ATTACHMENT C:
City of Saint Paul FY24 PIDP Grant Application

CITY SOUTH DOCK RENOVATIONS AND NEW BERTHING DOLPHINS PROJECT

Saint Paul Island, Alaska

U.S. Department of Transportation
Maritime Administration
FY2024 Port Infrastructure Development Program

PROJECT NARRATIVE

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INTRODUCTORY INFORMATION

Field Name	Response
Name of lead applicant	City of Saint Paul, Alaska
Is the applicant applying as a lead applicant with any joint applicants?	No
Does the applicant or joint applicant own the property where the grant-funded improvements will occur?	Yes
Is the applicant seeking funding under the small project at a small port set-aside?	Yes
Project name	City South Dock Renovations and New Berthing Dolphins Project
Project description	The Project will renovate the City South Dock by 1) replacing the used vehicle tires on the side of the dock with modern, energy-absorbing fenders, 2) replacing and upgrading the broken, missing, and substandard bull rails, ladders, and cleats, 3) adding three, 80-ton bollards for large vessel mooring, and 4) installing fire extinguishers and life rings. The Project will then install five new side-tie berthing dolphins with energy-absorbing fenders connected by a continuous catwalk to increase the effective mooring length of the City South Dock. In addition to Construction, the Project includes design, engineering, and environmental review/NEPA process.
Is this a planning project?	Not exclusively; it is both planning and construction.
Is this a project at a coastal, Great Lakes, or inland river port?	Yes - Coastal port
Is this project located in a noncontiguous State or U.S. territory?	Yes - Alaska
Geographic Coordinates (in Latitude and Longitude format)	Latitude 57.126579, Longitude -170.286426
Is this project in an urban or rural area?	Rural
Project Zip Code	99660
Is the project located in a Historically Disadvantaged Community?	Yes. Saint Paul Island is "Partially Disadvantaged." The US Department of Treasury has formally designated the Aleutians West Census Area as an Opportunity Zone. Saint Paul Island is a federally recognized Alaska Native Village Statistical Area.
Has the same project been previously submitted for PIDP funding?	Yes. PIDP FY 2023, FY2022, FY2021
Is the applicant applying for other Federal discretionary grant programs (managed by DOT or a separate agency) in 2024 for the same work or related scopes of work?	Yes. Applicant applied to USDOT RAISE in FY 2024 for only the planning component of this PIDP project.
Has the applicant previously received DOT funding for the same work or related scope of work?	No
Has the applicant previously received TIGER, BUILD, RAISE, FASTLANE, INFRA, USMHP, or PIDP funding?	No
PIDP Grant Amount Requested	$11,025,215
Total Project Cost	$11,728,952
Total Federal Funding	$11,025,215
Total Non-Federal Funding	$703,737
Will the applicant be seeking approval to expend funds prior to grant agreement execution?	Yes
Will RRIF or TIFIA funds be used as part of the project financing?	No
Does the applicant use LOGINK or a similar logistics platform provided or sponsored by the People's Republic of China or Chinese state-affiliated entities?	No

I. PROJECT DESCRIPTION

The City of Saint Paul is requesting $11,025,215 in FY24 Port Infrastructure Development Program (PIDP) **Small Project/Small Port** grant funding for the City South Dock Renovations and New Berthing Dolphins Project ("Project").

In many U.S. communities, this would be an amenity Project. But for Saint Paul Island, the City South Dock Renovations and New Berthing Dolphins Project is a life and safety necessity Project for a fishing community that is 750 miles by air to Anchorage and the Alaska mainland, has no roadway connections to the mainland, and relies on barge to bring food, fuel, and essential supplies once every 6-8 weeks. Failing to address the serious safety problems at the City South Dock puts the entire community at risk.

The Saint Paul Harbor supports the fishing industry, helping meet international demand for various species of Bering Sea crab, pollack, and halibut. The wellbeing of all Saint Paul Island residents depends on keeping the consistently working Saint Paul Harbor in a state of good repair. The proposed Project will strengthen harbor infrastructure and services to create and maintain a healthy foundation for residents and businesses to thrive. The economic benefit of a consistently functioning port will ensure the Saint Paul Island community is able to maintain and increase jobs supported by the fishing industry.

The City is currently purchasing gasoline and diesel from Vitus Marine, which is received via barge delivery only two times each year. The City of Saint Paul is the sole service provider for all gasoline, diesel, marine diesel, and heating fuel on Saint Paul Island. Residents of Saint Paul Island rely upon heating fuel for their homes. At this extremely minimal level of fuel delivery service, the inability or inaccessibility for the barge to safely moor at the City South Dock is a risk that could prove detrimental to the health and safety of the community. Saint Paul Island has a sub-arctic maritime climate, characterized by persistently overcast skies, high winds, and frequent cyclonic storms. Storms occur most frequently from October to April, often accompanied by gale-force winds to produce blizzard conditions. Going without fuel to heat a home in the harsh environment of the Pribilof Islands in the Bering Sea can be dangerous to health and safety, if not fatal during the coldest months of the year. Without gasoline and diesel fuel, vehicles, snowmachines, and ATV's used for subsistence hunting cannot be operated by the community members who rely on them for reaching the hunting grounds.

Figure 1: Saint Paul Island Harbor and City

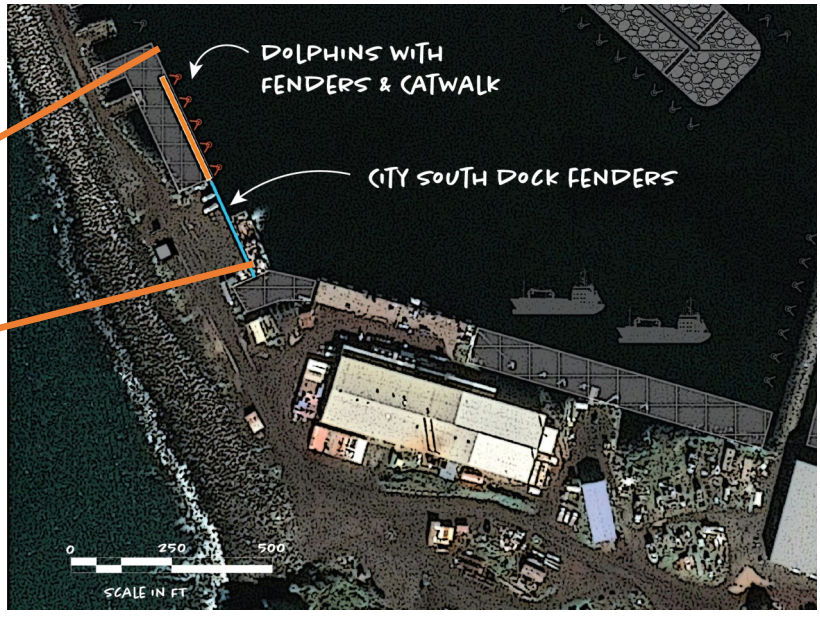
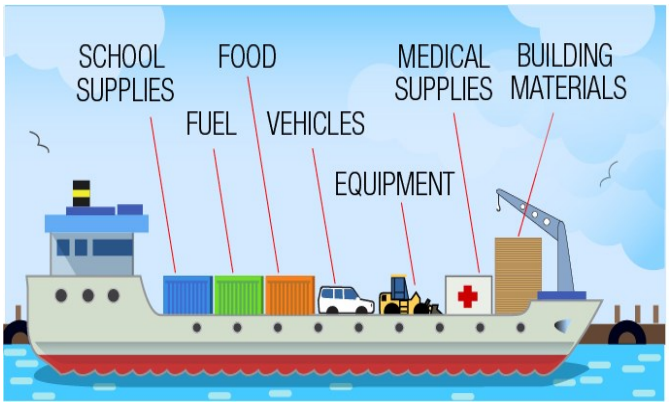


Figure 2: Project Overview



Barges and freighters bring other needed supplies to the island as well, including non-perishable food, critical supplies and materials for home and business repairs, medical supplies for the clinic, books and materials for the school, to name a few. At 200 feet long, the City South Dock is shorter than the 285-foot-long cargo barges that routinely use it. With inappropriately sized and inadequate dock capacity to receive the barges and freighters, the remote community of Saint Paul suffers dramatically.

The cost of goods in Alaska is very high due to a high dependence on goods imported from other states and countries, a high dependence on air cargo (one of the most expensive forms of freight transportation), and long supply chain distances within the state. By improving the harbor infrastructure to increase the quantity and reliability of deliveries of goods to Saint Paul Island by shipment through marine transportation, services would be significantly expanded at a lower price point because of the completion of this Project.

Statement Of Work

The City South Dock has an inadequate fendering system, consisting of used vehicle tires that have been hung on chains down the face of the dock. This is not uncommon in remote Alaska commercial fishing support facilities; however, rubber tires are not engineered to be used in a modern marine fender system. There are no published values for the amount of kinetic energy they can absorb nor the reaction they will produce under berthing loads. There are ladders on the face of the dock that have been smashed nearly flat by vessel impact.

There is a fuel header that the City maintains at this dock. Due to the adverse wave environment within the Harbor, existing bollards and cleats are insufficient for the mooring loads. Several concrete-block deadmen chain anchors have been added to the dock for enhanced mooring line capacity. There are a pair of winches and fairleads, one at each end to aid in mooring the Alaska Marine Lines (commercial freight transport) barge at the dock. The hull of the dock is in fair condition.

Current Design Status

In 2020, the City received an EDA Technical Assistance Grant to conduct the Saint Paul Harbor Improvement and Expansion Feasibility Study. The purpose of the project was to outline alternatives, options, phases and costs to replace, upgrade and expand the community's harbor to meet current and future needs. A site visit was conducted in June 2021 to inventory the existing moorage facilities and found there is inadequate moorage space for the larger commercial fishing vessels and that the existing moorage for larger vessels is in poor condition, particularly regarding the fenders and mooring capacity. The Feasibility Study completed in August 2021 (*Attachment A*) outlined three broad phases of improvements and expansion of Saint Paul Harbor. The proposed Project is a component of Phase 1: Upgrade and expand existing inner harbor facilities for improved larger vessel moorage.

Figure 3: Bollards & Bull Rails on the City South Dock

Engineer's conceptual designs and cost estimates for the Project were also completed as a part of the Feasibility Study.

Project Scope of Work

Funding from a FY24 PIDP grant will allow the City to address these urgent needs at the City South Dock. This funding request includes design, engineering, environmental review, and construction of the Project:

- Design & Engineering
- Environmental review and permitting
- Construction
  - ⇒ Renovate the City South Dock: Replacing the used vehicle tires currently being used as fenders with modern, energy-absorbing fenders. Replacing and upgrading the broken, missing, and substandard bull rails, ladders, and cleats. Adding three, 80-ton bollards for large vessel mooring. Installing fire extinguishers and life rings.
  - ⇒ Install new berthing dolphins: Installing five, side-tie berthing dolphins with energy-absorbing fenders connected by a continuous catwalk to increase the effective mooring length of the City South Dock.

Transportation Challenges Addressed By the Project

1) Inadequate Moorage Capacity

The City South Dock is the main dock for cargo and fuel barges. A significant operational constraint is the lack of moorage space. At 200 feet long, the City South Dock is shorter than the 285-foot-long cargo barges that routinely use it. Inadequate moorage capacity reduces the number of vessels that can safely moor. Vessels are not permitted to moor in the harbor other than at a dock or mooring facility. The current mooring capacity falls short of demand for several months during the year, primarily during peak fishing seasons. When the seafood processing plant is receiving crab in Saint Paul Harbor, it is important for them to move unloaded vessels away from the dock to begin the next unloading process; however, fishing regulations state that a vessel may not leave the harbor until the fish ticket for a delivery is finalized. During the snow crab fishery, in the season of worst weather conditions, this results in vessels moored to the City dock waiting for their fish ticket and regulatory permission to depart. Such actions compound the problems associated with what is a heavy-demand time for moorage space. Vessels often must jockey for position at the dock and, since they cannot stay in the harbor if not moored, some must exit and re-enter for fuel, unloading, or other services.

