APPLICATION FOR 2023 PORT INFRASTRUCTURE DEVELOPMENT PROGRAM GRANT

Aurora Harbor Drive Down Float Project

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TABLES

INTRODUCTORY INFORMATION

Name of lead applicant	City & Borough of Juneau Docks and Harbors
Is the applicant applying as a lead applicant with any joint applicants?	No
Project name	Aurora Harbor Drive Down Float
Project description	The project will build a drive down float and vehicle bridge, as well as incorporate two new 5-ton electric cranes, to serve the commercial fishing fleet. The facilities will improve safety, reduce overcrowding, and increase the efficiency of transporting goods between the vessels and the road system.
Is this a planning project?	No
Is this a project at a coastal, Great Lakes, or inland river port?	Coastal Project
Is this project located in a noncontiguous State or U.S. territory?	Yes, noncontiguous state: Alaska
GIS Coordinates (in Latitude and Longitude format)	58°18'14.4"N 134°25'55.6"W
Is this project in an urban or rural area?	Rural
Project Zip Code	99801
Is the project located in a Historically Disadvantaged Community (HDC) or a Community Development Zone (CDZ)? (A CDZ is a Choice Neighborhood, Empowerment Zone, Opportunity Zone, or Promise Zone.)	No
Has the same project been previously submitted for PIDP funding?	Yes
Is the applicant applying for other discretionary grant programs in 2023 for the same work or related scopes of work?	No
Has the applicant previously received TIGER, BUILD, RAISE, FASTLANE, INFRA or PIDP funding?	Yes, TIGER 1 (2009)
PIDP Grant Amount Requested	$11,196,900
Total Project Cost	$11,196,900
Total Federal Funding	$
Total Non-Federal Funding	$
Will RRIF or TIFIA funds be used as part of the project financing?	No

I. PROJECT DESCRIPTION

The City and Borough of Juneau (CBJ) Docks & Harbors Department seeks to update current infrastructure and expand facilities at Aurora Harbor to support CBJ's growing maritime sector. This sector is a major driver of CBJ's economy and through it, Juneau contributes to the regional and national economy through the distribution of seafood and seasonal employment of numerous local and out-of-state workers. The Aurora Harbor Drive Down Float project will provide critically important improvements to serve the seafood industry in Juneau. The project will create new job and business opportunities for commercial and recreational user groups, reduce congestion at the harbor, cut down on carbon dioxide emissions, and create a more efficient method to transfer goods.

The marine facilities this project seeks to improve are relied on heavily by the commercial fishing industry yet are inadequate to meet the needs of local and regional fishermen. Located in downtown Juneau, the proposed project site is located between Harris and Aurora Harbors. The existing facilities in the project area consist of the crane dock, a rock-filled sheet pile bulkhead with a concrete apron, fender piles, and two hydraulic cranes facing into a small vessel basin These facilities are collectively known as the Fisheries Terminal. The infrastructure primarily supports loading and unloading operations for commercial fishing vessels. The crane dock is often overcrowded and the fixed dock requires fishermen to manually walk from vessels up a steep gangway, carrying goods and supplies by hand. Both points are hindering the direct transfer of goods between vessel and shore.

The Aurora Harbor Drive Down Float Project will address these issues by providing a drive down float with two additional cranes to support more efficient operations.

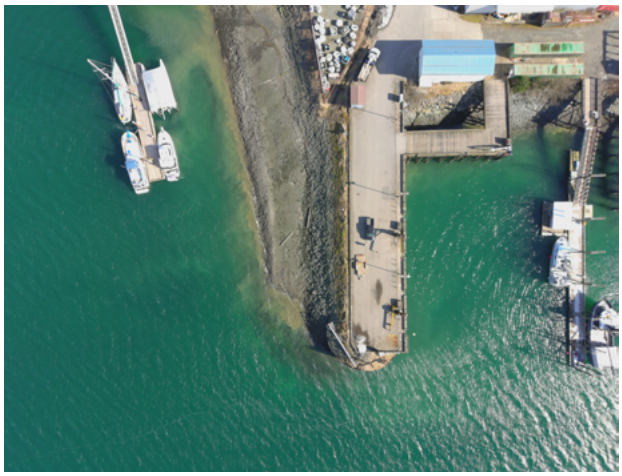

Figure 1. Existing fixed dock (left) and crane dock (right)

A. Project Goals

The primary purpose of the Aurora Harbor Drive Down Float project is to provide needed infrastructure to Juneau's maritime industry to support economic growth by developing a drive down facility with crane-load capabilities to streamline the transport of products and supplies.

The project will develop a 60- by 70-foot widened dock section that is attached to the existing pile-supported approach dock. The widened dock section will be the means of connecting the new 17-foot-wide by 140-foot-long vehicular transfer bridge to the shore. At the other end of the transfer bridge will be a 48-foot-wide by 120-foot-long, vehicle-accessible drive down float equipped with two 5-ton electric cranes. Potable water, fire suppression, power, and lighting utilities will be extended down the bridge to provide services on the float.

The proposed project will allow year-round, all-tide ability to load and unload gear, cargo, provisions, seafood, and more. The project increases the safety and efficiency of these operations by providing direct access between vessels moored to the float and the shore

through the vehicle transfer bridge. The project mitigates overcrowding and ensures timely loading operations for commercial fishing vessels.

B. Transportation Challenges Addresses

Juneau is accessible only by air or marine transport; it serves as a hub for many smaller Southeast Alaska communities that are also not connected to a traditional road system. These communities come to Juneau for access to medical care, supplies, and the Juneau International Airport. The airport is particularly important to local and regional fishermen, processors, and direct marketers who use it to fly product to regional, statewide, and national domestic markets, as well as international markets. As noted in the 2013 Comprehensive Plan of the City & Borough of Juneau (Comprehensive Plan), found in Attachment XX, the development of effective transportation infrastructure is "particularly significant to the development of regional commerce as Juneau is accessible only by marine and air transport. Goods, customers and information rely on the ability to travel in and out of the community rapidly, safely, and at the lowest cost to achieve maximum participation."

Aurora Harbor's layout provides additional transportation challenges: Land is limited in Juneau, and a portion of the upland area and docks immediately southeast of the project site are owned by the University of Alaska Southeast (UAS). The proposed project will expand and upgrade an area already dedicated to marine activities to better use available land and avoid construction on pristine tidelands or on land not owned by CBJ.

The Aurora Harbor Drive Down Float project is the first step toward addressing numerous basic transportation challenges, including safety, congestion, mobility of goods, and vessel moorage, in a manner that best protects the environment and public space. These challenges are rooted in the lack of direct vessel-to-roadway access and limited crane infrastructure that struggles to meet growing demand. The proposed project will incorporate additional cranes to mitigate overcrowding issues that cause delays in transporting commercial loads. The development of a drive down float will create vehicle-accessible dock infrastructure that will provide users year-round access to perform vessel maintenance and the ability to efficiently load and unload goods.

Of particular importance is how the proposed project will improve the connection of the local fishing fleet to the transportation network. The new drive down facility will make bringing seafood to processing centers and to market substantially more efficient by allowing the transfer of seafood directly from vessels to the road system.

C. Project History

Pre-Concept Economic Climate

During the mid1980s, the fishing and seafood industry in Juneau was in dire condition. Although Juneau was home to several hundred fishermen, fundamental industrial infrastructure was severely deteriorated or nonexistent.

Fisheries Terminal Concept Development and Land Acquisition

In 1986, the original Ad Hoc Fisheries Development Committee made recommendations to the CBJ assembly to revive the industry, which included creating a Juneau Fisheries Terminal. Between the two main downtown small boat harbors, which housed most of the commercial fishing vessels, was a tract of land owned by UAS. In an innovative agreement, CBJ and the

university agreed to a long-term lease for much of the property.

Public Loading Dock Development and Construction

In 1988, plans were developed for a public loading dock. The site chosen was the rubble mound jetty at the south end of Aurora Harbor, which separated that harbor from the leased tidelands. Two new 4,000-pound capacity hydraulic cranes were included. About 9,500 square feet of paved surface was created, with approximately 7,000 square feet usable for staging. The original crane dock that sits just east of the project site was completed in 1992.

Development of Other Upland Infrastructure

In that timeframe, much of the leased uplands was platted as a small vessel service yard and sublet to Juneau Marine Services. The company operated the Travelift and managed a small vessel service float. The new yard was a boon to the local fishing fleet, which now had access to good upland service facilities for the first time.

Project Funding Dries Up

Following construction, the already limited funding for work on the Fisheries Terminal Project dried up. Since then, almost all of CBJ Docks and Harbors' available resources have been devoted to rehabilitating the four small boat harbors under its management. Much of the basic moorage infrastructure was in very poor condition when transferred to CBJ from the State of Alaska.

