fishery and subsistence resources – would be extinguished, and the delivery of that seafood to market eliminated. This project contributes to the region's competitive advantage by leveraging its geographical position and effectively connecting it to markets.

Values Based Approach

This project is designed with equity in mind – equitable access for PWS residents and businesses to the rest of the world. The port terminal and ferry service is a lifeline that represents respect for the people who live in these communities, even as they acknowledge the intersection it has with a healthy environment. The dependence on the fishing industry as the local and regional economic driver highlights this interrelationship. This project will expand individual economic opportunities.

Economic vitality – multi-modal, intermodal freight needs, partnerships, community linkages

Commercial fishing is a key driver of the PWS economy. In 2019, 330 permit holders harvested more than 69 million pounds of fish and shellfish with a total ex-vessel value of $48 million. Harvest volume and value vary by year; in 2018, regional residents landed 41 million pounds valued at $34 million. Species include salmon, halibut, black cod, crab, and others.

With abundant coastal resources, PWS is positioned to engage in Alaska's growing mariculture industry. Active mariculture operations in the region include two oyster farms and four "authorized and active" kelp farms, all in the Cordova area. Another two oyster and six kelp farm applications are currently under review by the State of Alaska.

Marine transportation plays a central role in the industries active in the PWS region.

Transportation of oil and spill response contribute to the maritime transportation sector. Oil companies transport crude via oil tankers from Valdez to refineries along the West Coast through subsidiary and contracted companies. Alyeska Pipeline Company funds SERVS to provide oil spill prevention and response services in PWS. The company contracts with Edison Chouest to provide oil tanker escort and spill prevention services related to the Valdez Marine Terminal. Much of the seafood processed in the region is also transported from PWS via marine shipping.

The region lacks consistent and reliable ferry service between communities, and there are no roads or air services that connect all communities within the region. Weather also impacts safe and consistent transportation options for residents and visitors. Additionally, there is not a well-established network of collaboration to support organizations and communities on regional economic development issues. This project helps to address many of these weaknesses.

Economic impacts

The AMHS ferry system brings substantial benefits to the State and the Southeast Alaska region. It is estimated that AMHS has a $273 million annual impact statewide. The Marine Highway provides 1,700 direct and indirect jobs, bringing in $104 million in direct and indirect wages. Five hundred Alaska vendors benefit from contracts with AMHS. In 2014, 37 capital projects infused $38.2 million into the economy.

The economic impact of this project goes well beyond the construction opportunity it creates and extends to high-paying jobs in the marine and fishing industry, including seafood processing. AMHS operates under labor agreements, and the fishing industry has the free and fair choice to participate within a union structure. Ultimately, these are American jobs that support Alaskans.

Impacts to community, including low-income communities (negative and positive)

Tatitlek, Cordova, and Chenega are coastal communities with a long history of some form of active port – losing ferry service because of the inability to address future infrastructure needs is the greatest impact the communities could experience. Port development does not run any risk of negative externalities as it relates to low-income or historically disadvantaged communities. Quite the opposite, without port development, the risk becomes that those most vulnerable in our communities would be most impacted.

Addressing externalities - impacts to community or promoting benefits

The value of this project extends to how new infrastructure, planning, and technologies can be used for the safe and environmentally responsive delivery of freight and passengers to and from Chenega, Cordova, and Tatitlek. Environmental concerns are mitigated by using new ferry vessels designed to eliminate or minimize air, noise, and water pollution. This project will result in the avoidance of displacing existing housing and businesses.

C. Addressing Climate Change and Environmental Justice Impacts

This project proactively considers climate change and aligns with the President's greenhouse gas reduction goals, promotes energy efficiency, and increases the climate resilience of port infrastructure.

In PWS, climate change impacts are unique. They include longer-term effects such as heavy rains, flooding, ocean acidification, warmer waters, snowfall variations, warmer springs followed by frost affecting wild berry and timber production, invasive species, and toxins in the marine environment. Most people in Chenega and Tatitlek rely on subsistence resources, particularly seafood, as an important part of their lifestyle due to the high costs of shipped goods. The impacts of climate change are already impacting subsistence activities. As the project moves forward, particular attention must be paid to protecting subsistence resources and the environment's health on which the communities rely. Additionally, the economies of Cordova, Chenega, and Tatitlek are integrally linked to commercial fisheries and tourism related to fishing. A changing climate that includes warmer waters, ocean acidification, and invasive species could substantially impact the fisheries by changing the pattern of movement, distribution and abundance of certain fish species, or new species may move into the area.