Figure 4: Tug Malolo pushing barge to City South Dock

2) Inadequate Moorage Infrastructure

The City South Dock has an inadequate tire fender system, inadequate cleats, broken or missing bull rails, and damaged or missing ladders. Users report that the wave climate in the harbor is routine-ly very bad, and mooring lines regularly snap while at berth. The timber bull rails are severely deteriorated or missing altogether. The current fenders are used truck tires scavenged from the city dump that have been chained to the outside of the dock. All access ladders are smashed flat from vessel impacts. Mooring cleats are insufficient in number and spacing for mooring. Some of the cleats have been torn from the dock or bent. The cleats are also improperly

sized and located for either fishing vessels or larger vessels. The smaller vessels' lines tend to pull horizontally and need cleats closer together, while the larger vessels pull from a steeper angle and need cleats spaced further apart. Also missing on the south dock are mooring bollards to hold vessels, especially larger ones, in rough weather. Wave surges in the harbor basin combined with strong winds often result in vessels being slammed against mooring infrastructure. During winter, ice sometimes forms or washes inside the harbor. It is common for the ice to become wedged between a vessel and the dock. The presence of the ice and inadequate fenders preclude the vessel from being able to moor tightly against the dock. The result is that the vessel slams against the dock when driven by winds and wave surges. The deteriorated state of the City South Dock increases the risk of damage to vessels using the facility and increases the risk of injury to crewmembers onboard vessels or on the dock.

3) The need for a harbor of refuge for the Bering Sea fleet

The primary traffic in Saint Paul Harbor consists of Bering Sea commercial fishing vessels. The vast majority are commercial crab harvester vessels delivering to the island's processor or visiting the harbor for emergencies, repairs, supplies, fuel, or air transport. They range in length primarily from 85 to 125 feet or longer. Between 70 and 100 such crab vessels fish in the waters surrounding Saint Paul Island annually varying in number by the level of crab allowable harvest. In addition, a like number of similar sized non-lo-cal harvesting vessels catch fish in the surrounding waters. These vessels do not normally visit Saint Paul Island unless for emergencies, repairs, supplies, fuel, or air transport. As such, it is important for these vessels to be able to reliably enter and moor at Saint Paul Harbor.

How this Project Addresses These Transportation Challenges

For safe moorage, vessels must be able to tie securely to the mooring facility, have safe access to shore for personnel and equipment, and be able to stay securely moored when weather conditions deteriorate. This Project will add five new mooring dolphins with fenders and continuous catwalks. The dolphins will be aligned with the south dock essentially providing an extension of the dock with sturdy, secure mooring. Set on 50' intervals, the dolphins will provide additional safe moorage of 250', enough length for at least two more vessels in rough weather. This additional moorage would relieve a significant amount of the congestion in the harbor that occurs during the winter snow crab fishery. The increased moorage availability from the dolphins will greatly increase safety by allowing vessels to wait at the dock for needed repairs or services, provide safe harbor to more vessels during rough weather, and reduce stress and accident probabilities on the fleet from repetitive and dangerous vessel movements. Increasing the mooring capacity by adding five dolphins allows more vessels to hotel at the dock or dolphin, which produces lower greenhouse gas emissions than vessels jogging outside the harbor while waiting for available mooring space, thus contributing to environmental benefits.

Project History and Broader Context

The City South Dock is a concrete caisson/barge unit that was built by Concrete Technology in Tacoma, Washington, towed into position, then set on the bottom and filled with gravel. The as-built drawings are dated 1989. It has a 200-foot-long face and is 40 feet wide. The top has a 6-foot tall by 2-foot-thick parapet at the dock face. Behind this is gravel-fill deck surface. In 1989, the current breakwater was constructed by the U.S. Army Corps of Engineers (USACE). It includes an 1,800-foot-long main breakwater and 970-foot-long detached breakwater. It provides 8 to 10 acres of harbor space with water depths of 18 to 25 feet. In 1996, the USACE deepened the entrance channel,

To summarize, the Project:

- ⇒ Reduces future damage to vessels and harbor infrastructure
- ⇒ Reduces travel and waiting costs for vessels through increased moorage
- ⇒ Reduces injury risks at mooring
- ⇒ Reduces damage and injury risks from increased moorage
- ⇒ Reduces greenhouse gas emissions

which provided a spending beach on the lee side of the detached breakwater, underwater reefs adjacent to the main breakwater, and other improvements. A small boat harbor basin was constructed afterward, which included an inner-harbor breakwater. In 2009, seasonal floating docks were installed in the small boat harbor.

The USACE has spent significant time and resources studying, planning, designing, and constructing the breakwaters, entrance channel, and turning basin. The original design of the harbor was predicated on providing moorage for a fleet of 36 crab and bottom fish ves-sels with lengths up to 120 feet and an unladen draft of 12 feet. This also provided access for refrigerated cargo vessel lengths more than 300 feet. The current inner harbor facilities can only accommodate a fraction of this original design fleet.

Initial planning, public involvement, and conceptual design work was completed for the Proposed Project between 2020 and 2021 as part of the Saint Paul Harbor Improvements and Expansion Feasibility Study (*Attachment A*). In 2019, the City of Saint Paul was awarded an EDA Economic Adjustment Assistance grant to complete a feasibility study to address current and longer-term needs at Saint Paul Harbor and inform the City's Capital Improvement Plan update. From the beginning, the Project team engaged the community and industry stakeholders to capture community needs and priorities. The team also coordinated with operators, coastal engineers, and the USACE to ensure technical input had been captured and reflected in preliminary concept plans. Based on stakeholder input and feedback, the Project team updated the study concepts, clarified cost estimates, and outlined pros and cons of the various alternatives. In support of the study, a site visit was conducted in June 2021 to inventory the existing moorage facilities. The Saint Paul Harbor Improvements and Expansion Feasibility Study was released in August 2021 which identified three broad phases of improvements for the Harbor. The proposed Project would complete one of the nine subphases under Phase 1, which focuses on upgrading and expanding existing inner harbor facilities for improved larger vessel moorage.

Applicant Authority and Intentions

The sole applicant, the City of Saint Paul, has the authority to plan, construct, own, operate, and maintain the grant-funded project. The Project does not include any subrecipients or joint applicants. The proposed Project does not include dredging.

II. PROJECT LOCATION

Is the project located in a rural or urban area?	**Rural**
Is the project at a coastal, Great Lakes, or inland river port?	**Yes - Coastal port**
Is the project a small project at a small port?	**Yes**
Is the project located in an HDC?	**Yes – Aleutians West Census Tract 02016000100**

The Southwest Alaska Region

Southwest Alaska is a large region with a small, dispersed population. Located in the geostrategic location of the North Pacific between Asia, North America and the Arctic, air and marine superhighways direct the flow of commercial aircraft and vessels moving goods, services and people through Southwest Alaska to every major region of the world. Six airlines pass through airspace in the region daily. Roughly 4,443 vessels transit between Asia and America on an annual basis, and as the Arctic opens, traffic through the Bering Sea has reached a high of 484 vessels, up 123% from 2008-2012. Southwest Alaska supports one of the richest fisheries ecosystems in the world. Six of the top ten fishing ports, by value, are in Southwest Alaska. Strategically located ports capable of supporting harvesting and processing of fisheries resources are spread across the region, and Saint Paul Island is one of them.

Figure 5: Saint Paul Island location in Alaska

The Pribilof Islands

The Saint Paul Harbor and the Project location is on a narrow peninsula on the southern tip of Saint Paul Island, the largest of the five Pribilof Islands located in the Bering Sea of Alaska. The extremely remote and rural Saint Paul Island is 47 miles north of the nearest other inhabited Saint George Island, 240 miles north of the Aleutian Islands, 300 miles west of the Alaska mainland, and 750 miles west of Anchorage. The Pribilof Islands are situated on important migration routes for nearly all fish, birds and mammals that populate the rich Bering Sea.

Saint Paul Island

The Project is in a Disadvantaged Community. Saint Paul Island is a federally recognized Alaska Native Village Statistical Area. The Project is located on Tribal Land and in a Qualified Opportunity Zone. The many years of colonialism by the Russian and then the United States governments until the mid-20th century contributed to this island community being disadvantaged. Eighty-four percent (84%) of Saint Paul Island's population is Alaskan Native (Tribal), predominantly Unangan (Aleut). The first full time residents of Saint Paul Island were Unangan slaves brought by Russian colonists in 1788 to harvest fur seals and protect the rookeries. For over 200 years, the community's economy was centered on harvesting fur seals, first under Russian dominance and later under the control of the U.S. Federal Government. Until 1950, and in some cases beyond, liberties of travel, assembly, education, and occupation were restricted by the federal government. The Fur Seal Act of 1966 finally established rights for Saint Paul Island residents taken for granted elsewhere in the nation. The land, which was owned by the federal government, was finally transferred to the community at that time, allowing Saint Paul Island residents to own their own homes. It was not until 1981 that local harvesting of halibut was permitted to begin.

Figure 6: Saint Paul Island

Over the past three decades, U.S. fisheries resources in the Bering Sea have been managed by the National Marine Fisheries Service (NMFS) to give preferential access and harvest rights to recognized Native Alaskan communities along the Bering Sea coast. Saint Paul Island is one such community. This preferential access has occurred through allocation of 10% of all harvest rights (and if applicable, co-joined processing rights) for all species to these communities through the Western Alaska Community Development Quota (CDQ) Program. An additional effort to provide economic stability in these isolated, Indigenous communities led to crab processing rights being geographically specified to require processing in the Pribilof Islands area. These regional percentages consist of more than 2% of red king crab and over 46% of snow crab allowable harvests. Together with CDQ allocations, **the result is that about half of all snow crab harvested in the U.S. is processed in Saint Paul,** along with other crab and halibut.

Figure 7: Saint Paul Island Harbor. Credit Aaron Lestenkof

Saint Paul Harbor

Saint Paul Harbor consists of the main harbor and a small boat harbor. In the main harbor there is the main breakwater and a detached breakwater, the City South and North Docks and Piers, a Harbormaster Office, a barge off-loading area, and a dock and processing plant that is leased to Trident Seafoods. Saint Paul Island is home to the largest crab processing facility in the world, processing 500,000 pounds of crab daily and employing up to 400 workers in peak season.

Saint Paul Harbor consists of an outer breakwater and additional wave barrier protecting a three-part moorage basin. Immediately behind the breakwater is the large vessel mooring infrastructure, City South Dock, described in this Project, at Latitude 57.126579, Longitude -170.286426.

According to the EPA's Climate and Economic Justice Screening Tool, Saint Paul Island has:

Limited broadband access (80-90th percentile)

High population without health insurance (90-100th percentile)

Low income and low access to food ("is a food desert")

Low life expectancy (70-80th percentile)

According to the USDOT's Equitable Transportation Community Explorer tool, Saint Paul Island, Alaska has:

An 82% probability of experiencing extreme weather changes

91% of residents with mental health issues

96% of residents with high blood pressure

85% of residents with asthma

98% without health, property, or vehicle insurance

77% living with disabilities

III. GRANT FUNDS, SOURCES, AND USES OF FUNDS

The City of Saint Paul has had a professional consulting firm evaluate the Project, producing the following budget assumptions and a rough order of magnitude cost estimates. The budget dollars are 2024. As part of its project management, the City has included additional amounts to ensure public participation, an equity assessment, workforce development, and diversity, equity, and inclusion engagement.

