

Application for the RAISE Transportation Discretionary Grant 2021

FY2021 RAISE Program



Gary Paxton Industrial Park Haul-out

City and Borough of Sitka

Type: Maritime – New Capacity – Port Infrastructure

Location: City and Borough of Sitka, Alaska
Alaska's at-large Congressional District
Alaska Rural Area

Amount Requested: \$6,464,800

Contact: Michael Harmon, Public Works
Director

City and Borough of Sitka

100 Lincoln Street

Sitka, AK 99835

Phone: (907) 747-1823

Email: publicworks@cityofsitka.org

Website: www.cityofsitka.com

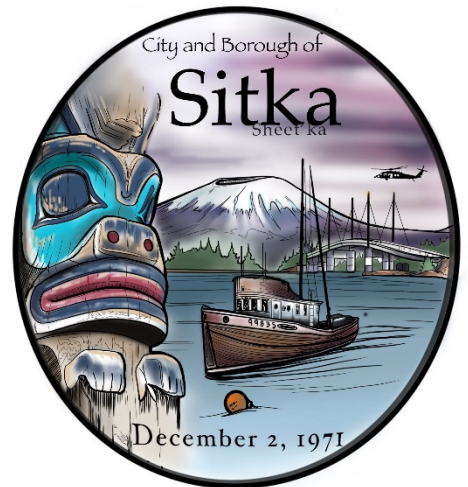


Table of Contents

Project Description.....	1
Transportation Challenges Addressed.....	1
History of Completed Projects	2
Other Transportation Infrastructure Investments.....	4
Detailed Statement of Work.....	4
Project Location	5
Geographical Description	6
Map of Project Location	6
Connections to Existing Infrastructure	7
Grant Funds, Sources and Uses of all Project Funding	7
Estimated Costs	7
Source of Funds.....	7
Documentation of Funding Commitment	7
Budget	8
Selection Criteria	8
Safety.....	8
Environmental Sustainability	9
Quality of Life	10
Economic Competitiveness	11
State of Good Repair	11
Partnership	12
Innovation	13
Environmental Risk Review	13
Project Schedule.....	13
Approvals and Permits	14
NEPA Compliance	14
Risk and Mitigation Strategies	15
Benefit Cost Analysis	16
Assumptions	16

Present Value Costs.....	16
Present Value Benefits	17
BCR	17
Additional Considerations	18

Table of Tables

Table 1 – Cost Share table	7
Table 2 – GPIP Haul-out/Travelift Cost Estimate	8
Table 3 – GPIP Project Schedule.....	14
Table 4 – GPIP 150-Ton Travelift Present Value Calculations Selected Years	17
Table 5 – 150-Ton Travelift Benefit Calculations Selected Years.....	17
Table 6 – Benefit/Cost Ratio Calculations	18

Table of Figures

Figure 1 – GPIP investments over time	4
Figure 2 – Schematics for GPIP Boat Haul-out	5
Figure 3 – Gary Paxton Industrial Park Location map.....	6

Project Description

The proposed project is to develop a Marine Haul-out facility at the Gary Paxton Industrial Park (GPIP) located in Sitka Alaska, owned by the City and Borough of Sitka (CBS). This project is critical for the commercial fishing industry and the marine service sector in Sitka. Sitka is one of the largest fishing fleets in Alaska. According to the National Oceanic and Atmospheric Administration, Sitka ranked 19th in the nation for fishery landings and value in 2019.¹ The existing Halibut Point Marine haul-out facility in Sitka will be shutting down within 6 months to pursue other business opportunities, leaving the community with limited ability to haul vessels.

The GPIP is managed by the Sitka Economic Development Association (SEDA), in partnership with CBS Administration, under the direction of a 5-member Board of Directors appointed by the CBS Assembly, the municipal governing body.

The goal of the CBS and GPIP Board of Directors is to develop a site that has the capability of hauling out vessels up to 150 tons as well as hauling out larger barges for repair and refurbishment. A local haul-out facility is vital to the Sitka maritime industry to support the local marine trades and reduce the carbon footprint of the commercial fishing industry.

Transportation Challenges Addressed

The GPIP Board has long recognized the importance of the fishing and the maritime industry to the community of Sitka. The GPIP Board and CBS have been working on vessel haul-out development concepts since the GPIP properties were acquired in 1999. This haul-out facility serves an important link to the fishing industry and economic activity of the Sitka region.

The Alaska Department of Fish and Game (ADF&G) Commercial Fisheries Entry Commission helps to conserve and maintain the economic health of Alaska's commercial fisheries.² In addition, the ADF&G Division of Commercial Fisheries manages commercial, subsistence, and personal use fisheries within the jurisdiction of the State of Alaska. ADF&G records show more than 500 vessel permits in 2020 participating in 65 different fisheries and almost 1,200 permits to various individuals. 2019 records show that 398 fishermen landed 27.7 million pounds with estimated gross earnings of \$41.3 million.³ Needless to say, the fishing industry is an important component in this community of 8,523 people.⁴ Furthermore, the capability to conduct repair and maintenance activity close to home and the fishing grounds enables vessel owners to be safer and more efficient and avoid costly travel to other communities.

The announcement of the closure of the haul-out facility in the community has put additional pressure on the operators of the GPIP to prioritize the development of a haul-out facility. This analysis looks at the fishing industry in Sitka and how those vessel owners will need to modify their operations to function efficiently without a haul-out, and then compares that scenario to one

¹ Fisheries of the United States 2019 – U.S. Department of Commerce, National Oceanic and Atmospheric Administration, and the National Marine Fisheries Service. Current Fishery Statistics No. 2019

² <https://www.adfg.alaska.gov/index.cfm?adfg=about.cfec>

³ <https://www.cfec.state.ak.us/gpbycen/2019/220470.htm>

⁴ <https://live.laborstats.alaska.gov/pop/index.cfm>

in which GPIIP is able to accommodate those vessels for their annual maintenance and repair needs.

Initially, the community examined a 100-ton versus a 150-ton travelift but since the 150-ton travelift accommodates about 90 percent of the vessels in the Sitka area, the GPIIP Board agreed to pursue this option. In addition, the CBS and the GPIIP Board agree that they need to be planning for the future and as vessels have become wider in response to fishing regulations, a 100-ton travelift would not be suitable. The GPIIP Board may agree to a larger travelift when funds become available if that is needed to serve the Sitka vessels.

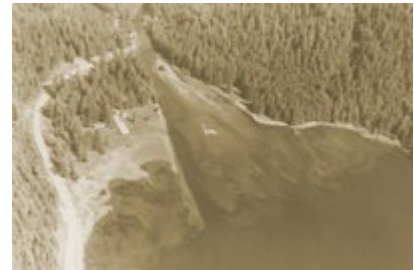
The following is a brief history of the GPIIP, its management, and previously completed projects.

History of Completed Projects

1940'S THE DAIRY

In 1940, Mr. Edward Morke purchased land where Sawmill Creek emptied into the Pacific Ocean for the purpose of starting a business called the Sanitary Dairy.

Using the fresh waters of Sawmill Creek for his dairy cows, Mr. Morke provided fresh milk to Sitka's children. In 1947, the dairy was sold to Mr. Harold Rice where he operated it until 1952. It was then sold to John and Freda Van Horn who renamed it Blue Lake Farms and continued to produce milk until mid-1950.



EARLY 1960'S PULP MILL



In 1956 the site was sold to a newly formed company called Alaska Pulp Corporation. This company would go on to make the first Japanese investment in the United States since World War II.

In 1959, the Alaska Pulp Corporation pulp mill began producing wood fiber from timber harvested from the Tongass National Forest under a long-term contract with the US Forest Service.

1980'S PULP PROCESSING FACILITY

The mill employed 450 Sitkans at its peak, making wood fiber used primarily in the production of rayon fabrics and later used in paper manufacturing. In 1993, Alaska Pulp Corporation announced the closure of the mill. After repeated attempts to sell the site and mill, Alaska Pulp decided to demolish the former mill and donate the site to the City of Sitka. In 1999, the City & Borough of Sitka officially took ownership of the site upon completion of demolition.