Previously Completed Components

1988 – Crane Dock Designed

1990 – Juneau Fisheries Terminal

- Dredging of the basin, installation of the sheet pile bulkhead, electrical for the cranes and lights, and water service to the sheet pile bulkhead

1990 – Fisheries Float Electrical

- Lights and electrical pedestals added to the existing moorage float

1992 – Juneau Fisheries Terminal Uplands Improvements & Crane Dock Constructed

- Uplands work around the boat yard and sheet pile bulkhead including: storm drains, curb and gutter, and asphalt paving

D. Broader Infrastructure Investment Context

The Aurora Harbor Drive Down Float Project is one component of the 2017 Juneau Downtown Harbors Uplands Master Plan: Bridge Park to Norway Point Master Plan (Attachment XX). This master plan is a phased approach to enhancing Juneau's downtown waterfront and providing infrastructure to support various harbor user groups. The plan's goal is to develop Juneau into a premier port in Southeast Alaska. CBJ Docks and Harbors is also in the planning process of replacing its old, cramped, and generally inadequate harbor offices. The goal is to construct a new building to house harbor functions and provide office and retail spaces for marine-related businesses. Only the drive down facility and additional cranes are being proposed for PIDP funding under the Aurora Harbor Drive Down Float Project.

E. Statement of Work

The Aurora Harbor Drive Down Float Project is a straightforward marine infrastructure project

primarily oriented toward servicing the commercial fishing and seafood industry. It will support expanded, more efficient operations and transfer of goods between vessels and the harbor.

i. Technical and Engineering Aspects

The planned drive down facility, will be located just inside of the south entrance to Aurora Harbor to provide vessel loading and offloading operations. The facility will consist of a 17-foot-wide by 140-foot-long vehicular transfer bridge connected to the shore at the northwest corner by a 60- by 70-foot widened dock section, which will be attached to the existing pile-supported approach dock. The bridge will provide access to a 48-foot-wide by 120-foot-long, vehicle-accessible drive down float equipped with two 5-ton hydraulic cranes. Steel pipe piles surrounded by energy absorbing pile hoops attached to the float will moor the drive down float. To reduce structural loads on the main float, a submerged auxiliary float will provide primary support for the bridge. Water, fire suppression, power, and lighting utilities will extend down the bridge to provide services on the drive down float.

The drive down facility is a unique and valuable piece of infrastructure to the maritime industry, as it allows for all-tide vehicular access to the vessels moored at the float. While the crane dock provides valuable infrastructure for heavy-capacity freight loading/unloading operations for large vessels, it alone does not have the capacity to meet the current demand of the fleet. The existing crane dock is unable to provide Americans with Disabilities (ADA) access because vessels are located beneath the dock due to the variations in tide and ladders, which are used for access. The drive down float allows for vehicles to directly access the vessels and transport crews/vessels, tools, provisions, seafood, gear, and other small cargo.

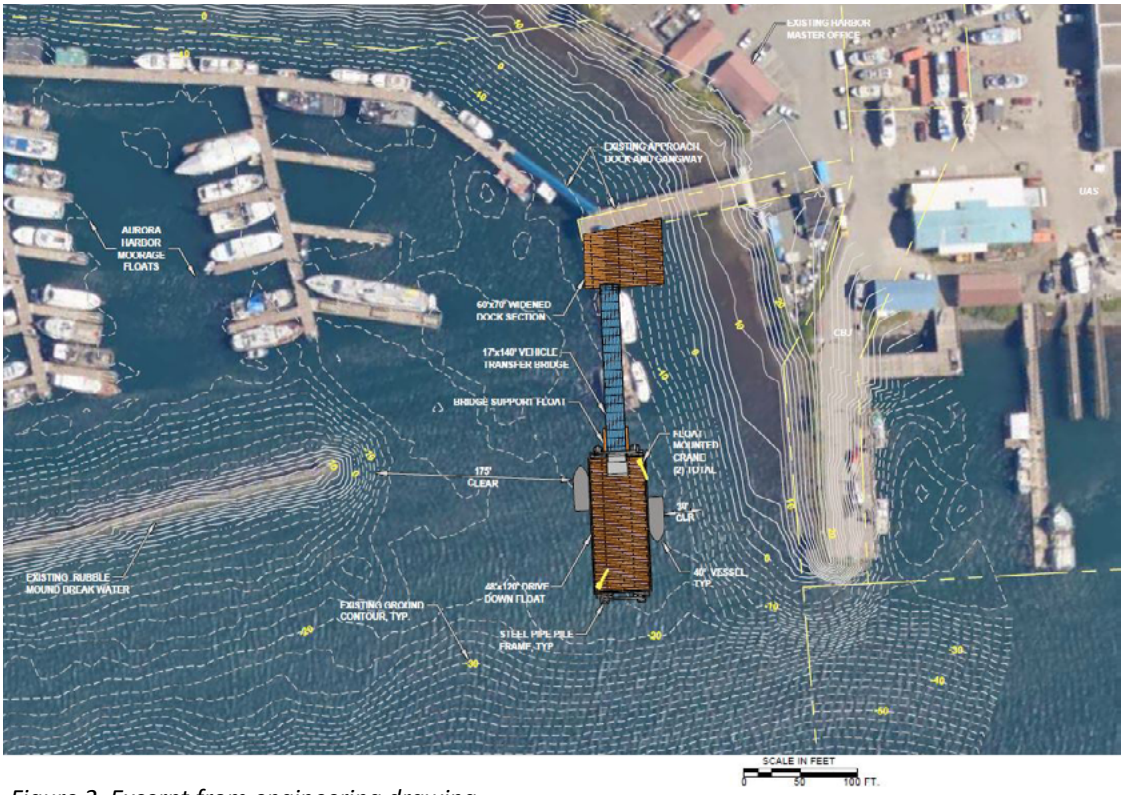

Figure 2. Excerpt from engineering drawing

II. PROJECT LOCATION

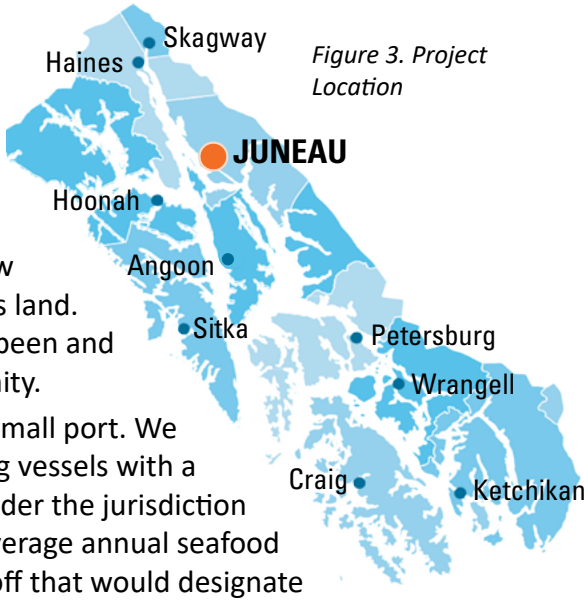

Figure 3. Project Location

The Aurora Harbor Drive Down Float Project will be constructed near downtown Juneau, between Aurora and Harris Harbors at 58°18'12.18" North and 134°25'56.11" West. CBJ (Dzánti K'ihéeni) acknowledges that our community is built on the ancestral lands of the Tlingit people. We honor the A'akw Kwáan and T'aaku Kwáan – the Indigenous people of this land. For more than 10,000 years, Alaska Native people have been and continue to be integral to the well-being of our community.

Juneau is a coastal port applying as a small project at a small port. We have numerous facilities capable of receiving oceangoing vessels with a draft of at least 20 feet, and our navigable waters are under the jurisdiction of the US. Army Corps of Engineers (USACE). Juneau's average annual seafood harvest is 10,000 tons, well below the 8-million-ton cutoff that would designate our facility a large port.

According to the U.S. Department of Transportation's (DOT) Disadvantaged Census Tract tool, the project is located in Census Tract 5, which is not designated as a Historically Disadvantaged Community. It is designated as Health Disadvantaged. Juneau is not located in a federally designated community development zone. The Census Tract has a population of approximately 3,263 residents, according to the tool EJScreen. The tool notes the population of People of Color within the tract is 30%, while the percentage of low-income population is 24%.

The broader CBJ community, which will be impacted by the proposed project, is a rural area with a population of 32,255 people, according to the 2020 U.S. Census. Alaska Natives represent 21% of the community population and 16.6% of the population is designated as non-white. Sixty-two percent of Juneau's Alaska Native households are low income, with 48% designated as very low income, according to the U.S. Housing and Urban Development income limits. Juneau is not considered an Urbanized Area; it is designated as an Urban Cluster.

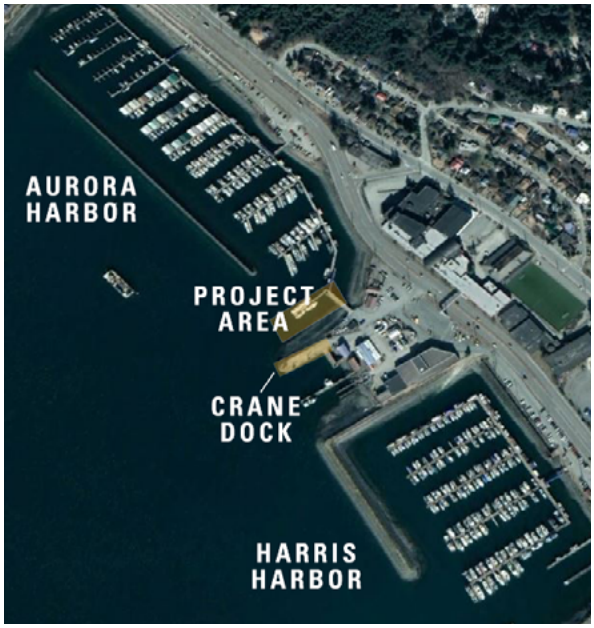

Figure 4. Project site

III. GRANTS, FUNDS, SOURCES, AND USES OF FUNDS

A. Funding Sources

The proposed total project cost is $11,196,900. The cost was developed by a professional engineering firm using preliminary design for the drive down float project. The cost estimates are based on similar, recent public project experience in Southeast Alaska. This experience includes the design and construction of a very similar drive down float at CBJ Docks and Harbors' Auke Bay Loading Facility in this xxyearxx.