Satisfaction of Cost-Share

The City of Saint Paul is able to contribute a non-federal cost share of 6%. As a rural community and a "small project at a small port," the City of Saint Paul requests a waiver to the 80% maximum federal share, and further requests 94% federal share of the proposed Project.

Funding Source	Funding Amount	Total Funding
PIDP Requested Funds:	$11,025,215	$11,025,215
Other Federal Funds:	$0	$0
Non-Federal Funds (Applicant match):	$703,737	$703,737
Total Project Cost:	**$11,728,952**	**$11,728,952**

Supporting Documentation of Non-Federal Cost-Share

The Council of the City of Saint Paul authorized the City Manager to plan, apply for funding, construct, operate, and maintain the grant-funded proposed Project. The Council of the City of Saint Paul approved a resolution in support of providing the applicant cost-share (*Attachment D*).

Any Pre-Obligation Requests

If selected as a recipient of FY24 PIDP funding, and should the Secretary of Transportation elect to increase the Federal share of costs above 80 percent due to the Project being located in a rural area and meeting the "small project at a small port" definition, the City intends to request approval from MARAD to allow for pre-construction expenses incurred between time of MARAD announcement of project selections and obligation of funding date.

Budget Narrative Description

No previously completed components are included in the Project budget. The Project is in only one census tract. This funding request includes design, engineering, environmental review, and construction of the Project:

- Design & Engineering
- Environmental review and permitting
- Construction
  - ⇒ Renovate the City South Dock: Replacing the used vehicle tires currently being used as fenders with modern, energy-absorbing fenders. Replacing and upgrading the broken, missing, and substandard bull rails, ladders, and cleats. Adding three, 80-ton bollards for large vessel mooring. Installing fire extinguishers and life rings.
  - ⇒ Install new berthing dolphins: Installing five, side-tie berthing dolphins with energy-absorbing fenders connected by a continuous catwalk to increase the effective mooring length of the City South Dock.

Cost Overrun Plan

The City has established procedures to prevent and address potential cost overruns of the Project. We understand that one of the best ways to stop cost overruns is to plan against them before executing stay within budget. When planning the project, our staff and consultants considered all possible scenarios and used historical data, interviews with consultants, and experience. We considered the volatile nature of the current inflation situation, supply and demand of materials and rising costs of shipping and freight. To compensate, a contingency of 15% has been included in the Project budget. When considering contracts with new entities, the City performs background checks and conducts reference calls. All attempts to avoid cost overruns will be employed to maintain the project's budget. If it is discovered that a cost overrun may be imminent, a strategic response will be determined which may include allocation of City resources, seeking loan and/or grant funding, or other measures as deemed suitable in the best interest of the City and the project's successful completion.

Letters of Support

Letters of support for the proposed Project (*Attachment C*) were received from members of the Harbor Planning Team and Industry Stakeholders as well as private organizations who most frequently utilize the infrastructure proposed in the Project: The Alaska Congressional Delegation, State of Alaska Department of Transportation, Central Bering Sea Fisherman's Association, Aleut Community of Saint Paul Tribal Government, Tanadgusix Corporation (TDX), Vitus Marine, Lynden Transport/Alaska Marine Lines, Aleutian Pribilof Islands Association, and the Alaska

IV. MERIT CRITERIA

1. Achieving Safety, Efficiency, or Reliability Improvements

The Project will focus on improving the existing Saint Paul Harbor infrastructure to increase safety, efficiency and reliability for the public, harbor facility employees, fishermen and vessel operators, processing plant employees, heavy equipment operators, and overall harbor operations. These improvements are projected to increase safe docking capacity and significantly reduce the risk of injury.

Saint Paul Island is regularly exposed to storms of hurricane-force strength. Wave surges in the harbor basin combined with strong winds result in vessels being slammed against mooring infrastructure. Existing inadequate mooring infrastructure creates safety risks while vessels are moored. Numerous mooring lines snap each year, and dock cleats are sometimes damaged or pulled out. Mooring lines snapping can hurt those either on the dock or onboard a vessel, including eye injuries, muscle damage, broken or fractured bones, head and traumatic brain injuries, paralysis, and loss of life. When mooring lines snap, vessel crewmembers must immediately adjust tension on the remaining lines and set more lines to compensate for those lost. Often, this means a crewmember must jump from the ship to the dock to secure the line.

This unsafe activity is often necessary during winter months with cold, rainy and/or snowy and icy conditions that are inherently dangerous for persons working on and around vessels and docks. Saint Paul Island's remote location further complicates safety risks. There are no hospitals or trauma centers on the island, only a medical clinic which has limited primary care capabilities. Anyone sustaining serious injuries must be flown nearly 750 miles to Anchorage. Poor weather conditions on the island can delay medevac flights for days at a time, allowing injuries to worsen.

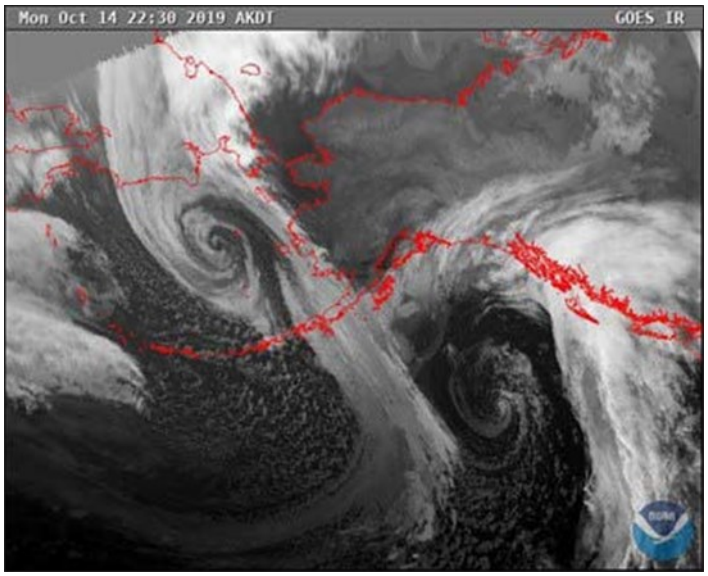


Figure 8: Typhoon that caused damage to Saint Paul Island in 2019

The City South Dock, a core transportation asset, requires replacement and modern upgrades to correct deficiencies identified in the City's Capital Improvement Plan[1] as well as the Saint Paul Harbor Improvements and Expansion Feasibility Study. City South Dock has inadequate bull rails, mooring cleats, bollards, access ladders, and fenders. The timber bull rails are in very poor condition or missing altogether. The current fenders are used truck tires scavenged from the city dump that have been chained to the outside of the dock. All access ladders are smashed flat from vessel impacts. The cleats are improperly sized and located for either fishing vessels or larger vessels. The smaller vessels' lines tend to pull horizontally and

the larger vessels pull from a steeper angle and need cleats spaced further apart. Also missing on the South Dock are mooring bollards to hold vessels, especially larger ones, in rough weather. The existing cleats are inadequate for larger vessels in rough weather. Cleats are used to secure mooring lines that keep vessels in place at the docks. In rough weather, the forces acting on the vessels increase significantly due to strong winds, waves, and currents which can exert additional strain on the mooring lines and the cleats. Without properly functioning cleats, mooring lines come loose, leading to the vessels drifting or even colliding with other vessels and structures.

Figure 9: City South Dock

Aside from the quality of mooring facilities, inadequate moorage capacity reduces the number of vessels that can safely moor. Vessels are not permitted to moor in the harbor other than at a dock or mooring facility. When all docks are at capacity during storms, all remaining vessels must stay out of the harbor and weather the storm. When the processor is receiving crab in Saint Paul Island, it is important to them to move unloaded vessels away from the dock to begin the next unloading process; however, fishing regulations state that a vessel may not leave the harbor until the fish ticket for a delivery is finalized. During the snow crab fishery, at the season of worst weather conditions, this results in vessels moored to the City dock waiting for their fish ticket and regulatory permission to depart. Such actions compound the problems associated with what is a heavy-demand time for moorage space. Vessels often must jockey for position at the dock and, since they cannot stay in the harbor if not moored, some must exit and re-enter for fuel, unloading, or other services.

Because of the great distance from other ports, Saint Paul Harbor is a port of refuge for fishing and crabbing vessels, U.S. Coast Guard and other government ships, tourist vessels, trans-Arctic commercial vessels, and expeditions that call on Saint Paul Island for emergencies, supplies, fuel, or air transportation. It is critical for these vessels to be able to reliably enter and moor at Saint Paul Harbor. During fishing operations, it is not uncommon for a vessel to suffer a mechanical problem and need to wait for replacement parts or repairs. In the Bering Sea, waiting for repairs is most safely accomplished while moored in the harbor. During the winter, Saint Paul Harbor is the only refuge north of Dutch Harbor—238 nautical miles—with semi-reliable air service for parts and personnel shipment; however, if a larger vessel is moored to the dock, there is usually no room for another vessel to moor for medical emergencies, repairs, transport to airport, refueling, and obtaining necessary supplies. In late 2020, it caused the F/V Ballyhoo to make the trip to Dutch Harbor with a medical emergency. There are simply not enough places to park. Lack of access contributes to the safety issues.

The Project provides solutions to these serious safety concerns, improves efficiency of the harbor, and increases reliability of the harbor operations, all of which are primary purposes of the Project.

City South Dock safety improvements include a) increasing overall safe moorage space by 250 feet—enough for two to five vessels—depending on weather; b) upgrading and repairing fenders, cleats, bull rails, and bollards to reduce current vessel and infrastructure damage and to reduce risks of injury and vessel loss.

[1] 2017-2021 CIP (later amended to continue through 2023, with the 2024-2028 currently in draft) https://stpaulak.com/wp-content/uploads/2023/02/CSP_Capital-Improvement-Plan_2017-2021_Amended22.pdf

a) This Project will add five new mooring dolphins with fenders and continuous catwalks. The dolphins will be aligned with the south dock essentially providing an extension of the dock with sturdy, secure mooring. Set on 50' intervals, the dolphins will provide additional safe moorage of 250', enough length for at least two more vessels in rough weather. This additional moorage would relieve a significant amount of the congestion in the harbor that occurs during the winter snow crab fishery. Adding moorage availability will increase safety by allowing vessels to wait at the dock for needed repairs or services, provide safety to more vessels during rough weather, and reduce stress and accident probabilities on the fleet from repetitive, dangerous vessel movements, per the Sensitivity Analysis of Damage and Injury Risk Reduction for Increased Moorage discussed in the Benefit-Cost Analysis (BCA) supporting this Project (*Attachment B*). The BCA explains how the safety measures proposed by this project are expected to reduce the risk of serious injury by 70-75%.

b) This Project improves safety by replacing the tires with modern, energy absorbing fenders at the City South Dock and new dolphins. The fenders reduce impacts of waves and wind on vessels by allowing tight mooring. The snug mooring reduces risk of injury from mooring lines snapping. The fenders also reduce ice impacts by creating a 6-foot gap from the dock, where much of the ice forms. Adding new cleats and three 80-ton bollards improves safety by creating appropriate means of tightly securing vessels to the dock or dolphins, according to their size. New bollards will allow vessels to stay in the harbor longer to complete their offloading of fish and crab cargo with reduced accident risk.