2000'S THE INDUSTRIAL PARK



Since 1999, the City has installed new utilities: potable water, sanitary sewer and electrical system at the park. A large diameter freshwater pipeline from Blue Lake to the shoreline and deep-water wastewater outfall pipe have also been completed. Much of the industrial debris has been cleared and main roads within

the core of the Park have been paved. In May of 2014, the Industrial Park was officially renamed the Gary Paxton Industrial Park (GPIP) in honor of Mr. Paxton's many contributions to the community of Sitka and his key role in acquiring the Park property for the City after closure of the pulp mill. In 2017, the City & Borough of Sitka installed a deep-water dock that allows for in-water boat maintenance and drive-down access. The dock opened early 2018 whereupon GPIP became a true marine industrial park.

The following graphic displays some of the funding received over the years for a variety of projects including storm, sewer, and water system upgrades, paving projects, fire suppression infrastructure, buildings, and a fish processing plant. The CBS has worked diligently over the years to maintain and improve this important industrial infrastructure serving the marine industry and has been successful in collaborating with public and private entities.



Figure 1 – GPIIP investments over time

Other Transportation Infrastructure Investments

The GPIIP is linked to downtown Sitka by a 5-mile road that is maintained by the City. The community also has a state-owned public-use airport, the Rocky Gutierrez Airport, serving the community with daily jet service and located just west of the central business district.⁵ There is no road access to outside communities from Sitka, but vehicles can be transported to town using the Alaska Marine Highway ferry system and via barge service from two private entities.

Detailed Statement of Work

The primary purpose of this project is to develop a haul-out facility at the GPIIP site that has the capability of hauling out vessels up to 150 tons at a minimum. Current barge haul-out operations at GPIIP are successfully conducted on an existing 8 percent gradient gravel ramp using pneumatic rollers and winches. Several manufactures of marine haul-out equipment including *Hostar Marine*, *Ascom*, *Conolift/Kropf Industrial* and *Brownell Trailers*, are available in the U.S., each with their own unique designs and specifications. Further research will be conducted with each of these manufacturers prior to moving forward with procurement and requesting competitive performance-based proposals.

The proposed boat haul-out facility consists of the following equipment and infrastructure:

- Mobile Marine Boat Hoisting Machine – 150-ton
- Pile supported haul-out pier to lift the boat out of the water
- Wash down pad with wash water treatment facilities and optional heated slab for winter use
- Outside work areas

⁵ https://en.wikipedia.org/wiki/Sitka_Rocky_Gutierrez_Airport

- Sheltered work and lease areas for services to be performed in controlled workspace environments
- Boat storage areas
- Storm water runoff and discharge treatment facilities
- Security fencing and surveillance
- Water, sewer, power, and lighting utilities
- Optional hydraulic trailer for yard operations and efficient onsite storage of vessels
- Appropriate environmental and operating permits

The preferred concept design is for a Boat Haul-out Facility located along the north side of the Multi-Purpose Dock with direct access to available space for boatyard work and staging areas.

See SCIP+Phase+2A+Preliminary+Screening-Level+Assessment+FINAL+(1).pdf and Support for 150-ton Travelift.docx for additional details.

Project Location

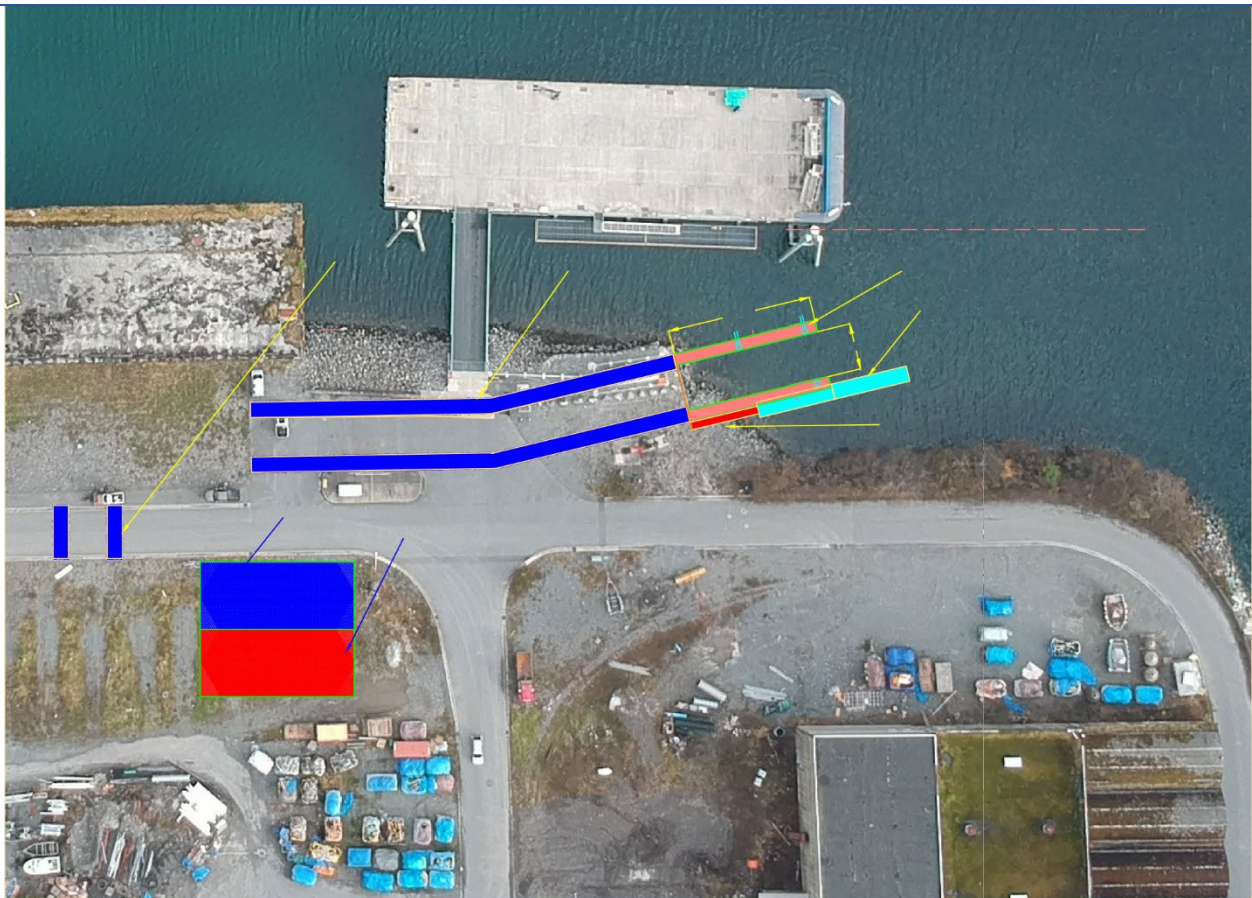


Figure 2 – Schematics for Proposed GPIP Boat Haul-out

Geographical Description

Sitka is located on the west coast of Baranof Island fronting the Pacific Ocean, on Sitka Sound. An extinct volcano, Mount Edgecumbe, rises 3,200 feet above the community. It is 95 air miles southwest of Juneau and 185 miles northwest of Ketchikan. Seattle, Washington, lies 862 air miles to the south. The CBS is located at Latitude, Longitude: 57.0583, -135.3448.

Sitka falls within the southeast maritime climate zone, characterized by cool summers, mild winters and heavy rain throughout the year. This zone lacks prolonged periods of freezing weather at low altitudes and is characterized by cloudiness and frequent fog. The combination of heavy precipitation and low temperatures at high altitudes in the coastal mountains of southern Alaska accounts for the numerous mountain glaciers. The CBS encompasses 2,874 square miles of land and 1,937.5 square miles of water.⁶

While many communities in Alaska are listed, the CBS is not on the list of Qualified Opportunity Zones (QOZ) as per the IRS Notice 2018-48 and 2019-42, 2018–28 Internal Revenue Bulletin 9, July 9, 2018. In addition, the City and Borough of Sitka is not in an Area of Persistent Poverty nor is it close to any of those areas in the State of Alaska.