Costs include 10% contingency to account for inflation and any changes necessary throughout construction. A detailed breakdown of the project budget can be found in Attachment XX.

Table 1. Budget Table

	Component 1	Total
PIDP Funds:		
Other Federal Funds:		
Non-Federal Funds:		
Total:		

CBJ is requesting DOT to fund XX% of the proposed project cost. CBJ intends to commit XX to the project, or XX% percent of the total cost. CBJ's letter of commitment can be found in Attachment XX. Tables 1 and 2 show a breakdown of federal vs. non-federal funds that will be used to develop the proposed project.

Table 2. Funding Sources and Percentages

Aurora Harbor Drive Down Float Total Project Budget							
Component	**Non-Federal**	**% of Total**	**PIDP**	**% of Total**	**Other Federal**	**% of Total**	**Total**
Estimated Total Construction Cost			$8,613,000				
Contingency (10%)			$861,300				
Planning, Permitting, Design, and Construction Admin/Inspection			$1,722,600				
Total Project Costs			$11,196,900				
Total Non-Federal Share							
Total PIDP Grant Funding Request							

i. Federal Funding Percentage Requirements and Expenditure Deadlines

The Aurora Harbor Drive Down Float project qualifies as a rural small project at a small port and is eligible for greater than 80% PIDP grant funding, although the wave of matching funds is not guaranteed. We are aware of the competitive nature of the PIDP program and the importance of a local 20% match. Unfortunately, CBJ Docks and Harbors does not have a 20% cash match available. However, to demonstrate our commitment to the proposed project, CBJ is putting $XX in city funds forward.

DOT seeks to obligate FY 2023 PIDP funds by September 30, 2026, with the expectation that

they will be expended within five years of obligation. The proposed project can meet this deadline; see Section VI for our discussion on project readiness.

IV. MERIT CRITERIA

A. Achieving Safety, Efficiency, or Reliability Improvements

i. Movement of Goods

CBJ's harbor facilities are of major local, regional, and national significance to the seafood industry. Juneau was ranked as the 47th largest commercial fishing port by value in the United States and the 12th largest in Alaska (Attachment XBCAX). The proposed project site is located within the south entrance of Aurora Harbor and adjacent to Harris Harbor, both of which provide moorage to local and regional fishing fleets. Aurora Harbor is the largest harbor in Juneau's harbor system – 452 vessels were homeported there in 2021. Aurora Harbor has the capacity for 465 vessels, while Harris Harbor provides moorage for 288 additional vessels.

The existing pedestrian gangway and timber fixed dock this project intends to supplement are a central point for the transfer of supplies, gear, maintenance equipment, and seafood, between vessels and land. The crane dock that sits just southeast of the project site is critically important infrastructure to the commercial fishing fleet; the dock is consistently busy with fishermen loading and offloading fishing supplies, nets, gear, bait, and crab and shrimp pots. Crane demand, based on hours of use, tripled between 2013 and 2021 due to increasing demand. Together, the fixed dock and crane dock are critical to the movement of goods in Juneau. In 2021, the crane dock was used to move 186,000 pounds of seafood and kelp to the market. Despite this immense demand, only 40% of the fish caught near Juneau made it into the community for processing due to Aurora Harbor's inadequately sized infrastructure.

The proposed project will improve the safety, efficiency, and reliability of harbor operations to ensure Aurora Harbor is operating at maximum efficiency for the local and regional fishing fleet, as well as increase shore processing and direct marketing that will create more business opportunities locally and better drive seafood to local, regional, national, and international markets.

ii. Safety Improvements

Safety comprises one of the most significant benefits to this project. The more than 450 fishermen and crew members who use the fixed dock throughout the year spend about 17,000 hours annually walking back and forth between the parking lot and their vessels to transfer supplies using the pedestrian bridge. The average age of an Alaska commercial fishing permit-holder is 52 years old. Currently, harbor users moving the typically heavy and bulky supplies between their vessels and the shore use wheelbarrows or carry items by hand. This task becomes especially dangerous at low tide when the ramps – which also become slippery when wet – become as steep as 29 degrees.

Additionally, due to the high demand for the crane dock, it becomes congested both in water and on the surface. The inner portion of the dock becomes hazardously shallow at low tides for both vessels attempting to maneuver around the dock and for those moored to it. The turning basin in front of the south face of the crane dock (the opposite side of the dock from the proposed drive down float) is tight and subject to strong currents, which makes it difficult for

larger vessels such as tenders and limit seiners to approach the dock.

The drive down float will allow harbor users to drive vehicles down to the float, where they can use the two additional five-ton cranes to transport goods and supplies directly from the vessels to vehicles. By removing the need for harbor users to walk the steep ramps and carry goods by hand, the proposed project will prevent an estimated 17 non-injury accidents, 8.5 minor accidents, and 0.49 incapacitating accidents each year. Avoiding these injuries will provide $13.6 million in savings over a 30-year period. Additionally, replacing the existing fixed dock with a floating dock will provide a safer option for the large tidal swings of up to 22 feet that occur. In these environments, floating docks are preferred as they will allow the dock to remain level with the changing water levels and with moored vessels, providing safer access between the vessel and the dock.

> "The existing [crane] dock face is sometimes hard to maneuver in strong tide situations, and the inner portion near the old wood dock is too shallow at low tide for many boats, including mine. Completing the dock on the north side will be a big plus."
>
> – Ian Fisk, Fisherman, Primo Prawns

iii. Efficiency Improvements

The new drive down float will replace a pedestrian ramp local fisherman use to transport goods using wheelbarrows. Hauling items manually this way requires hundreds of trips on foot, often in inclement weather. Along with the ability to move seafood more efficiently, the drive down float will better accommodate regular gear changes, mechanical work performed on vessels, and trip provisioning prior to fishing trips.

Gear changes are required for different types of fishing activities. For example, vessels use crab and shrimp pots during the summer and fall crab and prawn season, while the halibut and black cod season from March to November uses longlines. It is estimated that fishermen spend 144 hours per vessel each year changing gear out using the pedestrian ramp. Regular vessel maintenance is also hindered by the inability to quickly move tools and replacement parts back and forth from the vessel to land, amounting to an average of 8 hours spent performing vessel maintenance, or 84 hours per vessel each year. The last component is trip provisioning, which consists of stocking vessels with a life raft that requires annual inspection, groceries, and basic supplies to last sometimes extensive fishing trips. This amounts to 7.6 hours annually, per vessel, for provisioning trips.

Fishermen interviewed during the development of the BCA estimated the drive down float would cut down the time spent on gear changes and mechanical work in half, and slash time taken for provisioning trips by 90%. By avoiding walking back and forth across an often steep and slippery ramp between shore and vessels, the proposed drive down float project will amount to 16,492 hours saved annually. In the first year following the completed project alone (2027), the value of these improved efficiencies is $677,797, based on labor travel time. See Table 3 for the total time and money saved each year.

Table 3. Value of time saved with drive down float

Value of Time Saved with Drive Down Float		
	Total annual time savings in hours	**Total annual savings for vessels**
Gear Changes	9,300	$504,977
Mechanical Work	5,425	$294,570
Provisioning & Inspections	1,767	$103,688
Value of Time Traveled Saved (30-year period)		**$11,053,370**

The proposed project additionally seeks to expand crane operations at Aurora Harbor by adding two 5-ton cranes onto the new drive down float. The existing crane dock that consists of two cranes and a 150-foot-long dock face moved 186,000 pounds of seafood and kelp to the market in 2021. Annual crane usage more than tripled to 766 hours in 2021, up from 252 hours in 2012. Many fishermen have expressed issues with overcrowding at the crane dock and difficulty maneuvering to and from it, especially when another vessel is already moored to it. This is despite the fact that the dock is meant for use by more than one vessel. Adding two cranes to the drive down float will double capacity to accommodate crane demand, as well as reduce congestion in the water and at the docks.

Although Juneau was ranked as the 47th largest commercial fishing port by value in the United States and the demand for its infrastructure continues to increase over time, only 40% of the fish caught in the immediate vicinity of Juneau made it to local processors. This inefficiency is linked to the inefficient movement of goods and the primary and secondary processing businesses being taken out of the state and country. The drive down float and cranes will better connect the local fishing fleet to the transportation network by allowing commercial fishermen to move product and supplies directly from vessels to the road system, getting more seafood to processing centers. Adding a drive down float and doubling the nearby available crane capacity is expected to increase the value of shore processing and direct marketing sales by more than $2 million each year, totaling $17,963,377 million in additional sales over a 30-year period.

iv. Reliability Improvements

Commercial fishermen interviewed during the development of the BCA expressed concern over the reliability of the pedestrian bridge and fixed dock, as well as the crane dock. The high demand for the crane dock, combined with the tight space for maneuvering and strong currents within the turning basin, have led to congestion and uncertainty over being able to use the dock during key periods, such as gear changes between salmon and crab openings. Similarly, injuries are commonplace for users of the pedestrian ramp to the fixed float.