Figure 10: Old vehicle tires and Bollards at City South Dock

THE PROJECT WILL:

- Protect individuals inside the port from safety risks
- Reduce fatalities and/or serious injuries related to port operations
- Incorporate specific safety improvements that have port-wide system impact
- Result in a documented increase in cargo throughput by meeting an existing, well-defined need for additional throughput capacity
- Result in enhancements that generate well-documented improvements in the dependability of cargo operations
- Remedy infrastructure deficiencies that are identified in the City's capital investment plan and that have a demonstrated impact on cargo operations

2. Supporting Economic Vitality at the Regional or National Level – Small Projects

For over 200 years, the community's economy was centered on harvesting fur seals. This was first under Russian dominance and later under the control of the U.S. Federal Government. The Marine Mammal Protection Act of 1972 made it illegal to harvest or import marine mammals, and the economy shifted from fur sealing to commercial fishing, which is by far the dominant economic driver today. The Bering Sea is currently one of the most productive fisheries in the world, and Saint Paul is located at the epicenter of many of the Bering Sea's commercial fisheries.

Approximately half of all snow crab harvested in the United States is delivered by fishing vessels to the sole processor in Saint Paul Island. The fishery takes place from January into April, depending on allowable harvest levels and catch rates. It is primarily this activity, and past and future harvests of other crab species, that have been the impetus for the harbor.

Figure 11: Mooring bollard ripped out by barge at City South Dock

Saint Paul Island's remote island location is a significant economic challenge. The distance results in high transportation costs, serving as a barrier to investment in the local economy. Ensuring the long-term viability of the Saint Paul Harbor transportation assets is necessary for (1) maintaining the community's vital connection to the basic goods all residents rely on and (2) connecting the Bering Sea fishing fleet to the rest of the world—the fishing industry is what connects Saint Paul Island to the global economy, and every member of the community has some level of involvement in or reliance on the fishing industry.

Improving economic competitiveness is a primary objective of the Project. The economic well-being of the whole community is tied to the Harbor's ability to generate revenue, whether through fish tax revenue, receiving cruise ships, or the direct and indirect economic impacts of all other harbor transportation activities. The Project simultaneously (1) improves the resiliency of a critical link in the community's supply chain, and (2) improves long-term economic competitiveness and resiliency through infrastructure improvements and programming that opens the harbor to more diverse economic activities.

Implementation of the Project provides increased economic competition for the entire region. Upgraded harbor facilities can facilitate increased trade and commerce not only for the island but also for neighboring communities. Improved access to maritime transportation enables businesses to import and export goods more efficiently, boosting economic activity across the entire region. Harbor improvements often create jobs not only during the construction phase but also in the long term through increased economic activity. The expansion of port facilities, marinas, and related services can generate employment opportunities for residents.

The Project will:

1) Improve freight transportation mobility at, around, and through the port
2) Promote long-term economic growth and diversification to overcome the competitive disadvantages of the port

Supporting the Fishing and Seafood Industry

The Project ensures infrastructure improvements effectively support the local economy as well as the regional fishing and seafood industry. Trident Seafoods has the sole processor plant on the island and historically employs up to 300 people during the high season and 30 people during off-season. Associated with this is local employment directly supporting the harvesting and processing activities, fuel and supply sales, increased air transport activity, and the multiplier of these impacts throughout the community.

Economic Diversification

Harbor-area transportation improvements help implement all five goals in the Saint Paul Island Comprehensive Economic Development Strategy[2].

It is reasonably clear, based on prior planning and public involvement, that renovations to the City South Dock will support the establishment of new or increased economic activity. In addition to supporting local fishing and seafood processing activity and diversify into other fisheries, opportunities to expand the presence of military (primarily U.S. Coast Guard) vessels, tourism, and marine and climate research in the area create immediate economic activity, followed by an eventual increase in supporting services (e.g. hospitality, housing, maintenance, supply). The increase in moorage availability provided through the Project is expected to lead to a 30 percent increase in vessel mooring, which could serve as a catalyst for economic growth and development in the region by stimulating various sectors and generating income opportunities. More vessels mooring implies increased activity in ports and harbors. The additional moorage availability means more docks or berths are accessible for vessels to dock simultaneously. This enables multiple vessels to load and unload cargo concurrently, increasing efficiency and reducing turnaround times. This suggests a potential increase in trade and commerce as more ships can dock to unload and load goods, facilitating more efficient trade operations.

For example, there is great interest among fisheries scientists and experts in establishing mariculture facilities on the island. In 2021, Alaska Governor Dunleavy re-established the Alaska Mariculture Task Force as a step toward reaching the goal of growing a $100 million per year mariculture industry in 20 years. In 2022, the Alaska State Legislature passed a new law that allows permitting of production-level shellfish hatcheries. In late 2023, the City of Saint Paul submitted a grant proposal to NOAA Fisheries to conduct a feasibility study of the technical, regulatory, and financial aspects of accommodating king crab hatching and rearing as part of the ongoing effort to restore failing king crab stocks in the Bering Sea.

The U.S. Coast Guard has a Forward Operating Location, Sentinel Class Fast Response and National Security Cutters on Saint Paul Island. The Coast Guard patrols the Bering Sea waters during fishing season to provide emergency support to the fleet and enforce fishery regulations.

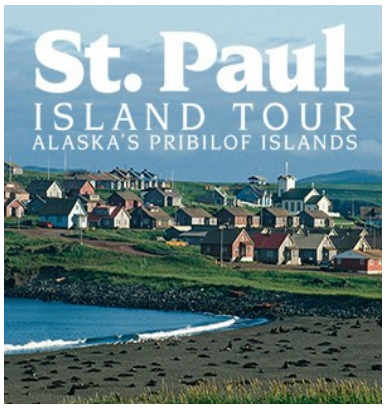


Figure 12: Saint Paul Island Tours

Commercial and small-scale luxury adventure cruise ships also call on Saint Paul Harbor and have shown interest in increasing not only in vessel size but frequency. Six cruise ships docked in Saint Paul Harbor in 2023, up from zero only three years ago. Seven cruise ships are expected in 2024. The great seabird colonies of the Pribilof Islands are known world-wide by professional guides, experienced naturalists, ornithologists, hunters, and photographers. Saint Paul Island also hosts the world's largest colony of northern fur seals. More than 50 percent of the entire population breeds here in the Pribilof Islands.

Outside funding for research vessels has recently increased, given the national interest in studying the effects of climate change on aquatic species in the region.

3. Leveraging Federal Funding

As a rural community, and a "small project at a small port," the City of Saint Paul requests a cost share waiver from the Secretary of Transportation to increase the Federal share of costs to 94% for this application. Federal funding is essential to provide the full 100% percent of the project budget, which is a much-needed investment to this remote community in need of infrastructure to support their main source of economic livelihood. The City of Saint Paul is prepared to commit 6% local match. The Saint Paul City Council approved a resolution (*Attachment D)* authorizing the City Manager to apply for FY24 PIDP grant funding for this Project.

[2] 2024-2028 draft https://www.aleut.com/wp-content/uploads/2023/12/St-Paul-CEDS-Public-Review-Draft-Dec2023.pdf

City of Saint Paul Investments In Saint Paul Harbor Infrastructure

Over the past four years, the City invested other funds preparing and planning the proposed Project. In 2020, the City received an EDA Technical Assistance Grant in the amount of $120,000 to conduct the Saint Paul Harbor Improvement and Expansion Feasibility Study. The City provided $107,923 -- a 47% local cash match – to that project. The Feasibility Study outlined the necessary improvements, renovations, upgrades, and areas of expansion for the Saint Paul Harbor.

In 2022, the City received an EDA Economic Adjustment Assistance Grant in the amount of $2,270,400 for the Saint Paul Small Boat Harbor Utility Expansion Project. The City provided $567,600 -- a 20% local cash match -- for that project, which is another of the proposed phases of improvement identified in the Saint Paul Island Harbor Improvement and Expansion Feasibility Study.

The City has invested in complimentary projects supporting and protecting Saint Paul Harbor infrastructure. In 2023, the City received a grant from the State of Alaska Department of Homeland Security and Emergency Management (DHSEM) for a closed caption security TV system Harbor-wide for security enhancements. The State of Alaska DHSEM grant amount of $134,883 is providing 89% of the project funding. The City is providing the remaining 11% as local match.

In March 2023 the City of Saint Paul, as lead applicant for a community collaboration application, was selected as a recipient of the US Department of Transportation Thriving Communities Program. Two years' technical assistance, capacity building and transportation infrastructure planning is currently being provided to the City of Saint Paul, including on this proposal.

Finally, the City has obtained both a USDA RUS Rural Electric Program loan and a USDA High Energy Cost Grant to perform grid upgrades at the Saint Paul Island power plant as well as for integration into the existing wind power system operated by TDX Power. The City recently partnered with the Aleut Community of Saint Paul Tribal Government and TDX Power on an EPA application to the Climate Pollution Reduction Grant opportunity to add three additional wind turbines and a battery energy storage system. The benefits of this project include GHG reduction, energy cost stabilization for ratepayers, and coordination of power production throughout the community, including the Harbor.

4. Port Resilience

The project results in positive, quantifiable impacts on the supply chain.

While some cargo arrives on the island via air, the island's small airport cannot replace the harbor's role in providing essential supplies to the full population. Most basic goods like food and fuel arrive by barge due to its cost effectiveness compared to air cargo. Even so, the costs associated with importing and distributing basic consumer goods result in consumer prices that are far above national averages, especially in Alaska's remote, low-population areas. The previously mentioned capacity and safety issues decrease the harbor's functionality, negatively impacting the supply chain.

The City of Saint Paul purchases gasoline and diesel received via barge delivery only two times per year. The City is the sole service provider for all gasoline, diesel, marine diesel, and heating fuel on Saint Paul Island. Residents of Saint Paul Island rely on heating fuel for their homes. At this extremely minimal level of fuel delivery service, the inability or inaccessibility for the barge to safely moor at the City South Dock is a risk to basic community functioning. Barges and freighters bring basic needs for survival to the community, such as non-perishable food, supplies and materials for home and business repairs, medical supplies for the clinic, books and materials for the school, vehicles, and heavy equipment, to name a few. Without reliable and safe docks to receive the barges and freighters, Saint Paul residents would suffer dramatically.

A better harbor allows for more frequent and reliable shipments of essential goods such as food, medicine, building supplies and fuel. This ensures that residents have more affordable access to necessary supplies without delays or shortages, improving their overall standard of living. Harbor improvements will reduce friction for conducting business stemming from inadequate design or state of repair in and around the harbor area. Hindered goods movement increases the cost of imported goods and hurts affordability for residents.

Figure 13: Saint Paul Harbor

<u>The Project will advance the port's ability to withstand natural and climate-related hazards and human-caused emergencies.</u>

The Project has and will continue to use throughout the planning and design phase, best-available climate data sets, information resources, and decision-support tools (including DOT and other federal resources) to assess the climate-related vulnerability and risk of the Project and to deploy solutions that reduce those climate change risks.

Along Saint Paul Island's coastline, sea level rise combined with a shift in the timing and extent of sea ice and storm surges have caused flooding and erosion, threatening shoreline, infrastructure, and Alaska Native ways of life. Wave action during fall storms has intensified due to the lack of sea ice that has historically protected against the formation of erosive waves. The City of Saint Paul's Local Hazard Mitigation Plan, updated and approved by FEMA in 2022, determined that climate change will impact the City of Saint Paul in many ways, including more frequent and destructive storm surges threatening harbor infrastructure and potentially more flooding and erosion farther inland.