Demonstrate whether and how the project has incorporated climate change and environmental justice into planning and project design

The use of the AMHS ferry system to gain access to the larger commercial fish market is a substantial carbon emission savings. These savings will be increased with newer ferries using better technology, more fuel-efficient, and better equipped for the area and seas.

For now, this intermodal transportation model is the best way to mitigate and reduce climate change impacts. Similarly, all commodities needed to support a community, supplies for the commercial fishing industry, charter and recreational fishing, and tourism industry must either be flown in by seaplane or shipped in bulk through the ferry system. Large items needed for construction, cars, trucks, work vehicles, and heavy equipment can only be transported by ferry. The ferries are also used to bring in septic tank trucks to empty the city's sewage tank. Bulk transportation of commodities on the ferry system is the best way to mitigate carbon emissions. Additionally, the new ferries are larger and will relieve space shortage issues that are now common, especially with getting fish quickly to market.

Climate and Environmental Justice as part of planning process

No specific climate or environmental justice activities have been completed, though the project sponsor recognizes this as part of the planning process.

Climate Action Plan or use of DOT's Disadvantaged Census Tract tool or EPA's EJSCREEN

The project is not included in a climate action plan. An equitable development plan has not been prepared, and USDOT's Disadvantaged Census Tract tool or the EPA EJSCREEN have not been incorporated into the project.

Provide a public involvement plan demonstrating meaningful engagement of the community affected by the project, to include environmental justice communities or disadvantaged communities.

Alaska DOT&PF has an ongoing need to keep in touch and engage with the public and hold meetings with constituencies and transportation-related board and advisory groups. In-person public involvement and public meetings are challenging considering the significant geographic area that the department covers and the distances between offices and population centers. With the added challenge of the pandemic, DOT&PF has an even greater need to utilize virtual meeting services. As such, DOT&PF acquired access to the online platform, PublicInput.com. It is currently used

for virtual and hybrid public meetings for boards such as the AMHS Alaska Marine Highway Operations Board (AMHOB). It supports in-person and virtual live meetings with live streaming and lower-tech participation options such as phone and text. This platform supports integration to project websites for stakeholder access to archived materials, including meeting videos, audio-enabled transcriptions, and any public project materials. Live meetings offer the ability to live stream on social media, such as Facebook and the project website. Streamed meetings also can use closed captioning. In addition, the platform offers the option to provide public opinion surveys.

Stakeholders can register for online updates through PublicInput's CRM, with a real-time dashboard that stores historical access data over time.

PublicInput will be the primary platform for all public engagement during the design and construction stages. If a need is determined, a solution exists to ensure equitable outreach by layering Environmental Justice data from the EPA onto our participation maps within each PublicInput project. This offers the greatest accuracy on environmental and socio-economic data.

DOT&PF has extensive experience with PublicInput. For example, it was used for the Alaska Marine Highway Reshaping Work Group (2020); over 35 virtual meetings were held with participants across coastal Alaska. These were live-streamed on Facebook and the PublicInput webpage.

Describe specific ways the project design will mitigate or reduce climate change impacts.

All of Cordova's electricity is provided by an updated hydroelectric facility. Cordova is pushing to add a substation at the new dock so that the ferry could plug into the clean, renewable energy source when berthed. Recently, the federal government announced that $250 million of the roughly $1 trillion federal infrastructure bill would be earmarked for an "electric or low-emitting ferry pilot program," with at least one of the pilots conducted in Alaska. DOT&PF and Southeast Conference (SEC) are partnering to conduct a Low-Emission Ferry Research project. Alternative fuel-powered, low-emission, and electric ferries could be a game-changer for AMHS as DOT&PF replaces the aging fleet in upcoming years. PWSEDD will support the project, including a detailed examination of the costs, benefits, and overall technical and financial feasibility of low-emission ferry operations within the AMHS service area. The PWSEDD includes all three communities with infrastructure needs described in this project, all of which would benefit from using electric ferries in the region. With a robust existing hydroelectric infrastructure, Cordova and its neighbors are well-positioned to support a new generation of electric or hybrid ferries.

D: Advancing Equity and Opportunity for All

Planning and policies related to equity and workforce opportunity

Improving the PWS docks will contribute to the success of the overall marine highway system, whether organized separately or as a part of the whole system. The Alaska Marine Highway Operations Board (AMHOB) was established in February 2022. As previously detailed has a public engagement portal to receive as many public comments as possible; stakeholder engagement is a high priority for Alaska DOT&PF and AMHOB.