> "I had an accident last February. I smashed my finger and required 10 stitches. I was taking a load of supplies to my boat, and the cart just got away from me. It was low tide and bad weather."
>
> – From BCA Fishermen Interviews

The proposed infrastructure improvements in the Aurora Harbor Drive Down Float Project will directly address these concerns, ensuring commercial fishermen and other harbor users have access to safe, reliable harbor infrastructure.

The 17- by 140-foot transfer bridge will connect a new widened dock to the 48- by 120-foot drive down float, allowing reliable vehicle access directly from shore to the float. The proposed design is based on a similar drive down dock that was built at the Auke Bay Loading Facility, which some fishermen navigate 34 nautical miles from Juneau to use. The addition of two 5-ton cranes on the new float will alleviate congestion at the crane dock, minimizing cumbersome maneuvering and mooring efforts for fishermen using larger vessels.

The existing fixed dock provides additional uncertainty around vessel access and goods transfer. Juneau's swinging tidal range causes significant movement of the vessels moored to the dock, but the dock itself does not move with the changing water levels or currents. The drive down float design will better accommodate Juneau's water environment. The float will be anchored with steel piles and pile frames surrounded by energy-absorbing pile hoops attached to the float, ensuring the structure will provide both stability and the ability for the float to move with changing tidal conditions. The vehicle transfer bridge will be supported by a submerged auxiliary float to reduce structural loads on the main float, preserving the longevity of the system.

Freight Movement

Important freight passes through Aurora Harbor using the crane dock, which harbor users have reported to be difficult to use for such goods (see BCA). However, these goods often cannot be walked up the pedestrian gangway.

Some of the freight transferred at the crane dock has included:

- Construction materials for home building
- Vessel reconstruction materials
- Seafood and kelp
- Subsistence harvests and sport fishing fish
- Yacht provisions

There is no road access to Juneau and many other nearby Southeast Alaska communities, many of which rely on Juneau for access to the above freight resources. Reliable movement of these goods is critical to the local and regional community. The drive down ramp and new cranes will allow operators to drive containers directly to vessels for loading. Fresh seafood and freight can be transferred without intermediate freight hauling stages. The proposed project will additionally free up space at the crane dock. This additional reliable method of freight transfer is expected to increase the freight products moved by hundreds of thousands of pounds each year.

B. Supporting Economic Vitality at the Regional or National Level

i. Economic Advantage of the Port

Juneau is a remote rural community with access to important aquatic resources. Since the community is not connected by the road system to the rest of the state, marine infrastructure is critical. In 2021, 452 commercial fishing vessels were homeported in Juneau, while 2,834 commercial fishing vessels were homeported in Southeast Alaska. In 2019, the Juneau seafood industry (including commercial fishermen and seafood processors) generated 567 direct year-round equivalent jobs, contributing significantly to the local economy.

The regional commercial fishing fleet of Southeast Alaska relies heavily on Aurora Harbor, which

is the largest of CBJ's protected harbors. Juneau is considered a regional hub for access to and transport of goods and services in Southeast Alaska. As discussed in the 2013 Comprehensive Plan, facilitating safe, reliable, and quick transportation is critical to supporting other communities and regional economic development. Commercial fishermen from the nearby Haines Borough and Petersburg Borough and several other communities come to Juneau to participate in the seafood industry and take advantage of Juneau's seafood processing facilities and connections to larger transportation infrastructure, such as the Juneau International Airport.

The existing crane dock is known to be in high demand and will continue to bring in users; the BCA notes that nearly 200,000 pounds of seafood and mariculture product are brought into Juneau from the crane dock each year, while the demand for its services has tripled between 2012 and 2021. Local businesses such as Taku Fisheries and Alaska Glacier Seafoods relied on the crane dock facility to transfer catches when they first started operating; now as large, successful businesses, both companies still depend on the crane dock to supplement their own docks. Dozens of smaller seafood operations also depend on the crane dock to move their seafood products from boat to shore. These include smaller shore-based processors like Horst Seafoods and Taku River Reds, and the many direct market operations that process and sell their own catch, like Primo Prawns, which processes and freezes high-value spot prawn catch onboard and offloads at the crane dock. Moreover, many marine service providers in Juneau also depend on it for heavy equipment lifts other service functions. All manner of fishermen use it for loading and offloading nets, crab and shrimp pots, longline gear, bait, provisions and general fishing supplies.

Juneau additionally has a strong outlook of harvestable fish; the nearby Douglas Island Pink and Chum, Inc. (DIPAC) is a salmon hatchery that is working to grow the total amount of salmon in the area. The permitted incubation capacity of this facility was 135 million chum salmon, 1.5 million coho salmon, and 1.25 million Chinook salmon eggs in 2021.

Creating Economies of Scale

The Aurora Harbor Drive Down Float Project is expected to decrease the average cost of operations following the increase in scale. The BCA performed for the proposed project indicates the benefits will total $43,065,893 over a 30-year period, beginning in 2027 and amounting to a benefit-cost ratio of 5.00 (Table 4). The BCA was conducted under the DOT guidelines for a Discretionary Grant Application to identify, estimate, and quantify the expected benefits of the Aurora Harbor Drive Down Float Project compared to the baseline condition.

Table 4. Benefit-Cost Analysis Results

Measure	Discounted at 7%
Total Benefits	$43,065,893
Total Costs	$8,608,561
Benefit-Cost Ratio	**5.00**

A breakdown of the major benefits of implementing the drive down float and two electric cranes are summarized in Table 5 and include:

1. **Travel Time Saved:** Avoided labor costs of vessel operators and crew making time-intensive trips back and forth to vehicles on foot and carrying materials over the ramp.
2. **Accidents and Injuries Avoided:** The value of injuries and accidents avoided, based on damage costs provided by DOT.

3. **Economic Activity:** The value of increased shore processing due to installing the cranes and drive down float.
4. **Emission Reductions:** The carbon dioxide emission reduction value will be cut by vessels avoiding travel to Auke Bay's drive down float (see Climate Change and Sustainability).
5. **Increased Freight Activity:** Freight movement will increase by hundreds of thousands of pounds annually.

These benefits ultimately outweigh the costs of the project, which are valued at $8,262,648 million for construction and $345,913 for operations and maintenance. All values are discounted at 7% and assume construction will be completed in 2026.

Table 5. Project benefits breakdown

Measure (2027-2056)	Benefits (discounted at 7%)
Value of time saved for gear changes, provisioning, and mechanical work	$11,053,370
Injuries Avoided	$13,597,003
Increased Processing and Sales	$17,963,377
Emission Reduction	$32,650
Increased Freight Activity	N/A
Residual Value	$419,494
Total Benefits	**$43,065,893**

Overcoming Barriers to Entry

Aurora Harbor is inherently constrained by the inability to expand much beyond the project site. The waters between the southeast side of the crane dock and Harris Harbor are owned by UAS, as is a portion of the uplands adjacent to the harbor. Despite this barrier, Aurora Harbor has become one of the most critical pieces of infrastructure for local and regional commercial fishing fleets in Southeast Alaska. This is evident in how much seafood passes through Aurora Harbor: 200,000 pounds of seafood and mariculture products pass through the existing crane dock each year.

All upgrades and expansions associated with the proposed project, however, were intentionally designed and placed within Aurora Harbor to both improve the logistics and safety of commercial fishing operations and avoid any development on UAS property. By adding two crane docks to the drive down float, the proposed project will alleviate congestion issues at the existing crane dock, where the turning basin is tight for larger vessels, especially while the dock is in use. Vessels will also spend less time at the drive down float due to the ability to transport goods and supplies more quickly between vessels and the shore.

Due to its remote location and the lack of road access, it is expensive and difficult to construct major projects in Juneau. Despite CBJ's critical role in the maritime sector and seafood industry. While there have been various harbor improvements in recent years, most available resources have been used to rehabilitate harbors to the extent possible. This is not a challenge unique to Juneau; many other Southeast Alaska communities – including those that rely on Juneau's

harbors – have limited or no road access and find construction costs to be a major obstacle to their own harbor developments.

Additionally, the 2013 Comprehensive Plan notes that as a major regional hub, Juneau faces the difficult task of helping the Southeast region achieve economic prosperity while also "finding an equitable balance between the community's contribution to solving the region's problems and the benefits that the community will receive for participating in regional solutions…"

As shown in the BCA, despite the high construction and material procurement costs, the benefits of the proposed project outweigh the costs. Overcoming the above barriers to develop improved harbor infrastructure will support Juneau in cementing its role as a leader in the regional and national seafood industry.

Creating More Efficient Access for Labor, Resources, and Customers

One of the most important aspects of the Aurora Harbor Drive Down Float project is providing the local fishing fleet with more efficient access to the transportation network. The drive down float will enhance this access by allowing fish to move directly from vessels to the road system, as these goods can be offloaded directly from vessels to vehicles using the new cranes and driven directly to processing centers and to market.