The clear evidence of climate change impacts to Saint Paul Island reinforces the centrality of planning and designing harbor infrastructure improvements that can reliably withstand these impacts. This means reducing structural vulnerabilities and stabilizing critical infrastructure to improve the harbor's resilience to a worsening wave climate. The 2021 Saint Paul Harbor Improvement and Expansion Feasibility Report (*Attachment A*), which outlined the proposed Project, provided recommendations for both near-term and long-term mitigation strategies.

Moving goods across the country and the world, the transportation systems sector is exposed to a limitless number of threats and risks. Even the simplest physical disruption of a maritime hub such as Saint Paul Harbor due to human or nature-made events can rapidly mushroom into a damaging stoppage of essential human and commerce links. Every member of the community has some level of involvement in or reliance on the fishing industry, whether direct or indirect. Tax revenue from fishing funds critical government services on the island. As such, the public welfare on Saint Paul Island depends heavily on the safety and reliability of its harbor infrastructure. It is for all these reasons that the harbor infrastructure must be protected. Installation of new and improved equipment, components, and material to replace and repair the aging and damaged harbor infrastructure increases the Saint Paul Harbor's preparedness level for natural hazards such as earthquakes, tsunami, severe weather, coastal storm surges as well as manmade risks such as port operation accidents and hazardous materials spills. It also increases the City's ability to recover more quickly from disruptive events.

The Project incorporates evidence-based climate resilience and adaptation features.
The City will adopt a science-based approach to managing climate-related risks and vulnerabilities to Harbor facilities and infrastructure. In its Request for Proposals for the architectural design, engineering and inspection of the proposed Project, the City will request that proposals:

- Reference current planning and environmental guidance and regulations for transportation infrastructure and prepare a work plan prioritizing the regulations and guidance that will have the most impact on the proposed project.
- Encourage and prioritize the incorporation of approaches increasing the resilience of the City South Docks to flood damage and/or operational disruption that fall into the basic categories of elevate, relocate, protect, or accommodate. Such approaches could include coastal protection, site selection and relocation, perimeter protection, or elevation of utilities and critical equipment.
- Encourage and prioritize incorporation of climate change projections—particularly sea level rise and increased coastal storm surges—into project design criteria as a supplement to applicable building code requirements. The City will preserve the flexibility of project teams to develop packages of flood mitigation solutions that best satisfy broader design objectives in a cost-effective and co-beneficial manner.
- Encourage and prioritize the consideration of critical interdependencies (for example, the safety of and shared risks to essential electrical, telecommunications, fueling, or surface access infrastructure) within the project scope.

The Project is included in or in alignment with the following resilience improvement plans:

1) The White House National Strategy for the Arctic Region, Pillar 2—Climate Change and Environmental Protection: Build Resilience and Advance Adaptation, while Mitigating Emissions, specifically Strategic Objective 2.1: Advance Community Adaptation and Climate Resilience.
2) The USDOT's Climate Action Plan Revitalizing efforts to Bolster Adaptation & Increase Resilience (August 2021), specifically the priority action of "enhancing resilience throughout the project planning and development process."
3) The Alaska Climate Change Action Plan Recommendations To The Governor (adopted in 2018; Action 1.3D, Action 2.2A, 2.3D, and Action 3.1C.) Specifically, the proposed Project considers food security and how natural disasters elsewhere, as well as climate-related disruptions, can affect food shipments by barge to rural, remote, coastal communities such as Saint Paul Island.
4) The City's current Capital Improvement Plan with projects to support harbor resilience.
5) The 2024-2028 Saint Paul Island Comprehensive Economic Development Strategy (CEDS), specifically supporting the vision of "an Unangan community of healthy, resilient people working together to sustain a robust ocean-based economy."
6) The City's 2022 Local Hazard Mitigation Plan Update, specifically mitigation strategies to reduce structural vulnerability and protect critical facilities from storm surge.

Figure 14: Storm surge along the Saint Paul Harbor breakwater

V. SELECTION CONSIDERATIONS

1. Climate Change and Sustainability

Climate change generates greater impacts in the Arctic than in many more temperate regions, yielding unstable terrain, vulnerable coasts, changing ecosystems, and a worsening biodiversity crisis.

More than 60 percent of Alaska Native communities are considered environmentally threatened due to climate change.

Figure 15: Unangun Tunuu in the Saint Paul Island school. Credit: TanamAwaa.com

The impacts of global climate change experienced on Saint Paul Island are severely disproportional to its own emissions. These impacts include sea level rise and stronger storm surges on the island's coastal areas, increased flooding and stormwater inundation, and more severe and frequent extreme weather events. Saint Paul Island is extremely vulnerable to the effects of increased temperatures and rainfall. Along Saint Paul Island's coastline, sea level rise combined with a shift in the timing and extent of sea ice and storm surges have caused flooding and erosion, threatening shoreline, infrastructure, and Alaska Native ways of life.

The Bering Sea is one of the largest and most biologically productive semi-enclosed seas in the world, but climate change threatens crab and fish populations and, therefore, the way of life for residents of Saint Paul Island. Declining sea ice and marine heatwaves in the Bering Sea have resulted in dramatic shifts populations of fish and crab stocks. These impacts are expected to increase as an impact of climate change.

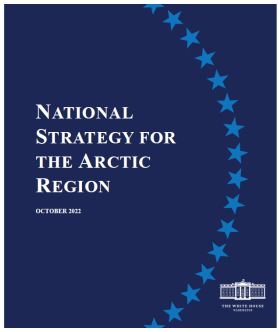
Alaska is at the forefront of climate change in the U.S., warming faster than any other state -- twice as fast as the global average since the mid-twentieth century.

Wave action during fall storms has intensified due to the lack of sea ice that has historically protected against the formation of erosive waves. Cliffs along the southeastern side of the island have also experienced erosion because of the changing timing and extent of freezing temperatures that previously helped stabilize the cliffs.

The Alaska Climate Research Center observed a change of annual average daily temperature on Saint Paul Island from 34.4ºF from 1950-1960, to 36.7ºF from 2010-2020 (a 7% increase) as well as an increase of annual precipitation from 23.7 inches to 26 inches (11% increase). The University of Alaska Fairbanks Scenarios Network for Alaska and Arctic Planning models climate data for mid-range global emissions. Temperature models show that the City of Saint Paul will experience a temperature increase of 4.9 degrees Fahrenheit (ºF) (12.9%) by the end of the century. NOAA reported record low maximum sea-ice extent levels in 2018 and 2019 in the Bering Sea. The City of Saint Paul's Local Hazard Mitigation Plan, updated and approved by FEMA in 2022, determined that climate change will impact the City of Saint Paul in many ways, including more frequent and destructive storm surges threatening harbor infrastructure.

<u>The Project furthers the administration goals of climate change and sustainability.</u>
The Project directly supports 3 of the 4 pillars of the White House National Strategy for the Arctic Region:

Pillar 2—Climate Change and Environmental Protection: Build Resilience and Advance Adaptation, while Mitigating Emissions. Strategic Objective 2.1: Advance Community Adaptation and Climate Resilience.



Pillar 3—Sustainable Economic Development: Improve Livelihoods and Expand Economic Opportunity. Strategic Objective 3.1: Invest in Infrastructure and Strategic Objective 3.3: Develop Emerging Economic Sectors in Alaska.

Pillar 4—International Cooperation and Governance: Sustain Arctic Institutions and Uphold International Law. Strategic Objective 4.1: Sustain the Arctic Council and Other Arctic Institutions and Agreements.

The project also presents a unique opportunity to integrate climate change mitigation and sustainability goals into its design and implementation. The City intends to include in the Project design and engineering RFP the following environmental sustainability objectives to be further investigated and incorporated, if feasible:

- Options for incorporating green infrastructure elements to help manage stormwater runoff and enhance biodiversity in the harbor area.
- Options for integration of renewable energy systems such as solar panels, wind turbines, or tidal energy generators to power Harbor facilities and reduce reliance on fossil fuels, thereby lowering greenhouse gas emissions. Saint Paul Island, an early adopter of wind turbines in the mid-1970's, is now prioritizing upgraded or replacement systems as the efficiency and reliability of these systems have improved. The City has obtained both a USDA RUS Rural Electric Program loan and a USDA High Energy Cost Grant to perform grid upgrades at the Saint Paul Island power plant as well as for integration into the existing wind power system operated by TDX Power. The City recently partnered with the Aleut Community of Saint Paul Tribal Government and TDX Power on an EPA application to the Climate Pollution Reduction Grant opportunity to add three additional wind turbines and a battery energy storage system. The benefits of this project include GHG reduction, energy cost stabilization for ratepayers, and coordination of power production throughout the community, including the Harbor.
- Prioritizing the use of energy-efficient materials and technologies in dock construction. This includes the use of sustainable building materials, leading to reduced energy consumption and associated emissions.
- Designing harbor infrastructure with climate resilience in mind to mitigate risks associated with the region's extreme weather events and rising sea levels. This might involve elevating structures, reinforcing coastal defenses, and incorporating natural or nature-based features for coastal protection.
- Promoting investing in infrastructure for sustainable transport modes such as public transit, cycling lanes, and electric vehicle charging stations which can reduce emissions from maritime and land-based transportation while improving mobility and accessibility for residents and visitors.
- Additional improvements to reduce vessel fuel use and greenhouse gas emissions.

<u>One of the Project benefits is the reduction of GHG emissions and particulates in the transportation sector.</u>

Burning marine diesel fuel results in emission of several harmful pollutants. The USDOT Benefit-Cost Analysis Guidance used for the Project's 2022 Benefits-Cost Analysis (*Attachment B*) lists four types that should be tracked. Based on calculations estimating fuel usage associated with traveling to Dutch Harbor and waiting for available mooring in Saint Paul Harbor, 13,333 gallons of marine diesel are estimated to be consumed each year. This usage is for vessels' main engines. Auxiliary engines and other generators onboard the vessels are not included in this

analysis since they might be used while moored in Saint Paul Harbor. Table 7 below, excerpted from the Project's BCA, presents calculations of estimated pollutant volumes and values released because of burning this diesel fuel. Additional berthing dolphins will increase the capacity of the Harbor, reducing congestion and waiting times for vessels. This optimization of operations can minimize fuel consumption and emissions associated with vessel idling outside the harbor. These calculations show the Project would result in a reduction of 136.2 metric tonnes per year of CO2.