Map of Project Location



Figure 3 – Gary Paxton Industrial Park Location map

See GPIP Map1.pdf and GPIP Map2.pdf for site location courtesy of the CBS.

⁶ State of Alaska Department of Commerce Community and Economic Development.
<https://dcced.maps.arcgis.com/apps/MapJournal/index.html?appid=2ded44ad6dd4456fbe353f1292e285c2#>

Connections to Existing Infrastructure

GPIP is connected to the rest of the CBS by the Sawmill Creek Road. Connections from there include the state-owned Rocky Gutierrez Airport on Japonski Island with a paved and lighted runway. In addition to daily jet service, several scheduled air taxis and air charters are available. The CBS operates five small boat harbors with 1,350 stalls and a seaplane base on Sitka Sound. Cruise ships anchor in the harbor and lighter visitors to shore. The Old Sitka Dock, privately owned, is the only deep-water moorage facility in Sitka capable of accommodating large vessels. The Alaska Marine Highway System (state ferry) has a docking facility approximately 6 miles north of town. The ferry serves Sitka several times a week, with a twelve-hour run to Juneau. Freight arrives by barge and cargo plane.

Grant Funds, Sources and Uses of all Project Funding

Estimated Costs

Cost estimates for this project have been conducted for a variety of alternatives over the years. Industry experts and the changing shape of the fishing fleet revealed that a 100-ton Travelift would not be adequate to serve the needs of the Sitka marine industry for long. This analysis focuses on the preferred 150-ton travelift. The NE Prelim Screening March 2014.pdf shows the total estimated costs for the Concept 1 project at \$12.5 million. There was a bulkhead included in this cost estimate which has since been deleted as unnecessary for the project. The project costs have been updated to 2020 dollars using the Anchorage Consumer Price Index. Total project costs are \$8.1 million in today's dollars.

Source of Funds

The CBS has the 20 percent match on hand and currently available in its SE Economic Development Fund and/or its General Fund. The Industrial Park Enterprise Fund could also contribute a small portion. There are no restrictions on these funds and the City's Assembly meeting of June 22, 2021 notes that these funds may be used for this purpose. There are no Other Federal Funds associated with this project.

Table 1 – Cost Share table

Total Project Costs:	\$ 8,081,000	100%
Funding Sources (Non-Federal):	Amount:	Percent:
City and Borough of Sitka (resolution attached)	\$1,616,200	20%
Federal RAISE Funds Requested	\$6,464,800	80%

Documentation of Funding Commitment

See City and Borough of Sitka signed resolution number 2021-14 as of June 22, 2021 committing the funding for this project. (Signed Res 2021-14.pdf) There are no previously incurred costs included in the budget and no other Federal funds are authorized for the project.

Budget

The following budget is based on engineering design estimates from 2014 which have been updated to today's dollars using the Anchorage Consumer Price Index.

Table 2 – GPIIP Haul-out/Travelift Cost Estimate

Improvement Component	Total Cost	RAISE Funds	Non Federal Funds
Mobilization & Surveying	\$586,000	\$468,800	\$117,200
Upland Improvements	\$1,370,000	\$1,096,000	\$274,000
Washwater On-site Pre-treatment Facility	\$734,000	\$587,200	\$146,800
Boat Haul-out Piers	\$1,966,000	\$1,572,800	\$393,200
Equipment - 150-ton Travelift	\$1,153,000	\$922,400	\$230,600
Power and Lighting	\$314,000	\$251,200	\$62,800
Contingency	\$918,000	\$734,400	\$183,600
Planning, Permitting, Surveying & Geotech	\$122,000	\$97,600	\$24,400
Design Engineering, Contract Admin & Inspections	\$918,000	\$734,400	\$183,600
Totals	\$8,081,000	\$6,464,800	\$1,616,200

Note: Cost estimate based on PND Concept #1 from January 9, 2014 minus the bulkhead. The RAISE Funds column is 80% of the total cost while the Non-Federal Funds column is 20% of the total cost. There are no Other Federal Costs associated with this project.

See BCA GPIIP Haulout.xlsx for further detail on the cost estimate.

Selection Criteria

Primary Selection Criteria includes Safety, Environmental Sustainability, Quality of Life, Economic Competitiveness, and State of Good Repair. Each of these topics are discussed in turn.

Safety

This project will contribute to a reduction in crashes, fatalities, and injuries as Sitka vessel owners will now have the opportunity to remain in Sitka to conduct annual repair and maintenance activities. The induced travel from the closure of the existing haul-out facility can be hazardous to vessel operators already working long harvest hours. The National Transportation Safety Board investigates major incidents/accidents and fatalities.⁷ From 1993 to 2019, there were 42 of these major incidents nationwide and 10.7 percent of them occurred in Alaska waters. The types of incident/accidents were 15 sinkings, 10 groundings, 9 fires, 3 capsizing, and 5 others. NTSB shares responsibility for responding to these with the U.S. Coast Guard.

⁷ <https://www.nts.gov/Pages/Search.aspx?k=marine%20accidents%20per%20miles%20traveled>

The USCG maintains a large database of accidents, incidents, and pollution responses in their Marine Information for Safety and Law Enforcement (MISLE) database.⁸ From 2002 to 2012, the database reveals 29 vessel events in Southeast Alaska: 7 acknowledged pollution sources, 18 casualty accidents, and 4 emergency responses. The reduction in travel to alternate ports for repairs and maintenance will contribute to improved air quality and the reduced risk of hazardous spills. The addition of travel to alternate ports for repairs and maintenance will increase the risk of pollution, casualties, and emergency responses.

An alternative to avoided travel to distant ports would be to use a grid during low tide conditions for maintenance, repairs, and refinishing of vessels. It is expected that without the haul-out, there would be increased demand for the grid. Work would be done at low tide in the water versus on the uplands with proper hazardous material containment. There have been instances a couple times a year in which boats lean away from the grid wall (the wrong way) and have to be chained and hoisted back upright to lean the other direction.

Environmental Sustainability

This project would allow vessel owners to avoid lengthy travel to distant ports to conduct annual repair and maintenance on their vessels. There will be significant savings in fuel and reductions in air and water pollution if vessels can remain in Sitka to conduct vessel repairs. Vessels seeking haul-outs at other Southeast Alaska ports would need to travel between 10 and 33 hours one way to arrive at their destination. Vessels traveling to Pacific Northwest for repairs would need to travel approximately 90 hours or about 3 ½ days to reach their destination.

Vessels electing to stay in Sitka and use the grid for annual maintenance may introduce pollutants in the water as they conduct their business during low tides. There is no attempt made here to document that pollution. However, the construction plan calls for wastewater collection and washdown facility along with pretreatment of water collected per EPA regulations. There are no wetlands affected by this construction project.

The GPIP monthly meeting of February 2020 included a discussion by the Board to prioritize EPA approved water treatment infrastructure and EPA approved washdown pad or water collection infrastructure. Meeting minutes regularly reflect the GPIP desire to operate and maintain this industrial park in an environmentally sustainable way. See GPIP+2.28.20+Board+Meeting+Packet.pdf. See also June 30 2020 minutes.pdf.