Currently, only 40% of the fish caught in the immediate vicinity of Juneau move through the community for processing. Juneau and Alaska's economy is losing economic opportunities from the transfer of unprocessed goods to primary and secondary processors in other states and countries (this is discussed in-depth in Overcoming Competitive Disadvantage). Juneau is well-positioned and interested in expanding manufacturing operations to support shore processing and direct marketing of harvested seafood. Some examples of previous successes included the locally owned Alaska Glacier Seafoods that began buying from local fishermen and offloading from boats using the crane dock. Alaska Glacier Seafoods now has its own dock and buys substantial amounts of fish from many local fishermen. Juneau-based Taku Fisheries similarly used the crane dock to offload fish and transport them directly to small processing facilities when it started out as a small salmon smoker; the company now generates more than $20 million in annual sales.

> "The crane dock was extremely important for us when we were starting Alaska Glacier Seafoods back in 1996. In fact, without the dock I don't think we could have built our company."
>
> – Mike Erickson, President, Alaska Glacier Seafoods.

By doubling crane capacity and providing improved, efficient access from vessels to the roads with the drive down float, the Aurora Harbor Drive Down Float Project will increase shore processing and direct marketing sales substantially. Supporting these operations will stimulate additional economic opportunities such as those seen by Taku Fisheries, Alaska Glacier Seafoods, Horst Seafoods, and Taku River Reds.

The total production of shore-based processors and direct marketers was 76.1 million pounds in Southeast Alaska in 2020, which is valued at $271 million. The BCA shows the improved access and capacity brought on by the proposed project will increase production by 570,400 additional pounds of seafood for a total annual value of $17,963,377 million over 30 years.

ii. Contribution to Freight Transportation At, Around, and Through the Port

Aurora Harbor is critical for freight offloading in Juneau (where it then becomes available to regional communities that rely on Juneau to provide such goods), as well as vessel loading. Freight goods that pass through Aurora Harbor include:

Construction materials such as gravel, wood, sheetrock, construction equipment, and additional more used for homebuilding.

- Wood, fiberglass elements, engines, propellers, electronics, refrigeration components, and the many other materials used for vessel restoration and upkeep.
- Subsistence harvests to be delivered to elders in Alaska Native households.
- Charter fish from sport fishing activities.
- Provisioning for both super yachts and smaller yachts that pass through Juneau in large numbers.
- Loading and unloading of necessary fishing gear and equipment during changing fishing seasons.
- Loading and unloading necessary provisioning, supplies, tools, and parts for in-water vessel repair and maintenance and commercial fishing trips.
- Offloading salmon, crab, halibut, and other catches direct from fishing vessels for movement by truck to processing plants.
- Offloading salmon catches from company and chartered tenders for delivery to processing plants.
- Offloading salmon, crab, halibut, spot prawns, and other direct-marketed species from vessels for movement by truck to cold storage, the airport for export, or by truck to local restaurants, stores, and individual consumers.

Harbor users reported using the crane dock to be cumbersome and difficult for transferring freight goods. Many users additionally note that the crane dock can be difficult to navigate to due to a tight turning basin radius combined with the strong, swirling currents present there. Docking at the crane dock becomes especially difficult when another boat is already moored to it, despite the crane dock being meant for more than one vessel.

The existing issues with safety, vessel congestion, effective movement of goods, and moorage in the project area are a direct threat to Aurora Harbor's role as regionally significant marine infrastructure, especially as the largest of the harbors run by CBJ Docks and Harbors. The proposed project will increase harbor resiliency against the existing congestion issues that limit the efficiency of freight operations. These improved efficiencies and resiliency measures will increase contributions to the local, regional, and national economies through a more efficient movement of goods; prevent the continued outsourcing of secondary seafood processing to other countries; and provide the necessary harbor infrastructure and supplies that other Southeast Alaska communities rely on Juneau for.

The addition of two cranes will double capacity for the critical crane operations in downtown Juneau, especially for vessels that find it difficult to park at the crane dock. The drive down ramp will create a more efficient – and far safer – means of transferring goods. Freight operators can drive containers directly to vessels for loading, foregoing intermediate freight hauling stages and providing faster distribution to processing facilities, directly to the market, or to individuals.

If the proposed project is not funded, freight expansion of a wide range of goods will not occur, movement of essential goods and supplies will remain inefficient, and Juneau will continue to see primary and secondary processing opportunities move overseas. Implementing the drive down float and adding two cranes is expected to triple the volume of seafood moved through Juneau, which was slated at 186,000 pounds of product in 2022. The total increase in freight volume will increase by hundreds of thousands of pounds each year.

iii. Overcoming Competitive Disadvantage

The poor connection to the transportation network is a major competitive disadvantage for the local fishing fleet and local fishermen. The limited ocean-to-road freight connection is a direct reflection of port inefficiencies and inadequate infrastructure. As a remote location with no major roadway access, Juneau must operate especially efficiently to compensate for the high costs of living, infrastructure development, and transportation that all affect its commercial fishing and freight operations.

A primary concern for Juneau and other Southeast Alaska communities is the loss of secondary processing opportunities that could be developed in Juneau to countries such as China. As discussed in the BCA, most salmon are currently headed, gutted, frozen, and sent internationally for processing and selling. The community of Juneau is prepared and willing to develop these additional business opportunities but does not have an effective system for transferring goods to local shore processors or direct marketers. Success stories from Taku Fisheries and Alaska Glacier Seafoods, discussed in Creating More Efficient Access for Labor, Resources, and Customers, show the potential for growth in Juneau if the process can be improved.

The table below shows how the Aurora Harbor Drive Down Float Project will help Juneau overcome this economic disadvantage: The drive down float will provide additional working space, double the crane capacity, and increase the rate at which goods can be transported from vessels directly to processors and direct marketers. The project is expected to increase onshore processing in Juneau by over 500,000 pounds each year and generate $2 million per year in first wholesale output, increased direct marketing, and growth of existing shore processing operations. In total, the project will improve seafood product direct marketing and processing in the region to provide an additional $17,963,377 in sales over a 30-year period.

Table 6. Increased processing and sales

Measure	Annual Benefits
Increase in Direct Marketing Annually	$662,083
Development of New Shore Processing Annually	$1,368,257
Increased Processing and Sales (30-year period)	**$17,963,377**

C. Leveraging Federal Funding to Attract Other Sources of Investment

i. Infrastructure Investment

When the existing crane dock was first constructed, it sparked a minor revolution in the direct marketing of seafood in Alaska. The traditional development model of the Alaska seafood industry was for independent fishermen to deliver to shore-based processors. Under Alaska limited entry licensing, fishing permits can only be owned by an individual; no individual may own more than a single permit in a given fishery; and the permit owner must be on board the vessel when the permit is being fished. This effectively ruled out processor ownership of fishing licenses and processor-owned fishing fleets. However, advances in technology made it possible for more and more processing to take place onboard vessels. Fishermen wanted to process and market their own catches, but various state regulations on taxation and seafood sanitation were not supportive. Plus, processors owned all the docks and most simply would not buy fish from any fisherman seeking to be independent.

Juneau was one of the first municipalities to build public infrastructure to help independent fishermen in the form of the crane dock. After investing in the crane dock, there was a surge in interest by fishermen who wanted to take advantage of higher prices. They gradually forced changes to state regulations, resulting in new licensing provisions. Some of these direct marketers have evolved into much larger companies and may are continuing to develop new products and innovative marketing. The crane dock was instrumental in these developments, and its effects have been felt in other communities. Fishermen from nearby Petersburg, Haines, and other communities come here to access the Juneau market and use the airport to fly product to Anchorage and the Lower 48. Other communities are now investing in facilities to assist direct marketers and independent small processors.

Investing in the drive down float and crane infrastructure will expand on the momentum started by the crane dock, which is proof of the economic ripple effects of investing in critical public infrastructure in Juneau.

D. Port Resilience

Transportation connectivity is critical to the community of Juneau, and this specific project will enhance the resilience of the community, addressing resiliency needs that have been documented throughout planning efforts on the local, regional, and statewide level.

i. Disaster Resilience

This project would provide additional connectivity and improve disaster response capacity in case of a natural or human-induced physical event, such as the following:

- **Injury Mitigation:** According to the project BCA, the existing system requires commercial fishermen and their crew to move a great deal of freight and supplies by hand cart, often with steep gangways (depending on the tides) or in inclement weather, resulting in documented accidents. A drive down crane float would eliminate an estimated 17,000 hours of walking back and forth with gear and freight between vehicles and vessels annually along with 250 projected injuries over the next 30 years.[1]

[1] BENEFIT-COST ANALYSIS OF THE JUNEAU AURORA HARBOR DRIVE DOWN FLOAT PROJECT

- **Cruise Disaster Response:** The downtown port of Juneau is expected to receive 693 port visits by cruise ships in 2023, with 1.65 million cruise ship passengers. Should a cruise disaster occur, having a drive down float in the downtown area will be critical in rescues/ response efforts. Evacuation and disaster risk reduction plans for cruise ship ports across the world typically include drive down floats.[2]
- **Bridge Disaster Response:** Douglas Island is located directly across the channel from the proposed drive down float. For the last 40 years, an effort has been in place to develop a second bridge to connect the island to the mainland and emergency services. A primary reason is to improve access for public safety and emergency response. While the cost of a second bridge has been prohibitive, the lower cost alternative of the drive down float would significantly increase the ability to provide emergency services to the island should a disaster impact the bridge or the single road that leads to the bridge.[3]
- **Oil Spill Disaster Response:** As the downtown port of Juneau includes nearly 700 cruise ship visits annually, as well as hundreds of visits by visiting fishing vessels and yachts, the U.S. Coast Guard, small float planes, and others, increased capacity to respond to a marine oil spill would be supported by a drive down float in the downtown area.[4]

ii. Economic Resilience

By expanding port infrastructure and supporting bringing seafood to market more efficiently, this project directly supports key components of the economic resilience plans in the regional and statewide Comprehensive Economic Development Strategy (CEDS) by strengthening supply chain ocean/road connectivity for ocean products and freight. Each of the following is supported by the drive down float development.