Alaska DOT&PF's Equal Employment Opportunity Plan (2022) leads with the Commissioner's statement, "Our Equal Employment Opportunity Program (EEO Program) will encompass all

human resource (HR) practices including, but not limited to, recruiting, hiring, transfers, promotions, training, compensation, benefits, recognition, and all forms of employment. EEO positively affects the development of our entire workforce, and an active EEO Program will provide a more positive employment environment which benefits this Department and all of its employees." The EEO plan includes reviewing personnel designations, employment practices information, employment practices assessment, monitoring and reporting systems, and additional resources.

Before starting a project, the DOT&PF does extensive outreach, striving to involve residents and community officials in developing projects that affect them. For each project, staff must consider reaching out to all project stakeholders, including local government officials, communities, tribal entities, local users, media, and transportation providers. DOT&PF utilizes a variety of outlets to reach as many people as it can. Public Information Officers regularly post information about projects and public involvement opportunities:

- In ads in local newspapers, radio, and TV;
- On social media accounts, including Facebook and Twitter;
- On a public involvement calendar;
- On the project pages of the Department website;
- Through emails to GovDelivery subscribers, and
- On the State of Alaska Online Public Notice website.

Multiple avenues are available for residents to comment on any project. There is also an online public involvement calendar. Publicly noticed meetings and presentations are usually held in a community and with any local Tribes or Native organizations. This provides all individuals an equal opportunity to be part of the process.

A 1983 Alaska Administrative Order provides that, "The Commissioner of the Department of Transportation shall take all possible affirmative action which the commissioner determines will help (1) to overcome effects of past discrimination against minorities, women, and other classes of persons protected by AS 18.80.200, in the contracting business; and (2) to promote full and equal opportunity for business enterprises owned and controlled by minorities, women, and other classes of persons protected by AS 18.80.200, to receive public construction funds."

DOT&PF participates in the federal Disadvantaged Business Enterprise (DBE) program and meets the federal requirements. The DBE program is designed to remedy ongoing discrimination and the continuing effects of past discrimination in federally assisted highway, transit, airport, and other transportation contracting nationwide. The primary remedial goal and objective of the DBE program are to level the playing field by providing small businesses owned and controlled by socially and economically disadvantaged individuals a fair opportunity to compete for federally funded transportation contracts. Language regarding the DBE program is contained in DOT&PF's bidding and contracting documents. (See form 25D-55 H/ FHWA-1273). In September 2019, the DOT&PF Civil Rights Office (CRO) contracted with MGT Consulting Group, LLC (MGT) to conduct their DBE Availability and Disparity Study Update. This five-year study includes construction and professional services procurement activities from October 1, 2014, to September 30, 2019 (FFY2015-FFY2019) and includes data on minority or women-owned businesses (ownership of more than 51 percent by minorities or women). During the study period, M/W/DBE firms were awarded contracts totaling $418.8 million, 17.68 percent of

the total construction dollars. MBEs were awarded $298.8 million in contracts, 12.61 percent of the total construction dollars. The findings differed somewhat when the data were examined on a regional basis. There was a significant difference in the Northern Region, with thirty percent awarded in M/W/DBE construction utilization. The DOT&PF Disparity Study Final Report also examines DOT&PF's goals for the program and how reaching those goals can be improved.

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 CRO committed to ensuring equal opportunity for all businesses and personnel on DOT&PF projects. The CRO is responsible for implementing, administering, and monitoring the DOT&PF's civil rights and affirmative action programs, including the External Equal Employment Opportunity, Title VI Nondiscrimination, Americans with Disabilities Act, Disadvantaged Business Enterprise and related Support Services, On-the-Job Training (OJT)/Special Provisions and related Support Services, and Contract Compliance programs on a statewide level. The CRO has qualified personnel on staff to effectively implement the civil rights and affirmative action programs as required by 23 CFR 200.9(b)(1) and (2). This shows a strong commitment by the State of Alaska to provide the opportunity to disadvantaged groups in the state.

As part of compliance efforts, contractors are also required to meet the EEO and AA requirements conditions listed on the federal EEO contract conditions lists. The document requires that the "contractor shall take specific affirmative actions to ensure equal employment opportunity". The evaluation of compliance by DOT&PF provides that it "shall be based upon its effort to achieve maximum results from its actions. This program helps ensure that contractors are meeting their EEO and AA obligations and is administered by the DOT&PF to advance minority hiring, training, and non-discrimination while setting a high bar.