This project will also benefit the conversion of vessels to more energy efficient models. Sitka recently saw the first conversion of a vessel to a hybrid electric engine.⁹

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<https://homeport.uscg.mil/Lists/Content/DispForm.aspx?ID=211&Source=/Lists/Content/DispForm.aspx?ID=211>

⁹ <https://www.kcaw.org/2020/01/30/hybrid-fishing-boat-quietly-makes-waves-in-sitka-sound/>

This project addresses environmental sustainability in the following ways:

1. The EJSCREEN report for the City and Borough of Sitka shows higher than State and Nation Environmental Justice readings for all categories. The EJ Index highlights which block groups contribute the most toward low-income/minority residents nationwide having a higher environmental indicator score on average than the rest of the US population.¹⁰ See appendix for EJSCREEN Standard report.
2. The project supports reduced emissions and marine travel demands.
3. The ability to haul out vessels close to home and fishing grounds and the increased storage capacity for these vessels will offer the ability for vessel owners to make conversions to hybrid electric engines.
4. Utilities will be available at the GPIP Haul-out facility that will allow vessel owners to recharge batteries and/or connect to electric utilities rather than running engines while in the water.
5. Many of the vessels utilizing the haul-out facilities at Sitka are emergency spill response vessels so having them remain closer to home will improve response time and successful outcomes.
6. The project avoids adverse environmental impacts to air and water quality and wetlands and improves stormwater/wastewater management.
7. The project replaces a needed service for this fishing community as the only haul-out facility is due to close by spring of 2022.

Quality of Life

The GPIP haul-out improvements will increase the transportation choices for individuals as marine transportation is the lifeblood of Southeast Alaska communities. Once the existing haul-out facility closes, Sitka residents will need to travel great distances to conduct essential services supporting the marine industry. The ability to conduct business activity close to home, family, and community cannot be understated. Additionally, the loss of local marine trade jobs would have a negative impact on the quality of life in Sitka.

The proposed GPIP haul-out will have a larger footprint than the existing haul out that is terminating operations. Sitkans will have better access to quality marine services jobs. SEDA is already working with the local University of Alaska Southeast Sitka Campus to provide training for local residents to move into these marine services fields.

In addition, the Climate Action Plan Task Force is responsible for studying and making recommendations to the Sitka Assembly on ways to plan for and mitigate the impacts of climate change on the City and Borough of Sitka's economy, infrastructure and future development, and methods the City and Borough of Sitka can employ to reduce the emission of greenhouse gases. (Resolution No. 2020-29A)¹¹

¹⁰ <https://www.epa.gov/ejscreen/glossary-ejscreen-terms#category-primary>

¹¹ <http://www.cityofsitka.com/government/clerk/boards/info/climate/>

There are no fiber or broadband deployments envisioned for this project. SEDA worked with a regional telecommunication company to bring sufficient fiber to the doorstep of the GPIIP for future development at the park in 2015.

Economic Competitiveness

The potential for closure of the existing haul-out facility at Sitka has given local residents a fair bit of angst in recent years. For that reason, the Assembly asked the facility owner to provide advance notice in the event of a planned closure. Thankfully, the haul-out facility owner has complied with that request which has given CBS the opportunity to pursue this needed infrastructure improvement in advance of closure. Without this improvement, the time spent traveling to alternate ports for repair and maintenance will be extraordinary and that assumes that these alternate ports have space available to accommodate the Sitka fleet. The value of the avoided travel is estimated at \$35.5 million over 20 years with a discount rate of 7 percent. Please see the Benefit Cost Analysis discussion located further in this grant application.

The existing haul-out facility cannot accommodate larger vessels already operating in the region. This project proposes a larger haul-out facility and storage capacity in order to meet the needs of the vessels currently operating in the area, improve long-term efficiency and reliability of local marine repair services, and to meet the future needs of the marine industry operating in the Sitka region.

The GPIIP is already an industrial park, and this addition will increase the capability of the park to continue to meet the needs of the vessels now and into the future. Productivity of this land will be increased with this addition.

It is expected that small businesses servicing the marine industry will either relocate or establish additional satellite operations in this rural area once the haul-out facility is operational. This will create long-term jobs and other economic opportunities for Sitka residents and regional communities.

State of Good Repair

The CBS is a rural community without road access to other communities in Southeast Alaska. As such, the community relies on air and marine travel for the transport of goods, people, and vehicles so the community can properly function. The marine infrastructure improvement outlined in this grant application will replace and improve the existing haul-out facility and contribute to continued economic development in the region.

This infrastructure development is consistent with the Gary Paxton Industrial Park Strategic Plan (GPIIP) adopted by the GPIIP Board on July 31, 2017. See [GPIIPstrategicplan2017approved.pdf](#). This development is also consistent with the Sitka Comprehensive Plan 2030 adopted May 2018. See [FinalCompPlanreducedsize.pdf](#). And this is consistent with the Sitka Economic Development Association Strategic Plan 2016. See [SEDAstrategicPlan.pdf](#). Improving Sitka's marine infrastructure and providing employment and economic development are key components of all these documents.

If left unimproved, Sitka vessel owners and crew will have to devote extraordinary amounts of time traveling to alternate locations to conduct their business. This infrastructure improvement will allow fishing industry participants in Sitka and the surrounding communities to continue efficiently and safely harvesting fish products and providing tourism opportunities.

The GPIIP is managed by the Sitka Economic Development Association (SEDA), in partnership with the CBS Administration. In this role, SEDA manages contracts, provides data, negotiates and drafts leases for property, provides budget information, conducts tours, and holds public meetings of the GPIIP Board of Directors. SEDA has developed a budget with revenue and expense projections that was presented to the Assembly. While there may be some shortfalls in the early years of operation, the CBS is prepared to cover those shortfalls until the operation breaks even. The project is expected to have a sustainable level of revenue to cover operations and maintenance of the facility based on the number of vessels currently using the soon-to-be-closed Halibut Point Marine facility. The goal is for the facility to provide jobs, serve the fishing fleet, and infuse additional dollars to the CBS.

CBS is not a border community. There are customs officers working in the community during the cruise ship season. If a foreign vessel needed haul-out, the customs officer would coordinate those activities at the GPIIP facility.

The CBS plans to maintain this infrastructure and the linkages to the marine environment and the landside transportation in a state of good repair. SEDA's monthly public meetings with the Board is the check on any problems that arise so that immediate action can be taken to remedy the situation.

Secondary merit criteria include partnership, innovation, including innovation in the areas of technology, project delivery, and financing. Each of these will be discussed in turn.

Partnership

In 2000, the CBS partnered with the SEDA to manage the GPIIP. It is the mission of the GPIIP Board and management, with direction from the Sitka Assembly, to strategically develop the park in a fiscally responsible manner that maximizes its economic benefit to the community through creation of meaningful jobs in conformance with established community plans and policies.¹²

The CBS partnered with Northline Seafoods, Inc. (Northline) to construct the current access ramp in 2017. Northline leased property from the CBS to construct the access ramp to allow for its seafood processing barge to be hauled out at the GPIIP for retrofitting of the barge to operate as low temperature floating processor. Northline terminated its lease in 2019 to allow the CBS to move forward with its plans to develop a public haul-out for the community.

The CBS continues to support and partner, when possible, with the seafood industry operating in the region. This project will allow those partnerships to continue. See Figure 1 for a list of

¹² <https://www.sawmillcove.com/>

private entities who have shared in the GPIP development. The CBS continues to engage with private partners to explore potential for private investment as well.

Innovation

The technologies being deployed for this construction project are similar to technologies already demonstrated at other harbors in Sitka and ports around the state. Alaska's marine environment is well known and construction of this type ramp and installation of a haul-out in Southeast is commonplace. There are no new technologies being proposed here. However, bidders will be encouraged to offer technological advances in their proposals.

The CBS is also in discussion with the Alaska Longline Fisherman's Association to develop a hub location for conversion of vessels to electric and electric/diesel combinations.¹³ Plans are not yet firm on this endeavor. Haul out would be a key component for this innovation.

There is discussion of utilizing a design-build project delivery method for this improvement, however final decisions will only occur after surveying and final design are complete. In addition, Alaska is currently one of the states engaged in the program with FHWA on responsibilities assigned through a Memorandum of Understanding for NEPA compliance.

CBS does not expect to finance any portion of this project. Sitka's Economic Development Funds and/or the General Fund are sufficient to cover the 20 percent match. CBS has sufficient cash flow to proceed with the project and accept reimbursement of funds when available.