Table 7. Estimated Value of Pollutant Reduction

Reference Values* (value of damage per ton per year)					Calculated Emissions** and Corresponding Values*					Discounted to
	NOx	SOx	PM2.5	CO2	NOx	SOx	PM2.5	CO2	Total	
Emissions (short tons/yr)					2.94	0.93	0.05	150.01		
Emissions as metric tons/yr					2.67	0.84	0.05	136.19		
Values($)										
2022	15,800	42,300	761,600	53	-	-	-	-	-	-
2023	16,000	43,100	774,700	54	-	-	-	-	-	-
2024	16,200	44,000	788,100	55	43,239	37,149	35,774	7,490	123,653	109,864
2025	16,500	44,900	801,700	56	44,040	37,909	36,391	7,626	125,967	108,660
2026	16,800	45,700	814,500	57	44,841	38,585	36,972	7,763	128,160	107,332
2027	17,100	46,500	827,400	58	45,641	39,260	37,558	7,899	130,358	105,993
2028	17,400	47,300	840,600	60	46,442	39,936	38,157	8,171	132,706	104,759
2029	17,700	48,200	854,000	61	47,243	40,695	38,765	8,307	135,011	103,475
2030	18,100	49,100	867,600	62	48,310	41,455	39,383	8,444	137,592	102,381
2031	18,100	49,100	867,600	63	48,310	41,455	39,383	8,580	137,728	99,498
2032	18,100	49,100	867,600	64	48,310	41,455	39,383	8,716	137,864	96,695
2033	18,100	49,100	867,600	65	48,310	41,455	39,383	8,852	138,001	93,972
2034	18,100	49,100	867,600	66	48,310	41,455	39,383	8,988	138,137	91,325
2035	18,100	49,100	867,600	67	48,310	41,455	39,383	9,125	138,273	88,752
2036	18,100	49,100	867,600	69	48,310	41,455	39,383	9,397	138,545	86,337
2037	18,100	49,100	867,600	70	48,310	41,455	39,383	9,533	138,682	83,905
2038	18,100	49,100	867,600	71	48,310	41,455	39,383	9,669	138,818	81,541
2039	18,100	49,100	867,600	72	48,310	41,455	39,383	9,805	138,954	79,243
2040	18,100	49,100	867,600	73	48,310	41,455	39,383	9,942	139,090	77,011
2041	18,100	49,100	867,600	74	48,310	41,455	39,383	10,078	139,226	74,841
2042	18,100	49,100	867,600	75	48,310	41,455	39,383	10,214	139,362	72,732
2043	18,100	49,100	867,600	77	48,310	41,455	39,383	10,486	139,635	70,752
2044	18,100	49,100	867,600	78	48,310	41,455	39,383	10,623	139,771	68,758

** USDOT 2022 Table A-6.* *** MCPA based on reciprocating – diesel, routine usage, 1,500 hp, 13,333 gals of diesel burned per year.*

Renovations and addition of berthing dolphins to City South Dock present additional opportunities to promote use of cleaner technologies and reduce emissions associated with maritime transportation. The City will include in the Project design and engineering RFP the following greenhouse gas emissions reduction objectives to be further investigated and incorporated, if feasible:

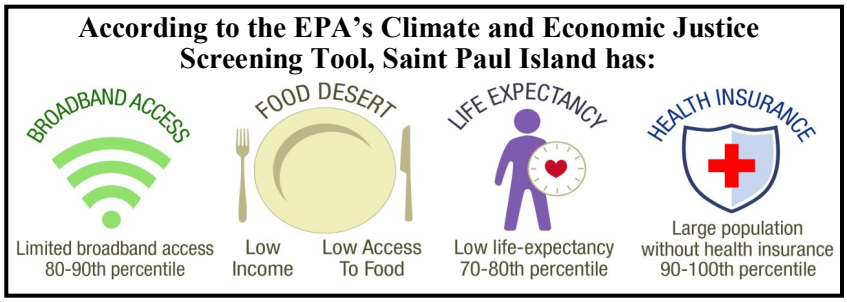
1) Evaluate options for increasing efficient vessel operations. Well-designed docks and berthing facilities can improve the efficiency of vessel operations, reducing the time ships spend idling or maneuvering to dock. Efficiency improvements could lead to fuel savings and lower emissions per vessel visit.
2) Evaluate options for upgrading docks to support shore power. This could enable vessels connect to the electrical grid while docked, allowing them to shut down their auxiliary engines. These upgrades could eliminate emissions from onboard generators and reduce overall greenhouse gas emissions during port stays.
3) Evaluate options for inclusion of cleaner propulsion technologies such as liquefied natural gas (LNG), hydrogen fuel cells, or battery-electric systems. If feasible, the Saint Paul Harbor could encourage the adoption of low-emission or zero-emission vessels by providing the necessary infrastructure.
4) Evaluate options for incorporating an emissions monitoring system to track air pollutant emissions from vessels during their time at port. If feasible, this data could be used to incentivize emissions reduction measures and inform decision-making to further mitigate greenhouse gas emissions from port activities and future additional renovation and expansion projects.

2. Equity and Justice40

Figure 16: The Aleut peoples of Saint Paul Island. Credit: Aleut Community of Saint Paul Tribal Government

To fully appreciate the role of this Project—and federal investment in general—in furthering environmental justice, the little-known history of the Unangan people of Saint Paul Island must be considered. It is critical to understand how different the Saint Paul Island context is from most of the continental United States—even other rural communities—and that any project recommendations for improving quality of life must be feasible for this remote island community. The first full time residents of Saint Paul Island were Unangan slaves brought by Russian colonists in 1788 to harvest fur seals and protect the rookeries. They were kept there as wards of the Russian and then United States governments until the mid-20th century. Until 1950, and in some cases beyond, liberties of travel, assembly, education, and occupation were restricted by the federal government. The Fur Seal Act of 1966 finally established rights for Saint Paul Island residents taken for granted elsewhere in the nation. The land, which was owned by the federal government, was finally transferred to the community in 1971, allowing Saint Paul Island residents to own their own homes. Saint Paul Island's population is currently 335, 83% of which are Alaska Native, predominantly Unangan (Aleut).

Any negative impacts on the environment would disproportionally affect the environmental justice populations, namely the tribal residents of Saint Paul Island. Therefore, the benefits of the Project will also positively benefit residents. The entire population experiences significant burdens as demonstrated by the high percentages in multiple indicators causing the community to be designated as disadvantaged.



According to the USDOT Equitable Transportation Community (ETC) Explorer tool, Saint Paul Island, Alaska:

- Faces a significant and growing risk of climate-related disasters, with an alarming 82% probability of experiencing extreme weather changes.
- Suffers significant health vulnerabilities, including a troubling 91% of residents experiencing mental health issues, 96% experiencing high blood pressure, and 85% with asthma.
- Shoulders significant social vulnerabilities, with 98% without health, property, or vehicle insurance, and 77% living with disabilities.

Equity Considerations.
The proposed Project prioritizes and advances racial equity and environmental justice through:

A) Creating positive outcomes that will reduce, mitigate, or reverse how communities adjacent to the port are experiencing disadvantage (such as by reducing pollution, connecting Americans to good-paying jobs, and/or improving quality of life).

The underserved community of Saint Paul Island suffers tremendous vulnerabilities to reliable transportation. While the burden on the Explorer Tool displays 65% of the population experiencing a transportation cost burden, the local reality is far worse. Saint Paul Island is not on any road system, and transit looks different here on this remote Alaskan island than most of the contiguous 48 states. There is only one airline that services Saint Paul Island three times per week; however, these are frequently cancelled due to significant weather impacting landing. For example, in July 2023 only three flights successfully landed the entire month. The cost of a round trip ticket to Anchorage is $1,900. Currently there is not a ferry service to the island; however, Saint Paul Island is now included on the recently (August 2023) designated USDOT Marine Highway Route M-11, so ferry service is anticipated in the future and the Project will plan for it.

An adequately functioning harbor is inseparable from protecting quality of life on Saint Paul Island. While some cargo arrives on the island via air, the island's small airport cannot replace the harbor's role in providing essential supplies to the full population. Most basic goods like food and fuel arrive by barge due to its cost effectiveness compared to air cargo. Even so, the costs associated with importing and distributing basic consumer goods result in consumer prices that are far above national averages, especially in Alaska's remote, low-population areas. The previously mentioned capacity and safety issues decrease the harbor's functionality.

The City is the sole service provider for all gasoline, diesel, marine diesel, and heating fuel on Saint Paul Island, which are received via barge delivery only two times per year. Residents of Saint Paul Island rely on heating fuel for their homes. At this extremely minimal level of fuel delivery service, the inability or inaccessibility for the barge to safely moor at the City South Dock is a risk to basic community functioning.

Data from the ETC and EJSCREEN tools discussed previously show the clear need for investments that can provide quality-of-life benefits. Improving the safety and enhancing the facilities to properly accommodate vessels will increase the efficiency and effectiveness of importing goods. A better harbor allows for more frequent and reliable shipments of essential goods such as food, medicine, building supplies and fuel. This ensures that residents have affordable access to necessary supplies without delays or shortages, improving their overall standard of living.

B) Implementation of programs and policies that ensure the benefits of project investments for, while mitigating the economic displacement of, economically-susceptible residents and businesses.

Securing PIDP funding for this Project would give the Saint Paul Island community access to expertise to identify specific project features that could have an outsized impact on furthering the quality of life for vulnerable residents and the broader community—beyond maintaining the

status quo. Bringing in planners and professional engineers with expertise in this space would introduce new ideas that residents may not come up with themselves and ensure these ideas are both implementable and compatible with the local context.

Harbor improvements will reduce friction for conducting business stemming from inadequate design or state of repair in and around the harbor area, whether for ships docking at the harbor or movement of goods from the ships through the harbor area. Hindered goods movement increases the cost of imported goods and hurts affordability for residents. Given the high percentage of low-income residents, this directly addresses transportation equity.

C) Implementation of a plan to engage the public, including disadvantaged communities during all phases of the project, including planning, design, construction, and implementation.

Public involvement has, and will continue to, meaningfully shape the recommended Saint Paul Harbor renovations and improvements.

The Saint Paul Harbor Planning Team and Industry Stakeholders ("Team") began meeting in January 2021 to outline alternatives, options, phases, and costs to renovate, replace, upgrade, and expand the community's harbor to meet current and future needs. The Team, comprised of 67% Alaska Native individuals, included representatives from the City of Saint Paul, Aleut Community of Saint Paul Tribal Government, Central Bering Sea Fisherman's Association, Tanadgusix Corporation (Native Village Corporation), and Trident Seafoods.

- The Aleut Community of Saint Paul Island Tribal Government of Saint Paul Island, promotes, maintains, and protects cultural practices, awareness, preservation, self-governance, and self-determination for the Aleut (Unangan) community members. Tribal Enterprises own five businesses on Saint Paul Island which focus on supplying quality products and services the Pribilof Islands and the greater Bering Sea Region.
- The Central Bering Sea Fishermen's Association (CBSFA) is the non-profit management organization for Saint Paul Island under the Western Alaska Community Development Quota (CDQ) Program. CBSFA owns property and infrastructure in the Saint Paul Harbor and provides surveillance and security to the small boat harbor area during the fishing season.
- Tanadgusix Corporation (TDX) was created under the Alaska Native Claims Settlement Act of 1971 to provide economic wellbeing for the indigenous Aleut (Unangan) people who resided in the village of Saint Paul and their descendants. TDX owns property in and adjacent to the Saint Paul Harbor.
- Trident Seafoods is the largest seafood company in the United States and a major employer on Saint Paul Island.

Presentations regarding the Project were held as public hearings, aired on the local radio station, and solicited public comments. The Team coordinated with operators, coastal engineers, and the US Army Corps of Engineers (USACE) to ensure technical input had been captured and reflected in the preliminary concept plans. The Team continues to meet regularly to discuss all aspects of Harbor improvement phases, funding opportunities, federal and state requirements, and partnering on funding and construction.

Upon notification of PIDP grant award, the City will hire a contractor specializing in community engagement and outreach to assist in the project and achieve the following objectives:

- Engaging residents of this underserved community to ensure equity considerations are meaningfully integrated throughout the lifecycle of the project
- Coordinating with other types of projects such as economic development, commercial or residential development near public transportation, power/electric infrastructure projects, and workforce development

- Assisting in identifying and establishing formal public-private partnerships or joint ventures to expand or create new economic development capacity
- Obtaining expertise in continuing and further developing an equitable engagement process to ensure that anyone who resides, works, visits, has an interest in, or does business in an area potentially affected by the Project will be included. *A complete Community Engagement Plan is further described in Narrative Section VI: Project Readiness, 2) Environmental Risk. This aligns with the USDOT's Promising Practices for Meaningful Public Involvement in Transportation Decision-Making Guide.*

The community engagement contractor will work with the City's designer to create newsletters, posters, website, and social media news posts, and include the project on the City's online "Projects Dashboard."