The bidding and contract documents include specific provisions to implement equity-focused policies related to all phases of contracting and construction. The contract provi-sions address non-discrimination, equal employment opportunity, reasonable accommodations for employees with disabilities, and non-segregation of facilities. These provisions require specific recruitment actions and dissemination of policies to achieve higher minority hire and the hiring of an EEO officer to monitor compliance. Under the training and promotions sections, contractors are required to seek out minority hires and fully utilize any training programs in the area. If unions are hired, they will use good faith efforts to increase opportunities for minorities and women, including any joint training opportunities. Last, the contract language calls for payment of Davis-Bacon wages when applicable and a minimum wage requirement. All these efforts toward equity will be in place for this proposed project at Auke Bay.

The DOT&PF has an EEO plan for internal hiring, which includes an individual to manage the upcoming construction projects. It is a fundamental policy of DOT&PF and the State to assure equal opportunity in employment to all individuals regardless of race, color, gender, religion, national origin, age, genetic information, veteran status, or disability. The State provides reasonable accommodations to applicants and employees who need them because of a disability or practice or observe their religion absent undue hardships.

Alaska DOT&PF appointed just under seventy percent (630) males and approximately thirty percent (275) females from July 1, 2019, thru June 30, 2021. This is a marked increase in female new hires from only 25 percent the previous fiscal year. Alaska DOT&PF has committed to actively participating in job fairs and reaching out to female and minority organizations to continue improving equality. Additionally, the department has created a Diversity, Equity, and Inclusion (DEI) Team whose members work with the different department training systems. This DEI Team will strive to find ways to bring the department's training data into a standardized format to help improve the ability to analyze for equality. The department's historical trend for training has consistently demonstrated equality, and it is expected to continue to do so.

The State of Alaska does not condone, permit, or tolerate illegal discrimination against its employees or applicants for State employment based on race, color, national origin, religion, sex, age, physical or mental disability, marital status, changes in marital status, pregnancy or parenthood, genetic information, or status as a veteran or veteran with a disability. The State is committed to promoting diversity and inclusion by fulfilling all state and federal EEO mandates and promulgating workplace rules and employment practices that value equity and fairness.

Three unions represent workers on the AMHS: the Inland Boatman's Union (IBU) of the Pacific representing unlicensed workers, the Masters, Mates, and Pilots (MMP), and the Marine Engineers' Beneficial Association (MEBA). Ninety-five percent of AMHS employees are residents of 44 communities, with the largest employment in Ketchikan and Juneau. For smaller communities with few opportunities, AMHS provides good career jobs with benefits. AMHS currently has 303 unlicensed crew members of IBU, 78 members of the MMP, and 58 members of the MEBA. Several unions representing departmental employees have seniority provisions for the initial appointment and/or promotional opportunities and layoff or reductions of force (Labor, Trades and Crafts; Public Safety Employees Association; MMP; MEBA, and IBU). These seniority provisions are agreed to through collective bargaining. Currently, there is a high vacancy rate at the AMHS, and they are actively recruiting new hires from across the State. Internally, AMHS reviews its required minimum qualifications, compensation, scheduling, leave policies, and training support to improve recruitment and retention. The proposed project supports workforce opportunities by maintaining the Auke Bay ferry terminal at full capacity with year-round jobs providing substantial union benefits.

Finally, 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. For students, school teams, and adventurers who cannot afford passage on a cruise ship or a plane ride, the AMHS affordably fulfills an uncountable number of dreams of experiencing Alaska, America's last frontier.

E: Leveraging Federal Funding to Attract Non-Federal Sources of Infrastructure Investment

Include any other information about non-Federal fund sources

Alaska DOT&PF has committed ten percent of the total project cost as the non-federal source of infrastructure investment.

V. Project Readiness

A: Technical Feasibility

Demonstrate city's technical capacity to implement the project based on experience and understanding of Federal requirements.

History of delivering similar projects
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 managed and produced the design documents and facilitated the construction of the existing Chenega dock and tidal ramp ferry berth in 1994. DOT&PF has standard bridge, mooring dolphins, and other marine facility designs on file. The marine engineering team also inspects every ferry terminal and associated transfer bridge structure in the State, including these facilities. They are highly experienced and intimately familiar with this particular project's local conditions and needs. Our 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.