Environmental Risk Review

This construction project is planned for an industrial area of Sawmill Cove. Every precaution will be taken to protect the land and waters affected as Sitka's tourism and fishing industries would be negatively affected otherwise. Land and water surveys will be conducted promptly upon grant award to reveal any unknown environmental conditions.

The CBS will follow all regulations required by the USACE, EPA, and Alaska DEC.

Project Schedule

CBS assumes a 2-year construction schedule from grant award to final closeout. Sitka is not as limited by ice and snow during the winter season as some Alaska communities, so many tasks can be performed during the winter months to move the project forward. See Table 3.

¹³ <https://www.alfafish.org/>

Table 3 – GPIIP Project Schedule

Project Milestones	Date (mos/yr)
RAISE grant application deadline	July-21
RAISE grant award	Nov-21
Site Survey	Feb-22
Final Design & Permitting	Jun-22
Bid package ready	July-22
Award and Notice to Proceed	Sep-22
Site construction work starts	Nov-22
Fabrication and materials procurement	Jan-23
Hydraulic Lift arrival	Feb-23
Site work complete	Apr-23
Project completion	May-23
Grant close-out	Jun-23

Approvals and Permits

The CBS plans to engage agencies for approvals and permits quickly once grant funds have been authorized. A listing of environmental and operational permits required include:

1. USACE – Section 10 and Section 404 Authorizations
2. ADFG Fish Habitat Permit
3. ADEC Stormwater Treatment & Runoff Design Review
4. ADEC Water & Sewer Utilities
5. ADEC MSGP Operational SWPPP for Boatyards
6. Local Building Permits
7. Access Easement to define the ramp and existing Utility Dock operations

NEPA Compliance

The SEDA manages the GPIIP and holds monthly public meetings concerning proposed improvements. Due to the COVID-19, some meetings in 2020 were cancelled. However, the February 28, 2020 meeting included a lengthy discussion of the proposed haul-out improvements and received several comments from the public on the path forward. Comments from the public include the need for a haulout so the CBS has stipulated even if the property is transferred, performance benchmarks must be in place to ensure that a haul out is in place for the entire community Please see GPIIP+2.28.20+Board+Meeting+Packet.pdf and June 30 2020 meeting minutes.pdf. Future meetings will occur with appropriate precautions to protect the health and safety of participants.

There is a Memorandum of Understanding between the State of Alaska and CBS concerning the activity allowed at GPIIP that sets forth institutional controls and long-term responsibilities. This project is in accordance with that MOU. Please see Revised_MOU_FINAL.pdf.

The CBS fully intends to meet the requirements of NEPA for this project including public meetings once they are allowed. Other forms of gathering public input may be required depending on timing and conditions of the COVID-19 environment.

Risk and Mitigation Strategies

Risks to this project include site specific conditions, scheduling, funding, and project management. The CBS has mitigated these risks by including multiple surveying efforts, allowing for design/build components to the construction, allocating the funding in advance of grant award, and relying on CBS's Public Works Department with many years of experience to manage the designers, surveyors, construction activity, and grant reporting. All equipment and materials estimated for this project can be obtained from U.S. firms. The COVID-19 environment is an ongoing risk that will be managed in accordance with CDC and State recommendations and may impact schedule.

Other risks and mitigation strategies follow:

1. While the CBS does not have previous experience with BUILD or INFRA grants, the City does have an active Public Works Department with experience in projects of similar size and nature.
2. The footprint of this project is owned by the City so real estate acquisitions will not be required.
3. Environmental concerns are always an unknown, but this property is already an industrial park with several documented construction projects so the unknown soil conditions for instance should be minimized.
4. The windows of fish migration in Sitka are well known and will be incorporated into construction contracts to limit adverse impacts.
5. CBS does not anticipate a waiver for domestic preference on the equipment or supplies needed for this project.
6. CBS reached out to USDOT headquarters to confirm the proposed schedule was reasonable.

CBS has a very successful track record of finishing large scale projects on time and on budget. Risks are managed on projects through incorporation of high-level experienced staff and consultant teams to ensure best practices are following in planning, organizing, and executing projects. CBS has extensive experience in marine projects and has recently completed four major marine projects in excess of \$5 million including an award-winning harbor project. The harbor project award was based on superb project delivery methods that saved the project time and money.

CBS has been recognized with several awards for their projects and delivery methods over the last 10-years. CBS regularly manages projects with grant funds including Federal funding and understands well how to manage such projects to success including all the necessary procurements. CBS is staffed with professional engineers, contract managers, procurement specialists, construction inspectors, and project managers skilled in risk management of contracts and projects of this nature.

The CBS team is continually and successfully executing over \$20 million in projects per year including projects up to \$150 million. The Public Works Director was certified in managing Federally funded projects under the State of Washington's Department of Transportation program for managing Federal Highway funds and his work has been referenced in training manuals for local government. The best practices used in managing Federal Highway funds has been carried over to CBS policy and staffing efforts to mitigate risk on projects and has served CBS well over the last 12 years executing over \$240 million in projects without incident or contractor claims.

Benefit Cost Analysis

Assumptions

The following assumptions have been used for the economic analysis.

- All commercial fishing vessels must haul their boats at least annually for pressure washing below the water line, anti-fouling paint, and replacement of sacrificial zincs, and other activity.
- The existing boat haul-out is expected to close by the end of 2022 requiring commercial vessels to seek haul-out services elsewhere.
- Vessels less than 20-feet in length can be removed by trailer for annual maintenance and repair.
- Vessels in the 20-foot to 40-foot length listed as trollers on the vessel permit file are too large to haul out by trailer and must travel to Wrangell for haul out. Vessels in the under 40-foot category are estimated to travel at 8.3 nautical miles per hour.
- Vessels in the 40-foot to 60-foot length must travel to either Wrangell (167 nautical miles one-way), Petersburg (159 nautical miles one-way), or Hoonah (58 nautical miles one-way) for annual haul-out. Vessels in the 40-60-foot category are estimated to travel at 10 nautical miles per hour.
- Vessels greater than 60-feet in length will need to travel to Seattle, or similar location in the Pacific Northwest, for annual maintenance and repair. Seattle is 902 nautical miles away. Vessels in the greater than 60-foot category are estimated to travel at 10 nautical miles per hour.
- The useful life of the haul-out/travelift prior to needing upgrades or major repairs is assumed to be 20 years so this forecast uses a 20-year present value calculation.
- Benefits and costs have been discounted at a 7 percent discount rate in order to compare values in today's dollars.

Present Value Costs

The loss of the current haul out in Sitka would greatly affect the marine trades industry. The jobs would more than likely be lost to other communities.

Initial cost estimates are \$8.2 million spread over a 2-year construction season. Periodic maintenance for the facility is assumed at 1 percent of initial construction cost every five years over the 20-year period of analysis.

Table 4 – GPIP 150-Ton Travelift Present Value Calculations Selected Years

Year	Construction	Periodic Maintenance	Total Cost	NPV Factor	Net Present Value
2022	\$ 3,550,800		\$ 3,550,800	0.93458	\$ 3,318,505
2023	\$ 4,531,560		\$ 4,531,560	0.87344	\$ 3,958,040
2028		\$ 80,810	\$ 80,810	0.62275	\$ 50,324
2033		\$ 80,810	\$ 80,810	0.44401	\$ 35,881
2038		\$ 80,810	\$ 80,810	0.31657	\$ 25,582
Totals	\$ 8,082,360	\$ 242,430	\$ 8,324,790		\$ 7,388,332
Total Construction Cost and Maintenance					\$ 7,338,332
Less Residual Value after 20 years					\$ 645,878
Present Value of Haul-out Improvement					\$ 6,742,454

Present Value Benefits

The net present value of benefits from avoided travel, opportunity cost of time, and emissions avoided over the 20-year period of analysis is \$31.1 million. Table 5 shows the summary for these benefits for selected years.