Letters in support of the Project (*Attachment C*) demonstrate not only the level of partnership and collaboration the City has with stakeholders but also the number of entities besides the City that would benefit from the Project. Collaborating with government agencies, private sector partners, nonprofit organizations, industry, and other stakeholders has allowed the community to leverage resources, expertise, and funding opportunities that are otherwise largely inaccessible.

In late 2022, the City, along with the Aleut Community of Saint Paul Island Tribal Government and the Central Bering Sea Fishermen's Association, were selected to participate in the USDOT's Thriving Communities Network. The City, Trident Seafoods, and the Central Bering Sea Fishermen's Association are already partnering to create new economic development capacities in the crab and halibut fishing industry and mariculture scientific research and industry. The Project will provide the needed transportation infrastructure improvements to bring these to fruition.

B. Justice40 Considerations.

The City of Saint Paul demonstrates its commitment to the fair, meaningful, and equitable treatment of all people primarily through the development, implementation, and enforcement of policies and ordinances. The City's Personnel Policies and Procedures include an anti-discrimination policy to promote a workforce that is representative of all residents of Saint Paul Island and that fosters an anti-discrimination work environment. This applies to employees of, and consultants and contractors performing work for, the City of Saint Paul. In the City's Recruitment and Selection Policy, the City provides equal employment opportunities in compliance with federal civil rights law to all employees and applicants for employment in accordance with federal law.

The Council of the City of Saint Paul desires to reduce racial disparity and foster multiculturalism, and further believes that affirmatively advancing equity, civil rights, racial justice, and equal opportunity is a responsibility of the City. The Council passed a resolution in May 2022 to confirm this position and officially state that it is the policy of the City to pursue a comprehensive approach to advancing equity for all, including people who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.

The City has considered the benefits and potential burdens this Project may create, and potentially impact, the underserved or disadvantaged community of Saint Paul Island.

The Project benefits include:

a) **Reduction of exposure to harmful emissions on the disadvantaged and overburdened community.** Fishing is the primary source of economic activity, yielding primarily Opilio crab and halibut, both of which are processed on the island. Eighty-four percent (84%) of the population is Unangan, or Aleut. As previously described under Climate Change and Sustainability, one of the Project benefits is the reduction of GHG emissions. Additional berthing dolphins will increase the capacity of the Harbor, reducing congestion and waiting times for vessels, resulting in a reduction of 136.2 metric tonnes per year of CO2.

b) **Integration of climate justice into project-related environmental review processes.** The Project will prioritize meaningful engagement with community members, especially those most affected by climate change and environmental degradation. Public meetings, consultations, and outreach efforts will be conducted to gather input from a diverse range of stakeholders, including indigenous peoples, low-income communities, and people of color. The Project will, as a part of the planning phase, consider the City's existing mitigation and adaptation strategies and identify additional strategies the City could take to address the climate impacts and enhance resilience in this vulnerable community.

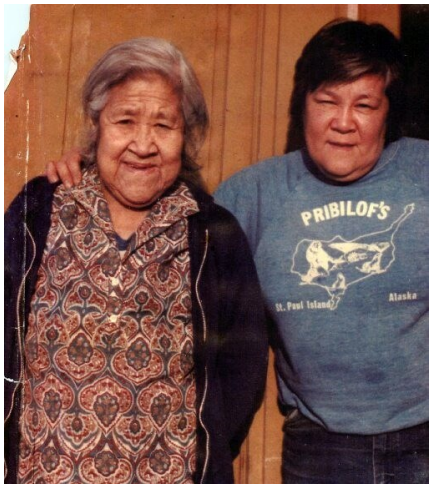


Figure 17: Historical photo. Credit: Aleut Community of Saint Paul Island Tribal Government

c) **Innovative project elements to reduce the environmental impacts associated with freight movements.** This Project prioritizes locally-owned equipment where possible for Project construction, through application of the City of Saint Paul's Local Preference clause which requires firms to utilize locally-owned equipment in the performance of work, to the extent feasible. This will result in reduced environmental impact as shipping heavy equipment via barge involves significant fuel consumption and emissions, contributing to environmental pollution. Utilizing locally owned equipment reduces the carbon footprint associated with transportation and supports sustainable construction practices.

d) **Support for the local economy**. Partnering with local labor and business owners fosters positive relationships with the community and stakeholders, promoting collaboration and goodwill. It demonstrates a commitment to supporting local businesses and investing in the development of the island. With an island population of only 335, the availability of laborers certified for specialized jobs can be limited. Despite this, the City of Saint Paul includes a Local Preference clause in all contracts, requiring firms to utilize labor, materials, and services from Saint Paul Island in the performance of work, to the extent feasible. Maximizing the use of local labor benefits many Alaska Native workers and business owners in Saint Paul Island. More than simply delivering a Project that improves a vital component in Saint Paul Island's infrastructure, the means of delivering this Project focuses on keeping as many investment dollars in this historically underinvested, majority non-white community.

3. Workforce Development, Job Quality, and Wealth Creation

Figure 18: The community of Saint Paul Island

The economic wellbeing of the whole community is tied to the Harbor's ability to generate revenue. The project will support the success of existing and establishment of a variety of other services and businesses to support the commercial fishing fleet, the processing seafood plant, military vessels, potential new industries, tourism, marine and climate research, and a growing community. For example:

- There is great interest among fisheries scientists and experts in establishing mariculture facilities on the island. In 2021, Alaska Governor Dunleavy re-established the Alaska Mariculture Task Force as a step toward reaching the goal of growing a $100 million per year mariculture industry in 20 years. In 2022, the Alaska State Legislature passed a new law that allows permitting of production-level shellfish hatcheries. In late 2023, the City of Saint Paul submitted a grant proposal to NOAA Fisheries to conduct a feasibility study of the technical, regulatory, and financial aspects of accommodating king crab hatching and rearing as part of the ongoing effort to restore failing king crab stocks in the Bering Sea.
- Currently there is not a ferry service to the island; however, Saint Paul Island is now included on the recently (August 2023) designated USDOT Marine Highway Route M-11, so ferry service is anticipated in the future and the Project will plan for it. Commercial and small-scale luxury adventure cruise ships also call on Saint Paul Harbor and have shown interest in increasing not only in vessel size but frequency. Six cruise ships docked in Saint Paul Harbor in 2023, up from zero only three years ago. Seven cruise ships are expected in 2024. Visitors from all over the world come to explore the Island's history, flora, fauna, as well as tours of the Saint Paul community, the Saints Peter and Paul Russian Orthodox Church and the Unangan Heritage Museum. The great seabird colonies of the Pribilof Islands are known world-wide by professional guides, experienced naturalists, ornithologists, hunters, and photographers. Saint Paul Island also hosts the world's largest colony of Northern Fur Seals.
- Outside funding for research vessels has recently increased, given the national interest in studying the effects of climate change on aquatic species in the region. "The Bering Sea Project," a partnership between the North Pacific Research Board and the National Science Foundation, seeks to understand the impacts of climate change and dynamic sea ice cover on the eastern Bering Sea ecosystem.

Creation of Good-Paying Jobs with Free and Fair Chance to Join Union

Implementation of the Project creates jobs not only during the construction phase but also in the long term through increased economic activity. The expansion of port facilities, marinas, and related services can generate employment opportunities for residents. The City's approach to quality jobs means that Project staff will have (1) fair, transparent, and equitable pay that exceeds the local average wage for an industry, while delivering; (2) basic benefits (e.g., paid leave, health insurance, retirement/savings plan); (3) providing workers with an environment in which to have a collective voice; and (4) helps the employee develop the skills and experiences necessary to advance along a career path. In addition, the City will offer good jobs that provide (5) predictable scheduling, and (6) a safe, healthy, and accessible workplace. With good jobs, (7) employees are properly classified and (8) have a statutorily protected right to a free and fair choice to join a union under the National Labor Relations Act (NLRA).

Incorporation of Strong Labor Standards

The City's contractor base has established, long-term, and mutually valued relationships with the organized labor community in Alaska. Larger development often occurs within collective bargaining agreements of the International Brotherhood of Electrical Workers (IBEW) and the various trade unions, depending on location. While this is very much about scale, the City's approach will be to engage its labor partners early to initiate discussions toward labor agreements and overall benefits of the project.

Promoting Investments in High-Quality Workforce Development Programs

The City will engage with the University of Alaska and the Alaska Works Partnership to identify ways in which training, apprenticeships and local hiring can benefit from the framework for the statewide building code. In addition, the project will reference the Alaska Workforce Investment Board's strategies for workforce development, found in its Combined Plan for Workforce Innovation and Opportunity.

The University of Alaska (UA) is an important mechanism for workforce development, including for apprenticeships. 20 years ago, the University of Alaska Anchorage (UAA) created the Associate of Applied Science in Apprenticeship Technologies. The University of Alaska System, the UAA Community and Technical College, and several joint apprenticeship training programs have joined the USDOL Registered Apprenticeship-College Consortium, which simplifies the process for an apprentice to earn college credit.

Alaska Works Partnership is a non-profit organization that gives Alaskans access to jobs and careers in the construction industry. Alaska Works educates Alaskans about good paying jobs, teaches basic skills, and establishes pathways for Alaskans to learn skills that last a lifetime and earn good pay with health care and retirement benefits. Alaska Works was created by Alaska's Building and Construction Trade and their apprenticeship training trusts in 1996. Alaska Works partners with industry employers, community organizations, educators and the State of Alaska to develop Alaska's workforce. Several thousand Alaskans living in over 140 communities have achieved a start in construction through one of their programs: Apprenticeship Outreach; Alaska Construction Academy; Helmets to Hardhats; Women in the Trades; and Building Maintenance.

Supportive Systems to Retain and Train People, with a Focus on Underrepresented

The goal of the City is to maximize the investment in its local workforce, and to incentivize contractors to hire underrepresented skilled labor. In this way the Project team can ensure that it is able to foster safe, healthy, and inclusive workplaces with equal opportunity, free from harassment and discrimination. In addition, the City has considered ways in which to make investments in training, education, and skill development and supporting the corresponding mobility of workers to advance in their careers.

Hiring Policies/Workforce Cultures Promoting Entry/Retention of Underrepresented Populations

Figure 19: Local laborers working a Public Works project on Saint Paul Island

The City will encourage Project staff and contractors to participate in training programs and offer paid time for employees to participate in skills training. This will include the provision of personalized, modularized, and flexible skill development opportunities, such as on-demand and self-directed virtual training. The project will identify and provide continuing education programs for employees to earn credentials and degrees relevant to their career pathways.

Local Inclusive Economic Development and Entrepreneurship

The City has a local business directory that it will share with project contractors and visiting officials, to foster local, inclusive economic development. At the same time, the City will consider hosting a regional entrepreneurship fair, inviting potential businesses to reflect on the business opportunities that could come from improved port infrastructure.