Feasibility or constructability and schedule, and complying with federal requirements
DOT&PF expects to complete this project in under a four-year time frame. Two years are estimated for design and environmental permitting, with one to two years for physical construction depending on environmental permit limitations, AMHS vessel scheduling, and construction logistics such as material supply. Physical construction activities will need to consider staging ferry vessel use while this berth is under demolition and construction.

Degree of design completion
The design is preliminary, and the project anticipates additional design over the next three years.

Inclusion in ongoing state or regional planning efforts - include links or reference
This project is included in the PWSEDD CEDS referenced above and is consistent with the planning efforts of the AMHS. The Prince William Sound Economic Development District (PWSEDD) and project partners are requesting PIDP funds to make three of the region's five ferry dock facilities compatible with the in-coming Alaska Class Ferry (ACF) vessels. Chenega and Tatitlek's docks, which rely on multi-use tidal ramps and a fixed dock facility that currently accommodates the outdated LeConte class vessels, barges, and landing crafts, are unique in the AMHS system. Cordova's dock was constructed primarily for a vessel that no longer operates in Prince William Sound (PWS) (M/V Chenega).

Project Schedule

		Cordova	Tatitlek	Chenega
	Staffing	DOT&PF	DOT&PF/ Consultant	DOT&PF/ Consultant
	Construction Funding	x	x	x
	Obligation Year	FY25	FY25	FY25
Project Development	**Prelim Design ATP**	10/1/22	10/1/22	10/1/22
	Project Management Plan (PMP)	11/1/22	11/1/22	11/1/22
	Prelim Design (25%) Plan Review	3/1/23	3/1/23	3/1/23
	Federal Environmental Document	12/1/23	12/1/23	12/1/23
	Final Design ATP	1/15/24	1/15/24	1/15/24
	Plans in Hand (PIH) Review	3/1/24	3/1/24	3/1/24
	Plans, Specifications & Estimate (PSE) Review	6/1/24	6/1/24	6/1/24
	Project Certification	7/15/24	7/15/24	7/15/24
	Construction Obligation	9/1/24	9/1/24	9/1/24
Construction	**Authority to Advertise (ATA) / Bid Advertisement**	9/15/24	9/15/24	9/15/24
	Construction Contract Award	11/15/24	11/15/24	11/15/24
	Construction Start	7/15/25	7/15/25	7/15/25
	Construction Finish	3/15/26	3/15/26	3/15/26

B: Environmental Risk

Information about the NEPA status of the project

This project will need to be conducted in full compliance with Federal NEPA requirements – which have not yet been completed. DOT&PF has initiated the preliminary design and permitting activities and recently completed a major offshore improvement project at the nearby stern berth. The project team is familiar with the site, and this previous data will be helpful. DOT&PF will pursue this project like our current and previously completed FHWA-funded ferry terminal projects. It will take approximately 12-18 months to complete the NEPA and State and Federal permitting requirements for this project. The project team will do this concurrently with preliminary and final design efforts.

Environmental Permits and Reviews

This project encompasses offshore construction and placement of driven and drilled pile foundations. Environmental permits will include the U.S. Army Corps of Engineers Section 10/404 permit, Clean Water Act Section 401 Water Quality Certification, a Section 106 review, Formal Consultation under Section 7 of the Endangered Species Act, an NMFS Incidental Harassment Authorization (IHA), an Essential Fish Habitat Consultation with NMFS under the Magnuson-Stevens Act, and coordination with ADF&G, ADEC, and USFWS.

Environmental Studies or other Documents

Environmental studies will include a Section 106 Programmatic Allowance, a Biological Assessment in support of Section 7 Formal Consultation, an IHA permit application, an EFH Assessment for the EFH Consultation, and other analyses in support of the NEPA document, which is expected to be a Categorical Exclusion (CE).

Discussions with MARAD

MARAD is aware of the general condition of the Alaska Marine Highway System and coastal

ports in Alaska. Alaska DOT&PF recently requested that the American Marine Highway System extend the existing M-5 MARAD route to include western and northern Alaska. AMHS will continue to work with MARAD to designate projects, but at this time, the PWS docks are not a designated project.

Public Engagement

The appendix also contains letters of support for the project.

This particular project encompasses an improvement that will require public involvement. Public engagement will be facilitated in accordance with State and Federal Environmental procedures. A stakeholders group will be established, and at least one public meeting will be conducted on-site. The preferred alternative will not be difficult to ascertain, and the public will be kept informed at all levels of design, including plan reviews. Written concurrence will be obtained from the communities before bid advertisement. Public scoping notices will be published in local newspapers, various agency websites, and the State of Alaska Online Public Notices website.