Table 5 – 150-Ton Travelift Benefit Calculations Selected Years

Year	Avoided Travel	OCT Diff from base case	Emissions Avoided	Total	NPV Factor	Net Present Value
2023	\$1,595,902	\$273,760	\$753,391	\$2,623,053	0.87344	\$2,291,076
2024	\$1,613,556	\$276,014	\$761,903	\$2,651,473	0.81630	\$2,164,392
2028	\$1,686,678	\$285,349	\$797,153	\$2,769,180	0.62275	\$1,724,506
2033	\$1,783,976	\$297,770	\$844,060	\$2,925,806	0.44401	\$1,299,093
2038	\$1,888,265	\$311,084	\$894,336	\$3,093,685	0.31657	\$979,382
2042	\$1,977,066	\$322,421	\$937,146	\$3,236,633	0.24151	\$781,689
Totals	\$35,571,174	\$5,941,575	\$16,828,963	\$58,341,713		\$28,188,641

BCR

The 150-ton travelift has positive benefit to cost ratio of 4.18. The 150-ton travelift meets most of the Sitka vessel owners' needs now and plans for future. See Table 6 for details on the benefits and costs along with the residual value after 20 years and the benefit/cost ratio.

Table 6 – Benefit/Cost Ratio Calculations

Summary of Calculations	150-ton Haul-out
Benefit calculations - 2021 \$\$	
Vessel avoided travel	\$ 17,179,000
Opportunity Cost of time	\$ 2,886,000
Emissions reduced	\$ 8,124,000
PV Benefits summary	\$ 28,189,000
Cost Calculations - 2021 \$\$	
PV Cost of Project	\$ 7,388,000
Less residual value	\$ 646,000
Effective cost (PV)	\$ 6,742,000
PV Net benefits (benefits - costs)	\$ 21,447,000
Benefit/cost ratio (benefits/costs)	4.18

See the Economics Appendix attached to this narrative for further details.

Additional Considerations

The rural community of Sitka, Alaska is heavily dependent on a working waterfront. Sitka has the largest fleet of vessels and harbor system in the state and is 8th in the state and 19th in the nation in value of fish landings.¹⁴ Sitka's only privately-owned shipyard, Halibut Point Marine, is closing their operation in the summer of 2022. Ultimately, this amounts to a catastrophic failure to haul-out and marine services for Sitka's fleet.

¹⁴ *Fisheries of the United States 2019* prepared by the National Marine Fisheries Service Office of Science and Technology published in May 2021.

Appendixes:

EJSCREEN Report for Sitka

Benefit /Cost Analysis

GPIP Interview Protocol with Results

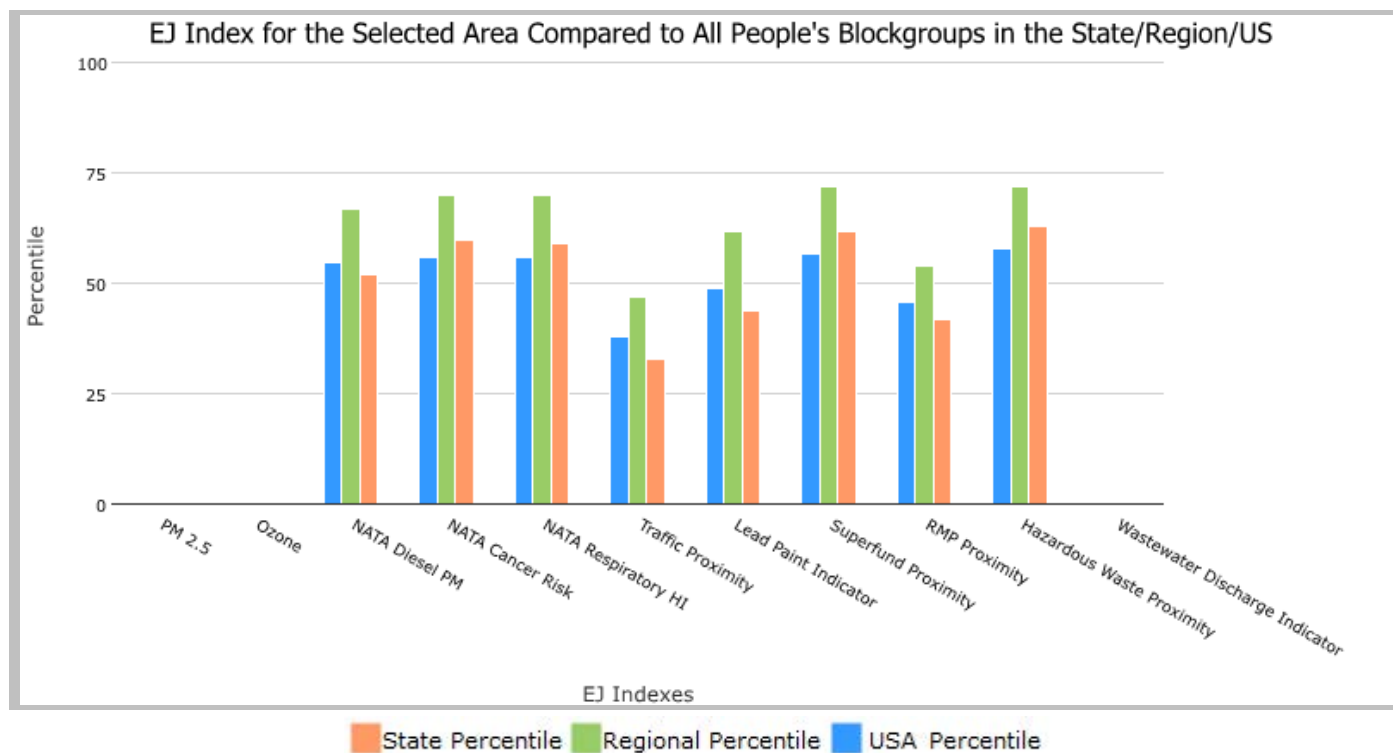
20 miles Ring Centered at 57.052682,-135.335083, ALASKA, EPA Region 10

Approximate Population: 8,732

Input Area (sq. miles): 1256.38

CBS

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM _{2.5}	N/A	N/A	N/A
EJ Index for Ozone	N/A	N/A	N/A
EJ Index for NATA* Diesel PM	52	67	55
EJ Index for NATA* Air Toxics Cancer Risk	60	70	56
EJ Index for NATA* Respiratory Hazard Index	59	70	56
EJ Index for Traffic Proximity and Volume	33	47	38
EJ Index for Lead Paint Indicator	44	62	49
EJ Index for Superfund Proximity	62	72	57
EJ Index for RMP Proximity	42	54	46
EJ Index for Hazardous Waste Proximity	63	72	58
EJ Index for Wastewater Discharge Indicator	N/A	N/A	N/A