The Southeast Alaska 2025 CEDS[5] is a five-year strategic plan for the region and includes a **five-year economic resilience plan**, which advocates for the following: **Revitalize freight transportation services and ensure the viability of the seafood sector**. This project would support both of these regional economic resilience goals. Moreover, the proposed project develops many of the key Southeast CEDS initiatives to support the economy, including:

- Move freight to and from markets more efficiently
- Implement ports and harbors infrastructure improvements
- Further develop seafood markets (includes a focus on building out a more robust supply chain)
- Support regional processors becoming more economically
- Competitive
- Full resource utilization and ocean product development
- Food Security: Increase supply, demand, and equitable access and distribution of local foods and regional food system opportunities

[2] HTTPS://PROGRAMAMESOAMERICA.IOM.INT/SITES/DEFAULT/FILES/EVACUATIONS_AND_DISASTER_RISK_REDUCTION_CARIBBEAN_0.PDF
[3] JUNEAU DOUGLAS NORTH CROSSING STUDY HTTPS://WWW.JDNORTHCROSSING.COM//DOCUMENTS.HTML
[4] SOUTHEAST ALASKA'S AREA CONTINGENCY PLAN 2021: HTTPS://DEC.ALASKA.GOV/MEDIA/10702/SOUTHEAST-AREA-PLAN.PDF
[5] SOUTHEAST ALASKA 2025 ECONOMIC PLAN: SOUTHEAST CONFERENCE'S COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY 2021-2025. HTTPS://WWW.SECONFERENCE.ORG/STRATEGY/ PAGE 20. MORE THAN 400 PEOPLE REPRESENTING SMALL BUSINESSES, TRIBES, NATIVE ORGANIZATIONS, MUNICIPALITIES, AND NONPROFITS WERE INVOLVED IN THE PLANNING PROCESS. THE REGION WORKED TOGETHER TO DEVELOP MORE THAN 50 OBJECTIVES AND 4 PRIORITY OBJECTIVES.

The S**tate of Alaska CEDS Alaska Statewide CEDS 2022-2027:**[6] Economic resiliency is also a critical element of the statewide CEDS. One of the six overall goals of the plan is as follows: **Build a Resilient Economy**. Some of the key plan objectives include:

- Marine Infrastructure: Upgrade port, harbor, and waterfront infrastructure
- Seafood: Maximize the value of Alaska's seafood industry.

V. SELECTION CONSIDERATIONS

E. Climate Change and Sustainability

The Aurora Harbor Drive Down Float Project addresses climate change and sustainability in several ways.

- **Reduced Carbon Emissions:** One of the benefits of the project is that it will allow commercial fishing vessels to forgo having to travel to the Auke Bay drive down float. According to the project BCA, an estimated 704 metric tons of carbon dioxide air emissions is expected to be avoided through implementation of this project.[7]
- **Juneau Climate Action & Implementation Plan:** It has long been difficult for Juneau and regional residents to access freshly caught local seafood. The drive down float is expected to significantly increase community access to direct marketing, as it will provide direct access between locals in their vehicles to those selling ocean products, displacing the need to import some foods. The Juneau Climate Action & Implementation Plan describes the significant GHG emissions associated with importing foods and sets forth the following goal to mitigate this problem: *Support local seafood sales on or near the downtown waterfront*.[8]
- **Increased Food Security:** Almost all of Juneau and Southeast Alaska foods are imported by barge.[9] An additional benefit of reducing reliance on food imports by increasing access to local seafood through this project is that the community and region will be better situated should a disruption to the barge supply chain occur. This is also a key objective in the regional CEDS: Food Security Objective: *Increase supply, demand and equitable access and distribution of local foods and regional food system opportunities*.[10]

[6] ALASKA STATEWIDE COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY 2022-2027. ALASKA DEPARTMENT OF COMMERCE, COMMUNITY, AND ECONOMIC DEVELOPMENT. PAGE 5. THE PLAN WAS DEVELOPED BY THE STATE OF ALASKA, LOCAL AND REGIONAL LEADERSHIP, INDUSTRY AND BUSINESS REPRESENTATION, TRIBAL REPRESENTATION, LEARNING INSTITUTIONS, AND REGIONAL ECONOMIC DEVELOPMENT ORGANIZATIONS, INCLUDING ALASKA REGIONAL DEVELOPMENT ORGANIZATIONS, AND A STRATEGY COMMITTEE MADE UP OF STATE LEADERS FROM BUSINESS, GOVERNMENT, AND THE NONPROFIT SECTOR. HTTPS://WWW.COMMERCE.ALASKA.GOV/WEB/STATEWIDECOMPREHENSIVEECONOMICDEVELOPMENTSTRATEGY.ASPX

[7] BENEFIT-COST ANALYSIS OF THE JUNEAU AURORA HARBOR DRIVE DOWN FLOAT PROJECT

[8] JUNEAU'S CLIMATE ACTION PLAN HTTPS://JUNEAU.ORG/INDEX.PHP?GF-DOWNLOAD=2019%2F03%2F2011-CLIMATE-ACTION-PLAN.PDF&FORM-ID=22&FIELD-ID=11&HASH=32C8805F269CE4BD156CB5CD0BDFD2917FBAC831E531C75D02D84A2E17E4405C THE CBJ ADOPTED THE JUNEAU CLIMATE ACTION & IMPLEMENTATION PLAN IN 2011.

[9] THE MARITIME ECONOMY OF SOUTHEAST ALASKA. HTTPS://WWW.RAINCOASTDATA.COM/PROJECT/THE-MARITIME-ECONOMY-OF-SOUTHEAST-ALASKA-2013/ PAGE 10

[10] SOUTHEAST ALASKA 2025 ECONOMIC PLAN: SOUTHEAST CONFERENCE'S COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY 2021-2025. HTTPS://WWW.SECONFERENCE.ORG/STRATEGY/ PAGE 38.

i. Environmental Impacts

The proposed project is not expected to have adverse environmental impacts to air or water quality, wetlands, or endangered species. The project area has already been highly developed and there will be no habitat encounters such as eel grass beds or salmon spawning streams. The proposed project is additionally designed to align with known permitting requirements. The project will be subject to NEPA review, as well as permitting by USACE and the Alaska Department of Environmental Conservation (ADEC).

ii. Project Planning Process

CBJ does not maintain a publicly available emissions inventory of greenhouse gases and an equitable development plan has not been prepared. While the proposed project has not been incorporated into a climate action plan, as discussed above, it does seek to align with certain aspects of the existing Juneau Climate Action & Implementation Plan. Various DOT tools such as the Transportation Disadvantaged Census Tract and EJSCREEN tool have been used to assess current demographic information and understand the scope of existing environmental and transportation disadvantages in the community, but they were not used in the planning process. The proposed project, however, is part of a broader master plan that incorporated an extensive planning process that required a great deal of public involvement. The master plan is overwhelmingly supported by the community.

The Juneau Downtown Harbors Uplands Master Plan: Bridge Park to Norway Point, which the proposed project is based on, was completed in March 2017. The planning process began with reviews of past planning initiatives and an economic analysis of Juneau. The project developed an inclusive public involvement process to ensure there would be communitywide understanding and support for the master plan, with the understanding that these community members are integral stakeholders to the success of many master plan components.

Four public meetings, three all-day open house sessions, three meetings with the Docks and Harbors Board, and a number of integrated design charrettes were held to ensure maximum public participation in the planning process. Juneau is a diverse community where all voices have an equally important stake in developing a vision forward for the community. Federally recognized Alaska Native tribes located within the Juneau census area include the Douglas Indian Association and the Central Council of Tlingit and Haida Indian Tribes of Alaska. To ensure as many voices would be incorporated into this process as possible, meetings were announced through a series of public service announcements on public radio, ad placements in the local newspaper, social media posts on official city pages, physical event posters, email newsletters, and announcements across various websites. More than 150 residents took part in the process.

Throughout the planning process, an engineering consultant verified that plans were feasible by engineering, construction, and permitting standards, while an economic consultant incorporated economic trends and forecasts for Juneau into prioritization decisions.

F. Equity and Justice40

This project contributes to the Justice40 initiative. In Juneau, just over 40% of community members are low income or historically disadvantaged. According to the 2020 U.S. Census, Alaska Natives make up 21% of the community population, while an additional 16.6% of the population is non-white; and nearly three percent of the "white only" population was below poverty levels in 2021.[11] Alaska Native households in Juneau are much more likely to be low-income. According to the U.S. Housing and Urban Development income limits, 62% of Juneau's Alaska Native households are low income, including 48% that are very low income.[12] In addition to supporting the local economy and local commercial fishermen, the project will improve access to subsistence harvests by local households, along with overall access to fishing and seafood by Alaska Native households in the community. The local Alaska Native community has a culturally critical relationship of access to the ocean and salmon. However, in the 140 years of nonindigenous development of downtown Juneau, that access has been cut off as the waterfront was industrialized and filled. Several Juneau plans call for renewed access to the water, including CBJ's 2022 planning effort known as "Blueprint Downtown" and the 2004 Long Range Waterfront Master Plan.