Regional input will be solicited. A project website will also be established. Generally, ferry terminal improvement projects are non-controversial and widely accepted. The local communities and traveling public almost always agree that public transportation improvements such as enhanced or reliable ferry service are vitally important to the regional economy and public needs.

State and Local Approvals

No additional state or local approvals are required. No additional right-of-way is needed for the project.

Reviews, Approvals, and Permits by Other Agencies

Review, approvals, and permits by other agencies include the U.S. Army Corps of Engineers, NFMS IHA permit, Section 7 Formal Consultation with NMFS, and an NMFS EFH Consultation. Review and approval by the Native Village of Chenega Bay will also be afforded for local concurrence purposes. No local building permits will be needed for this type of construction.

U.S. Army Corps of Engineers Involvement

The USACE will be consulted throughout the project, as required.

C: Risk Mitigation

Risk mitigation during design will primarily include time. Careful attention is needed for scheduling and environmental permitting activities, so those can be completed promptly to advertise for construction bids and construct the project. Risk mitigation during construction is also of importance. This project primarily involves driven steel piles. The design and associated bid documents must ensure an understanding of the depth of driving or required pile lengths and anchoring or rock socketing measures. DOT&PF has pile records and relevant experience from past projects at and near this ferry berth.

VI. Domestic Preference

All iron, steel, manufactured products, and construction materials to be used in the project will be produced in the United States. Therefore, this project will comply with PIDP's domestic content requirements.

VII. Determinations

Project Determination	Guidance
1. The project improves the safety, efficiency, or reliability of the movement of goods through a port or intermodal connection to the port.	This project improves the speed, safety, and throughput of cargo and passenger movement because, without a facility that can accommodate future AMHS ferry vessels, only plane or private marine charter services would be available to move people and goods into and out of PWS communities. If this project is not completed, the loss of PWS communities' connection to the AMHS would almost certainly threaten the communities' viability as a permanent place. There would be little to no freight movement without the AMHS ferry service. The AMHS ferry service greatly expedites the movement of freight/cargo. There is no economically viable alternative to a dock for moving large shipments of goods into and out of a remote port. Substantively regular service is required for efficient logistics in goods movement and personal mobility. Chartered marine services are substantially more costly than the regular ferry service that the State of Alaska could provide through AMHS. Specific benefits of this project include public safety, ferry reliability, and maintaining a consistent level of existing ferry service.
2. The project is cost effective.	Not applicable. This project is located in Alaska.
3. The eligible applicant has the authority to carry out the project.	In Chenega – By the time of implemention of this project, all property rights for lands and structures are expected to be under the ownership of the Native Village of Chenega. DOT&PF will retain legal rights to operate and maintain any improvements utilized for ferry service. In Tatitlek - DOT&PF constructed the existing dock structure in 1994. Subsequently, ownership of the dock structure and offshore tidelands lease was transferred to the North Pacific Rim Housing Authority. In Cordova - The subject project is located within submerged tidelands that the City of Cordova owns. DOT&PF has legal agreements on file which convey property rights for the ferry terminal mooring structures associated with this project. Ferry terminal uplands and associated access are located on DOT&PF-owned property.

4. The eligible applicant has sufficient funding available to meet the matching requirements.	PIDP funding will account for 90% of project cost and the Alaska DOT&PF has committed to a 10% non-federal match.
5. The project will be completed without unreasonable delay.	We expect that this project can be accomplished in under a 4-year time frame. Two years for design and environmental permitting and one to two years for physical construction depending on environmental permit limitations, construction logistics such as material supply, etc. Physical construction activities for the new berth should largely be out of the way of the existing dock but some conflicts may occur. The project schedule included herein describes all necessary component aspects of the project.
6. The project cannot be easily and efficiently completed without Federal funding or financial assistance available to the project sponsor.	No other funds have been identified to complete this project. If the project is not funded through a PIDP grant then additional opportunities will be considered, if available. If the project is not completed a time will come soon when Chenega and Tatitlek will be unable to dock any ferries, crippling the communities and effectively bringing its industry and economy to a halt. Prince William Sound communities support the growth of small businesses, tourism, commercial fisheries, renewable energy initiatives, and their related skilled workforce. None of this is economically viable without regular and reliable ferry service.