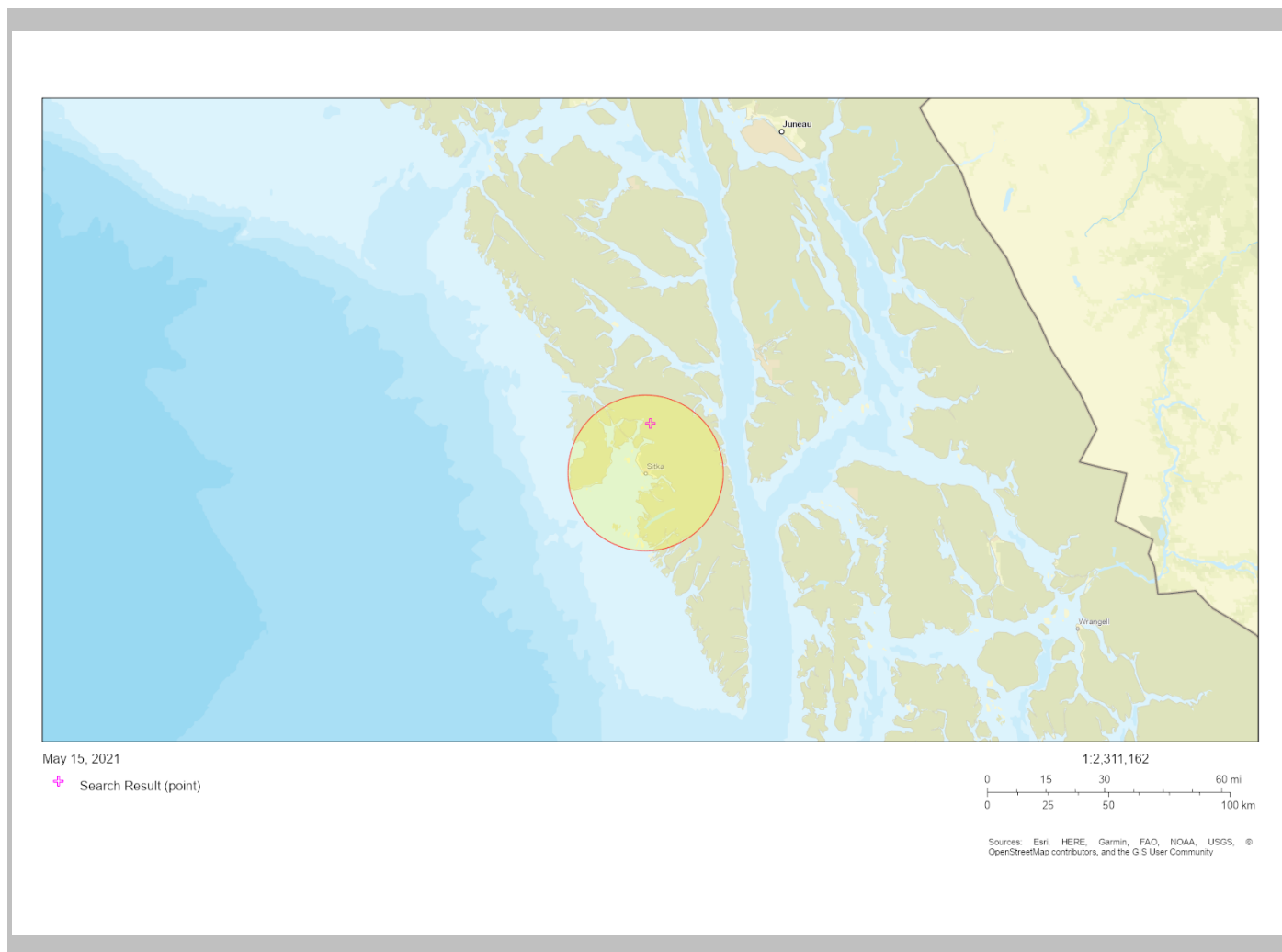
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

20 miles Ring Centered at 57.052682,-135.335083, ALASKA, EPA Region 10

Approximate Population: 8,732

Input Area (sq. miles): 1256.38

CBS



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2020)

20 miles Ring Centered at 57.052682,-135.335083, ALASKA, EPA Region 10

Approximate Population: 8,732

Input Area (sq. miles): 1256.38

CBS

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	N/A	N/A	N/A	8.52	N/A	8.55	N/A
Ozone (ppb)	N/A	N/A	N/A	39.1	N/A	42.9	N/A
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.134	0.361	41	0.481	<50th	0.478	<50th
NATA* Cancer Risk (lifetime risk per million)	8.3	15	24	31	<50th	32	<50th
NATA* Respiratory Hazard Index	0.12	0.2	37	0.46	<50th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	180	260	66	510	49	750	46
Lead Paint Indicator (% Pre-1960 Housing)	0.14	0.079	86	0.22	51	0.28	44
Superfund Proximity (site count/km distance)	0.0043	0.092	17	0.13	0	0.13	0
RMP Proximity (facility count/km distance)	0.97	0.5	81	0.65	78	0.74	75
Hazardous Waste Proximity (facility count/km distance)	0.0065	0.56	9	1.5	0	5	0
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	N/A	N/A	N/A	3.1	N/A	9.4	N/A
Demographic Indicators							
Demographic Index	29%	32%	55	29%	60	36%	49
People of Color Population	38%	39%	58	28%	74	39%	57
Low Income Population	21%	25%	44	30%	36	33%	35
Linguistically Isolated Population	2%	2%	67	3%	58	4%	55
Population With Less Than High School Education	6%	7%	49	9%	44	13%	35
Population Under 5 years of age	5%	7%	24	6%	37	6%	38
Population over 64 years of age	15%	11%	77	15%	54	15%	53

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

Benefit-Cost Analysis for the Gary Paxton Industrial Park Haul-out Facility

Prepared by:
Cordova Consulting
P.O. Box 1134
Chickaloon, AK 99674
(907) 957-0581

Introduction

Commercial fishing is the backbone of Sitka's economy. Sitka has the largest boat fleet in Alaska and is also one of the top fishing ports. According to the National Oceanic and Atmospheric Administration, Sitka ranked 19th in the nation for fishery landings and value in 2019.¹⁵ Recently, the City and Borough of Sitka learned that the Halibut Point Marine boat haul-out facility in the community will be shutting down by spring of 2022. This presents an opportunity for the CBS and a challenge to meet the needs of the fishing fleet in a timely manner.

Commodity Forecast

The fishing industry is stable. The Alaska Department of Fish and Game reports almost 400 fishermen fishing 698 permits during 2019. The harvest was 27.8 million pounds with an estimated value of \$41.3 million. Sitkans harvest crab, halibut, herring, other groundfish, other shellfish, sablefish, and all the species of salmon. See Table 7.

Table 7 – 10-Year average fishery harvest and value for Sitka residents

10-Year Average	Number of Fishermen Who Fished	Number of Permits Fished	Total Pounds Landed	Estimated Gross Earnings	Average Earnings Per Pound
Crab	21.1	23.8	402,131	\$1,219,249	\$3.03
Halibut	158.5	159.2	1,696,606	\$7,043,687	\$4.15
Herring	13.9	16.3	1,985,028	\$550,605	\$0.28
Other groundfish	31.7	37.3	1,013,283	\$623,501	\$0.62
Other shellfish	39.5	46.2	256,049	\$1,064,089	\$4.16
Sablefish	112.4	126.5	3,021,381	\$10,585,101	\$3.50
Salmon	314.4	321.9	22,875,779	\$20,469,571	\$0.89

Note: Gross earnings are as of the year recorded and have not been adjusted for inflation.

Source: State of Alaska Commercial Fisheries Entry Commission - <https://www.cfec.state.ak.us/>

While halibut has the highest value per pound, the majority share of pounds landed and gross earnings is from the 5 species of salmon harvested in the state. See Figure 4 for graphic of average 10-year harvest and estimated earnings.

¹⁵ Fisheries of the United States 2019 – U.S. Department of Commerce, National Oceanic and Atmospheric Administration, and the National Marine Fisheries Service Published May 2021.

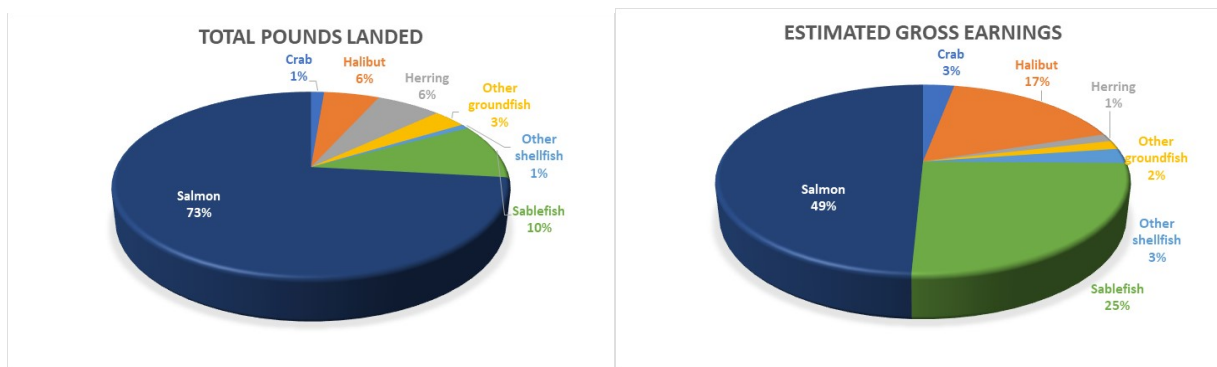


Figure 4 – Sitka residents 10-year average harvest and value

Tourism realized some bumps in 2020 due to COVID-19 restrictions but is expected to reestablish activity in 2021 now that vaccines are approved for the virus, cruiselines are returning to the state, and independent travelers are making their vacation plans to stay within the United States. Cruise Lines of Alaska recently announced plans for cruiseships to return in July 2021.