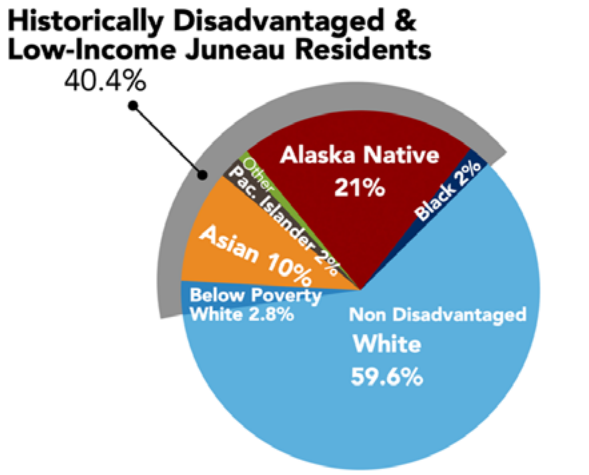

Figure 5. Demographic breakdown of Juneau residents

Access to the ocean is especially important to the indigenous population in Juneau. According to the letter of support from the Douglas Indian Association (DIA; Attachment XX):

> **"**DIA strongly and unconditionally supports the CBJ Docks & Harbors efforts to construct a drive down float at Aurora Harbor, which is less than 2,000 feet from our Tribal Office. As Tlingit people of SE Alaska for over 10,000 years, we are a maritime national which relies on access to the water for transportation, subsistence, and culture. The Tlingit people has depended on Salmon from time immemorial. We have a numerous number of Tribal members who commercial fish that would benefit immensely with this infrastructure improvement.**"**

i. Public Engagement & Project Impacts

As discussed in Climate Change and Sustainability, the proposed project is from the Juneau Downtown Harbors Uplands Preferred Master Plan: Bridge Park to Norway Point. The two core components of the public engagement process included a) ensuring a thorough understanding of the proposed plan and its effects on the community and b) creating an opportunity for concerns, feedback, and a diverse collection of ideas and viewpoints to help shape the plan and its priorities.

[11] RACE DATA: 2020 CENSUS DATA FOR REDISTRICTING HTTPS://LIVE.LABORSTATS.ALASKA.GOV/CENSUS-RETURN-RESULT?VALUE%5B0%5D=4412; POVERTY DATA: 2021 ACS 5-YEAR ESTIMATES DETAILED TABLES

[12] JUNEAU ALASKA TRIBAL HOUSING ASSESSMENT. AUGUST 2019. PREPARED FOR CENTRAL COUNCIL TLINGIT AND HAIDA INDIAN TRIBES OF ALASKA AND TLINGIT HAIDA REGIONAL HOUSING AUTHORITY. BY RAIN COAST DATA. HTTPS://WWW.REGIONALHOUSINGAUTHORITY.ORG/WP-CONTENT/UPLOADS/2019/08/JUNEAU-DOUGLAS-CCTHITA-TRIBAL-HOUSING-SURVEY-ANALYSIS.PDF

All public engagement opportunities were inclusive of all members of Juneau's community and were heavily advertised through radio stations, newspapers, email newsletters, various websites, multiple social media channels, and on physical flyers placed throughout town. More than 150 residents ultimately took part one of these sessions over a 10-month period, which included: 4 public meetings, 3 all-day open house sessions, and numerous integrated design charrettes.

Additionally, three meetings were held with the Docks and Harbors Board. Comments from these public engagement sessions were essential to the development of the current master plan. Based on community feedback, the three initial master plan alternatives were reprioritized and further refined to develop a single, preferred master plan.

CBJ has not received any compliance reviews, external lawsuits, investigations, or complaints alleging discrimination, of any kind, in the last five years.

G. Workforce Development, Job Quality, and Wealth Creation

The Aurora Harbor Drive Down Float Project will help create good-paying jobs.

i. Supporting Jobs and Earnings

In 2021, the seafood economy in Southeast Alaska had 3,300 workers with associated workforce earnings of $226.4 million, for an average wage of $68,600.[13] Regional harbor infrastructure supports that entire sector. One of the goals of this project is to grow and support the direct marketing sector – allowing fishermen to sell seafood directly to local residents and businesses. Annually, the project is expected to increase sales by $2,030,339 (see BCA). The direct, indirect, and induced impacts of this float is expected to be 30.4 jobs throughout all businesses and industries in Juneau. The total direct, indirect, and induced impact of increased seafood sales is expected to be $3.1 million annually, including $989,587 in annual earnings.[14]

ii. Supporting Mariculture Growth

In addition to the sale of seafood and the support of local commercial fishermen, this project will help facilitate the growth of the mariculture industry. Through a $49 million Build Back Better Regional Challenge grant to the Southeast Conference, the U.S. Economic Development Administration (EDA) is supporting the development of sustainable mariculture industry (utilizing aquatic resources for food, jobs, and economic development through ecosystem-based approaches to fisheries and management) in Alaska to produce shellfish and seaweed for the long-term benefit of the state's economy, environment, and communities. This drive down facility will support mariculture and enable this sector to grow. The Cluster will distribute a quarter of the total funds to Alaska Native communities. "Mariculture provides an opportunity during new resource development to address the inequities by prioritizing tribal and Alaska Native leadership, ownership and participation in mariculture, as well as providing services such as training, financing, and other business development to support equitable opportunity," states the Alaska Mariculture Cluster Overarching Narrative.[15]

[13] SOUTHEAST ALASKA BY THE NUMBERS 2022, BY RAIN COAST DATA. HTTPS://WWW.RAINCOASTDATA.COM/PROJECT/SOUTHEAST-ALASKA-BY-THE-NUMBERS-2022/

[14] MULTIPLIERS ANALYSIS BY RAIN COAST DATA USING RIMS TYPE II MULTIPLIERS FOR JUNEAU.

[15] HTTPS://WWW.FISHERIES.NOAA.GOV/FEATURE-STORY/ALASKA-MARICULTURE-CLUSTER-WINS-REGIONAL-CHALLENGE-GRANT-AQUACULTURE

VI. PROJECT READINESS

This project is ready to proceed upon procurement of funding. It is supported by the public through the Juneau Downtown Harbors Uplands Master Plan, which included significant public involvement as part of the development process. CBJ Docks and Harbors is the project proponent and owner. We operate and manage multiple waterfront facilities and properties throughout Juneau. These include two cruise ship docks, several small boat harbors and boat floats, six launch ramps, two commercial loading facilities, two boatyards, and several hundred acres of tidelands and waterfront properties under lease.

A. Technical Capacity

This project is technically feasible and able to meet the deadline of obligating funds by September 30, 2026. It is part of the broader Juneau Downtown Harbors Uplands Master Plan: Bridge Park to Norway Point (Attachment XX). During the master plan development process, a professional engineering consultant reviewed the concept plans to ensure all major components of the project were feasible from an engineering, construction, and permitting standpoint. The firm also provided detailed construction cost estimates in April 2023 based on preliminary design. The estimates are based on knowledge of material sourcing, permitting requirements, and familiarity with local contractors. In addition, there are many local, statewide, and regional marine contractors that have experience with the fabrication and construction of projects similar to the Aurora Harbor Drive Down Float Project.

The proposed drive down float design has been successfully constructed and used in other locations throughout Alaska. The functionality and versatility of the drive down float and new cranes are key attributes to the collective purpose of the Fisheries Terminal, which is the final vision for the project area. Several fabricators within the northwest United States have extensive experience with the fabrication, assembly and transportation of the proposed drive-down float, access bridge design, and crane procurement and installation.

i. Project Schedule

The schedule for the proposed project can be found below; it will easily accommodate the September 30, 2026, obligation deadline. The schedule includes state and federal permitting timelines. Since the additional infrastructure proposed for development is a continuation of the original Fisheries Terminal project, initial local approvals and preliminary design have been already completed. The project was also reaffirmed and endorsed by the public and local government in 2017 as part of master planning effort. Due to this pre-work, the project is ready to commence as soon as funding is awarded.

The Aurora Harbor Drive Down Float Project will require review and approval by the CBJ Planning Commission. We regard this as a proforma review, as the project meets all local zoning and development criteria. The final local matter will be appropriation of grant receipts by the CBJ Assembly. This is also expected to be a proforma step, as the project aligns with long-term, local economic development priorities and with the recently adopted Juneau Economic Plan. CBJ Docks and Harbors fully expects endorsement from all local government bodies with project review responsibilities.