VI. PROJECT READINESS

1. Technical Capacity

City's Capacity to Implement the Project

The City of Saint Paul currently has 20 employees who fulfill the obligations of a local government, which include public safety, public works functions and services. The City of Saint Paul has an experienced managerial and technical staff that uses state of the art networked computer hardware and software to manage personnel, accounting, project status, reporting, and

performance standards. With previous grants, City staff have managed every project locally. This includes receiving the funds in the City's general fund, completing the scope of work defined in the grant agreements, developing solicitations for Requests for Proposals, negotiating contracts, completing financial and progress reporting from startup to project completion, and close-out. Many small communities that receive grant funding require hiring a CPA or having a separate bank account for grant funds, but the City has consistently done it all in-house and maintained clean audits. Past and current grant and contract awards have successfully met federal and state audit standards and have maintained compliance with all regulatory requirements. The City's independent auditor has made the determination that the City of Saint Paul is a low risk auditee for the past three years (2021, 2022 and 2023) since no findings were found.

There is a large amount of heavy equipment already available for use on Saint Paul Island. Use of local heavy equipment is extremely important for managing project costs, as Saint Paul Island's remote location results in high barge costs to deliver construction materials and equipment. Additionally, the City owns vehicles and housing units that are available to contractors to rent and utilize while working on-island on the Project.

City's History of Delivering Similar Grant-Funded Projects

The City of Saint Paul has successfully managed multiple Federal, State, and private grants, carrying out projects on time and on budget. Due to Saint Paul Island's short summer construction season, many projects are multi-year projects. Examples of some of the larger and most recent grants include:

- State of Alaska, Community Development Block Grant (March 2023). $850,000 for Bulk Fuel Dispensing Facility/Tankage Upgrade.
- Alaska Energy Authority (March 2023). $500,000 matching grant for the Bulk Fuel Dispensing Facility/Tankage Upgrade.
- US Department of Transportation, Thriving Communities Program (March 2023). Two years' technical assistance, capacity building and transportation infrastructure planning.
- US Department of Transportation, Safe Streets and Roads For All Discretionary Grant Program (January 2023). $200,000 for a Regional Action Plan.
- US Economic Development Administration, Economic Adjustment Assistance Award (September 2022). $2,270,400 for Saint Paul Harbor Utility Upgrade Project.
- Denali Commission Matching Grant Award (March 2024). $567,600 matching funding for Saint Paul Harbor Utility Upgrade Project.
- US Economic Development Administration, Financial Assistance Award (September 2020). $120,000 for the Saint Paul Harbor Improvements and Expansion Feasibility Study.
- USDA, Rural Utilities Service, Assistance to Rural Communities with Extremely High Energy Costs (September 2020). $807,969 for electric utility upgrades.

Project Feasibility and Inclusion in Other Planning

As previously described, the 2021 Saint Paul Harbor Improvement and Expansion Feasibility Study found there is inadequate moorage space for the larger commercial fishing vessels and that the existing moorage for larger vessels is in poor condition, particularly regarding the fenders and mooring capacity. The proposed Project is one of nine components of the recommended Phase 1 upgrades. A complete list of the Project's inclusion in other plans is on page 16.

Project Compliance with Federal Requirements

The Project can effectively maximize domestic content and support the goals of the Build America Buy America policy through the following measures:

- Prequalification of domestic suppliers who can provide the required materials.
- Specify in the project requirements that materials used in construction must have a high percentage of domestic content.

- Encourage the use of domestic labor for construction activities by partnering with local unions, vocational training programs, and workforce development initiatives.
- Give preference to bids and proposals that demonstrate a high level of domestic content.
- Partner with industry associations representing domestic suppliers and manufacturers to identify opportunities for increasing domestic content and address any challenges or barriers that may arise during the procurement process.
- The Project may request a waiver, if necessary.

Degree of Design Completion and Source of Cost Estimate

R&M Consulting completed 15% design and produced quotes for materials based on estimated needs identified during its condition assessment and Feasibility Study, completed in 2021. R&M Consulting provided updated estimates in 2024 dollars.

Project Schedule

The City will seek pre-obligation authorization to complete pre-construction activities (field work, permitting, and design) to maintain an efficient Project schedule as well as early procurement to mitigate materials shortage and extended time durations for shipping of materials to Saint Paul Island. The City will seek authorization to request reimbursement of pre-award costs incurred prior to MARAD's obligation of funds, specifically for NEPA and environmental review.

If PIDP announces the FY24 selected proposals for award by December 31, 2024, the City could reasonably complete the remaining planning, design, environmental and NEPA requirements by the end of Q3 2026. This leaves 15 months before the September 30, 2027 obligation deadline. Construction season on Saint Paul Island is a small window of time, typically between May and September. Two full construction seasons have been built into the project schedule. With construction expected to be completed by the end of Q3 2028, this allows 3 additional years for any construction delays that could occur—this makes the probability of failing to meet the fund expenditure deadline very low.

TASK NAME	2024	2025				2026				2027				2028		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Planning Approval (Complete)																
Award Notice/Seek Pre-Obligation Authorization																
Public Engagement																
Field Work																
Survey																
Geotechnical																
Permitting																
Section 10 & 404																
NEPA																
Final Design (Plans, Specifications, & Estimates)																
Design																
Review																
Construction																
Bidding																
Procurement																
Construction																
Project Closeout																

Risk Mitigation

The risks to the proposed Project's successful completion are minimal. Project work can begin quickly upon receiving a PIDP award due to the following factors:

- The Saint Paul Harbor Improvements and Expansion Feasibility Study completed in 2021 provided conceptual designs and cost estimates for the Project, completed by R&M Consultants, Inc., which has a proven track record of successfully planning, designing, and building

Projects of similar scope and function in Alaska.

- No right-of-way or other real estate acquisition is necessary.
- For the proposed Project, the City of Saint Paul would follow the DB delivery method to streamline the process, improve efficiency in project delivery, reduce administrative tasks and reduce financial risks.

2. Environmental Risk

NEPA Status of the Project

The NEPA process has not yet begun. Should the proposed Project receive grant funding, the City of Saint Paul would be required to further evaluate potential Project impacts to the natural and human environment in accordance with local, state, and federal regulations. Given the scope of the proposed work, and the fact that no dredging or fill work is required for the Project, the anticipated NEPA document is an Environmental Assessment, and the Project cost estimate and schedule are based on that anticipation. The Project may ultimately qualify for a Categorical Exclusion due to mitigating factors discussed later. At a minimum, the proposed action and the "No Action" alternative would be evaluated during the NEPA process. Due to the complexity of the Project and its location in a coastal area with cultural and historic resources and populations of threatened and endangered species, the City will hire an environmental consulting firm with the resources, specialized knowledge, and relevant expertise will help ensure that the required environmental review and reports are compliant with current regulations, reducing the risk of non-compliance penalties and legal issues. The cost of this has been included in the Project budget.

National Historic Preservation Act (NHPA) Status of the Project

Section 106 National Historical Preservation Act and Section 7 Endangered Species Act will also be considered as part of NEPA compliance.

Environmental Permits and Reviews

Agency coordination and the regulatory permitting process has not been initiated for the Project. Project-specific environmental studies and other documents have not yet been conducted or generated. Environmental permits would need to be acquired for exploratory surveys (e.g. geotechnical surveys) as well as for construction of the final proposed design. At a minimum, a Section 404/10 permit from the US Army Corps of Engineers (USACE) would need to be obtained for in-water construction activities such as pile driving for dolphin installation. Concurrently with the USACE permit-ting process, a water quality certification from the Alaska Department of Environmental Conservation (ADEC) would be obtained in accordance with the Clean Water Act. Based on the proposed design, additional permits and/or concurrence may need to be obtained from the Alaska Department of Fish and Game, Department of Natural Resources, National Marine Fisheries Service (see below), and the U.S. Fish and Wildlife Service.

Given the unavoidable in-water construction activities, an Incidental Harassment Authorization (IHA) would normally be required for potential impacts to species protected under the Marine Mammal Protection Act and Section 7 Endangered Species Act (ESA). The Project is in an enclosed harbor with surrounding landforms that mitigate noise impacts to marine mammals; therefore, National Marine Fisheries Service IHA permitting is not anticipated.

Community Engagement Plan

The Project will conduct community engagement beginning with the planning and design phase through to completion. By implementing the following comprehensive public engagement plan, the project can ensure that the Historically Disadvantaged Community (HDC) of Saint Paul Island meaningfully involved in the decision-making processes and promotes equitable outcomes for all community members. The City will:

- Identify and engage with local key stakeholders including community leaders, organizations, and residents within the community.

- Develop culturally sensitive and accessible materials to inform HDCs about the project's goals, benefits, and potential impacts. Host informational sessions in community centers and provide translation services and materials in languages spoken within the community.
- Organize interactive workshops and listening sessions where HDCs can voice their concerns, priorities, and ideas for the project.
- Ensure all engagement activities are held in physically accessible locations and provide accommodation for individuals with disabilities. Offer childcare services, transportation assistance, and stipends to remove barriers to participation. Utilize digital platforms and virtual meetings to reach those who may face mobility or transportation challenges.
- Establish a transparent public comment period where all stakeholders can submit feedback on the project's plans and designs. Actively incorporate public feedback into the project's development and design.

State and Local Approvals
All required State of Alaska approvals were discussed under environmental permits and reviews. For local approvals, the Project has been approved by the Council of the City of Saint Paul through both approval of the Capital Improvement Plan and Resolution 24-10 (*Attachment D*) authorizing the City Manager to apply for PIDP grant funding for this Project.

Information on environmental reviews, approvals, and permits by other agencies
Discussions with the appropriate DOT operating administration field or headquarters office regarding the project's compliance with NEPA and other applicable Federal environmental reviews and approvals have not yet occurred, as explained above. This Project is not dependent on, nor

SECTION VII: STATUTORY DETERMINATIONS

Project Determination	Response
1. The project improves the safety, efficiency, or reliability of the movement of goods through a port or intermodal connection to the port.	Renovations to the City South Dock will improve safety by upgrading to modern, energy absorbing fenders to reduce impacts of waves and wind on vessels by allowing tight mooring. The snug mooring reduces the risk of injury from mooring lines snapping. Adding new cleats and three 80-ton bollards improves safety by creating appropriate means of tightly securing vessels to the dock or dolphins, according to their size. Bollards will allow vessels to stay in the harbor longer with reduced accident risk. Increasing overall safe moorage space by 250 feet by adding five berthing dolphins will greatly increase safety by allowing ves-sels to wait at the dock for needed repairs or services, provide safety to more vessels during rough weather, and reduce stress and accident probabilities on the fleet from repetitive and dangerous vessel movements.
2. The project is cost effective.	Not applicable, as the Project is a "small project at small port."
3. The eligible applicant has the authority to carry out the project.	The City of Saint Paul owns, maintains, and manages Saint Paul Harbor and owns all the land where Project improvements will occur. Through resolution, the City Council authorized the City Manager to apply for FY24 PIDP grant funding for the project.
4. The eligible applicant has sufficient funding available to meet the matching requirements.	As a rural community and a "small project at a small port," the City of Saint Paul requests a waiver to the 80% maximum federal share and seeks a 94% federal cost share. The City can provide a 6% local match for the Project.
5. The project will be completed without unreasonable delay.	If notified of award by December 31, 2024, the City could reasonably complete the remaining planning, design, environmental review, and NEPA requirements by the end of Q3 2026. This leaves 15 months before the September 30, 2027, obligation deadline. Two full construction seasons have been built into the project schedule. With construction expected to be completed by the end of Q3 2028, this allows 3 additional years for any delays that could occur.
6. The project cannot be easily and efficiently completed without Federal funding or financial assistance available to the project sponsor.	Due to competing needs and a lack of resources, no significant repairs have been or can be made to the City South Dock without federal financial assistance. Without PIDP funding, none of the proposed Project scope will be completed.