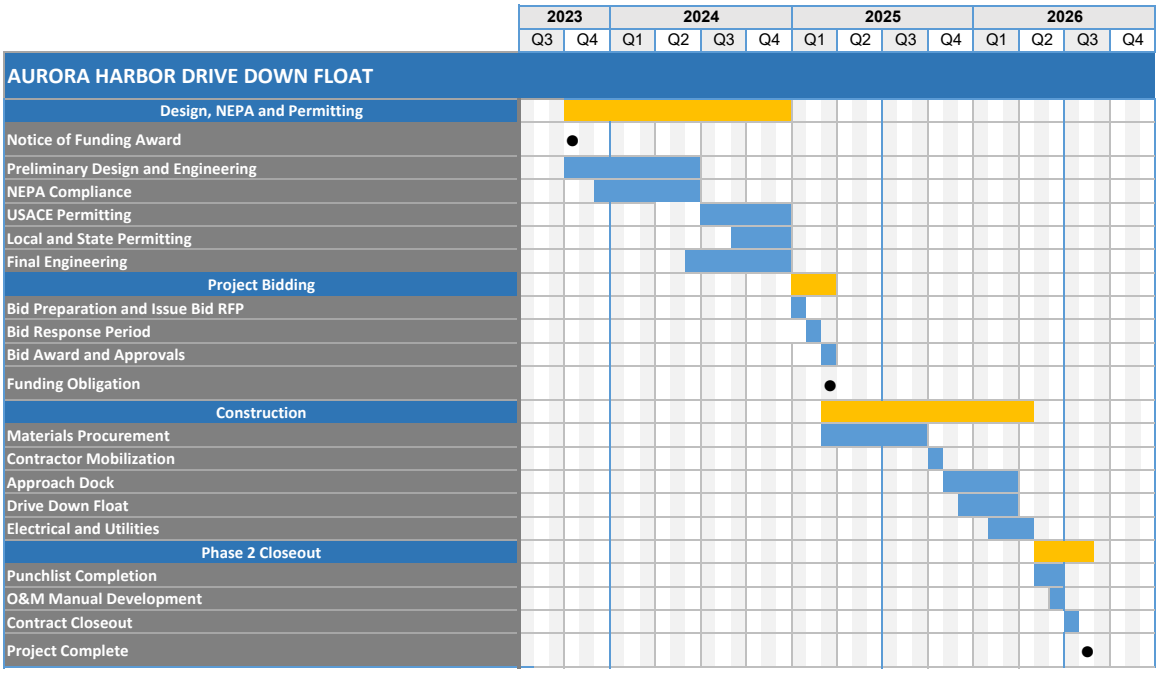

Figure 6. Project schedule

ii. Risk Mitigation

We understand the potential risk of permitting delays and have scheduled conservative timelines that include 7 months for NEPA review and compliance, as well as 6 months for USACE permitting and 4 months for receiving local and state permits. We additionally allocated 7 months for material procurement that overlaps with the project bidding to begin procurement of construction materials early and leave room for delays.

During the design phase, engineering investigations into the site, soil, and coastal conditions at the harbor will inform design development that is constructible for specific site conditions. Solidifying these design environmental conditions is a crucial step to risk mitigation planning. The engineering consultant will be well-versed in marine infrastructure development for Southeast Alaska communities, ensuring appropriate permitting requirements will be followed and construction contractors adhere to design documents. CBJ will work closely with the contractor and engineering consultant to address concerns as soon as they come to light. Our cost estimate includes contingency planning for unexpected changes or issues during construction, as well as inflation.

B. Environmental Risk

As this project has always been part of the original development plan, there is minimal environmental risk associated with completing the Aurora Harbor Drive Down Float. CBJ has recently received environmental permits and approvals for other recent projects in the vicinity. The immediate area has already been highly developed, and there are no habitat issues such as eel grass beds or salmon spawning streams in the project area.

i. NEPA Status

No NEPA has been conducted for this project. It will be developed as part of the required

environmental reviews during the design process. We expect to receive a categorical exclusion under NEPA, but we expect an Environmental Assessment will likely be required due to in-water construction. We have allocated 7 months for NEPA review and will begin the process within three months following notice of funding award.

ii. Environmental Permits and Reviews

There are no environmental studies or other documents associated with this project. Nonlocal agencies with permitting responsibilities include USACE and the U.S. Environmental Protection Agency (EPA). A USACE permit will be required for construction in tidelands. We expect little, if any, difficulty in receiving this permit. The site was originally permitted for the same use, and CBJ Docks and Harbors recently received USACE authorization for a dredging permit for the entire Aurora Harbor. That dredging has been completed in accordance with the approved permits, and the dredge area immediately abuts and extends beneath the drive down float.

The immediate area has already been highly developed, and there are no habitat issues like eel grass beds or salmon spawning streams in the project area. While these permitting steps can be tedious, CBJ Docks and Harbors has a long history of permitting significant in-water and tidelands projects. This experience tells us that this project will easily clear permitting requirements.

Public Engagement

This project is part of the Juneau Downtown Harbors Uplands Master Plan, which went through a comprehensive public involvement and engagement process that was open to all members of the community. The process included input of more than 150 Juneau stakeholders and residents during four community workshops, three open house events, three harbor board presentations, integrated design charrettes, stakeholder meetings, and intensive public outreach over a 10-month period. This public input took the form of public comments, questions, and interviews – all of which aided in the development of the master planning document. For the Aurora Harbor Drive Down Float, CBJ and the planning team worked closely with local fishermen to better understand their needs and how to meet them through infrastructure improvements.

The project has the support of the community. The preferred Master Plan was endorsed by the public at the conclusion of the February 16, 2017, public involvement meeting. On March 30, 2017, the CBJ Docks and Harbors Board adopted the master plan. See the letters of support for the project in Attachment XX. A detailed description of the planning and public engagement process can be found in Section V.

iii. State and Local Approvals

Due to the extensive planning and public involvement process that has already been performed, we expect the final permitting and approval process to be straightforward and relatively brief. CBJ has extensive experience in acquiring environmental permits and local approvals for projects of a similar nature and will draw upon that experience to navigate and acquire all required approvals and permits in a timely manner to meet the milestones described in the project schedule.

Alaska Department of Environmental Conservation (ADEC) Water System Plan Review and Alaska State Fire Marshall (ASFM) Plan Review documents will be submitted for approval upon design completion.

VII. DOMESTIC PREFERENCE

The Aurora Harbor Drive Down Float Project represents a conventional marine construction project that requires no foreign manufactured components. The approach dock and float anchor piles will consist of common round steel piles from domestically fabricated steel. A new potable water and fire suppression system will be installed using U.S.-manufactured, High-Density Polyethylene (HDPE) pipe and domestic valves.

The two electric cranes will be installed and sourced domestically. All other timber and steel materials incorporated in the work are commonly available from domestic sources. No waiver of the Buy American requirements will be required to complete the work.

VIII. STATUTORY DETERMINATIONS

Project Determinations	
1. The project improves the safety, efficiency, or reliability of the movement of goods through a port or intermodal connection to the port.	The Aurora Harbor Drive Down Float Project will develop a drive down float to provide a safer, more efficient method for transporting goods and supplies directly from vessels to shore. The new float and vehicle transfer bridge will replace the current method of carrying items by hand from a fixed dock up a steep and often slippery pedestrian gangway. The addition of two cranes on the new float will double the capacity for crane usage, as the current crane dock is often congested and cannot keep up with increasing demand for its services. The proposed project will additionally cut emissions from vessels by reducing the need for fishermen to travel to the Auke Bay Loading Facility to use its drive down float and cranes. By developing more reliable infrastructure to allow Aurora Harbor to operate at maximum capacity, the proposed project will better connect the local and regional fishing fleet to the transportation network and create an increase in shore processing and direct marketing. This will create more local business opportunities and improve the transport of goods to local, regional, national, and international markets. The safety, efficiency, reliability, and emission-reduction improvements of the proposed project amount to $43,065,893 in benefits.

2. The project is cost effective.	This project is part of a larger planning effort to build a complete facility to serve all of the needs of the Juneau fishing vessel fleet. The BCA was prepared for the Drive Down and found that the completed project provided a benefit-cost ratio of 5.0.
3. The eligible applicant has the authority to carry out the project	CBJ owns the property at the proposed project site and has the sole authority to construct the proposed project.
4. The eligible applicant has sufficient funding to meet the matching requirements.	The project is defined by the PIDP as a rural, small project at a small port. This means that the Federal share of the funding may exceed 80% of the total funding, although this is not guaranteed. CBJ Docks and Harbors department recognizes the competitive nature of the PIDP grant program, but we currently can only match XX%, or $XX.
5. The project will be completed without unreasonable delay.	CBJ Docks and Harbors Department has a documented history of completing ambitious waterfront infrastructure projects on time and under budget. Recent successful Docks and Harbors infrastructure projects include the Statter Harbor Passenger for Hire Floats ($4.4 million), Downtown Waterfront Improvements consisting of over an acre of pile supported docks ($12 million) and the award-winning Cruise Ship Berthing facility ($53 million). With a management team consisting of 3 registered professional engineers and the support of local, experienced structural engineering firms, we can complete the proposed project without unreasonable delay.
6. The project cannot be easily and efficiently completed without Federal funding or financial assistance available to the project sponsor.	The funding sources currently available to CBJ Docks and Harbors department cannot be utilized to fund the Aurora Harbor Drive Down Float Project. Without federal funding, this critical piece of infrastructure cannot be built.

ATTACHMENTS

Attachment A: Benefit-Cost Analysis

Attachment B: Benefit-Cost Analysis Spreadsheet

Attachment C: Project Schedule

Attachment D: Funding Commitment Letter

Attachment E: Engineering Drawings

Attachment F: Juneau Downtown Harbors Uplands Master Plan

Attachment G: Comprehensive Plan of the City and Borough of Juneau

Attachment H: Project Cost Estimates

Attachment I: Letter of Support