Population typically drives the need for commodities and the Sitka population has been stable up until recently. The Alaska Department of Labor and Workforce Development forecasts that Sitka's population will decline some (-3.3 percent) in the next ten years or by about 270 people total.¹⁶

Vessel Forecast

There are more than 400 fishing vessels permits with Sitka addresses in the Alaska Commercial Fisheries Entry Commission (CFEC) database for 2020. Using these vessels and their characteristics as a minimum for vessels wishing to haul-out to conduct repairs and maintenance at Sitka is a conservative estimate. There are many more vessels that could use the haul-out facility including recreational, government, barge, and research vessels. In addition, vessels from other communities could also find the need to haul-out at Sitka. Supporting data for these other vessels is not readily available so they have not been included in the benefits analysis, which strongly suggests that benefits are understated in this evaluation.

The City and Borough of Sitka conducted personal interviews with users of the Halibut Point Marine facility. Responses from those interviews can be found at the end of this Benefit/Cost Analysis. The responses informed the following assumptions in order to determine benefits for the project:

- All commercial fishing vessels must haul their boats at least annually for pressure washing below the water line, anti-fouling paint, and replacement of sacrificial zincs, and other activity.

¹⁶ <https://live.laborstats.alaska.gov/pop/projections.cfm>.

- The existing boat haul-out is expected to close by spring of 2022 requiring commercial vessels to seek haul-out services elsewhere.
- Vessels less than 20-feet in length can be removed by trailer for annual maintenance and repair.
- Vessels in the 20-foot to 40-foot length listed as trollers on the vessel permit file are too large to haul out by trailer and must travel to Wrangell for haul out. Vessels in the under 40-foot category are estimated to travel at 8.3 nautical miles per hour.
- Vessels in the 40-foot to 60-foot length must travel to either Wrangell (167 nautical miles one-way), Petersburg (159 nautical miles one-way), or Hoonah (58 nautical miles one-way) for annual haul-out. Vessels in the 40-60-foot category are estimated to travel at 10 nautical miles per hour.
- Vessels greater than 60-feet in length will need to travel to Seattle, or similar location in the Pacific Northwest, for annual maintenance and repair. Seattle is 902 nautical miles away. Vessels in the greater than 60-foot category are estimated to travel at 10 nautical miles per hour.
- The useful life of the haul-out/travelift prior to needing upgrades or major repairs is assumed to be 20 years so this forecast uses a 20-year present value calculation.
- Benefits and costs have been discounted at a 7 percent discount rate in order to compare values in today's dollars.

The methodology used to determine the number of vessels benefiting is as follows:

1. Obtain 2020 vessel permits with Sitka mailing addresses from Alaska Commercial Fisheries Entry Commission (CFEC) database. This probably understates the number of vessels who would use the haul-out as other communities may travel for this purpose much like Sitka will have to once the local haul-out closes.
2. Sort the vessel permit file by vessel type, length overall, and gross tonnage.
3. Identify average gross tonnages by vessel length. Note that not all vessels report their gross tonnage to CFEC so the averages are probably understated.
4. Eliminate vessels with gross tonnages over 150 tons. There were five vessels in this category. These vessels are more likely to use haul-out facilities in Ketchikan or Pacific Northwest Ports.
5. Incorporate the percentage of alternate vessel haul-out locations obtained from the personal interviews conducted in May 2021.
6. Use one annual haul-out event based on the findings from the personal interviews.

Table 7 shows the number of vessels by category with Sitka mailing addresses. This table also displays the average, minimum, and maximum gross tonnages for the vessels.

Table 8 – Number of Vessels with 2020 Commercial Permits

Vessel Activity	# Vessels	Avg Gross Tons	Min Gross Tons	Max Gross Tons
FISHING <40	220	6	0	31
FISHING >=40	132	33	0	94
FREEZER CANNER >40	1	91	91	91
FREEZER CANNER, FISHING <40	1	10	10	10
FREEZER CANNER, FISHING >=40 and <60	13	35	0	49
FREEZER CANNER, TENDER PACKER, FISHING >=40 and <60	4	45	37	52
TENDER PACKER <40	2	0	0	0
TENDER PACKER >=40 and <60	0	0	0	0
TENDER PACKER >=60	2	75	0	150
TENDER PACKER, FISHING <40	9	5	0	15
TENDER PACKER, FISHING >=40 and <60	12	41	7	85
TENDER PACKER, FISHING >=60	5	82	30	129
Total Vessels	401			

Source: State of Alaska Commercial Fisheries Entry Commission.

In order to facilitate the choice of project to pursue, the benefit analysis then looked at the base case and an alternative with 150-ton travelift. The base case is needed in order to compare the other alternative to a “no action” scenario. Using a 20-year period of analysis allows for comparison to the construction costs which occur in advance of benefits accruing. Benefits are assumed to begin accruing in 2023 after a 2-year construction period.

Assumptions for each of the alternatives follows:

Base Case – No Action

In this case, the existing haul-out facility closes by the end of 2022 and vessel owners must seek alternatives to maintain and repair vessels. The following assumptions were used:

- Vessels under 20-feet in length can be removed by trailer and stay in Sitka for maintenance and repairs.
- Vessels in the 20-foot to 40-foot range identifying as trollers cannot be hauled out by trailer (due to width) and are expected to travel to Wrangell for haul-out. Wrangell will probably be overwhelmed with the number of vessels and it is expected that Petersburg will serve as a back-up to Wrangell.
- Vessels in the 40-foot to 60-foot category must travel to either Wrangell or Petersburg for annual haul-out. This analysis uses the responses from telephone interviews conducted May 2021 for selection of alternative ports to haul-out. Some vessels will travel to Hoonah as well for haul-out and repairs.

- Vessels greater than 60-feet in length must travel to Seattle or similar Pacific Northwest location for annual haul-out.
- The existing haul-out owner provided ten years data showing a slight increase in the demand for haul-out services. This increased demand was about 1.4 percent annually for vessels in the under 60-foot category. So, the vessels in the under 60-foot category are assumed to increase by 1.4 percent annually.

150-ton Travelift Alternative

Several more vessels can be accommodated with a larger travelift than are currently accommodated with the existing 88-ton travelift. Assumptions concerning the 150-ton travelift are as follows:

- 84 percent of vessels in the under 40-foot category will use the 150-ton travelift based on current usage.
- 84 percent of vessels in the 40-foot to 150-foot category will also use the 150-ton travelift.
- The number of vessels grows in the under 60-foot category annually by 1.4 percent based on most recent 10 years of existing haul-out usage.
- Interview results from May 2021 indicate that all vessel owners would use the new travelift facility once a year.
- Vessels greater than 150-feet report gross tonnages more than 150 tons so cannot use the 150-ton travelift and must travel to Pacific Northwest ports for repair and maintenance.

Vessel Avoided Travel

Additional assumptions concerning the avoided travel include:

- Sitka vessels would be making a roundtrip to the alternate port for haul-out as these vessel owners have addresses in Sitka and are presumed to live there year-round.
- Vessel speeds are estimated at 8.3 nautical miles per hour for vessels under 40-feet.
- Vessel speeds are estimated at 10 nautical miles per hour for vessels greater than 40-feet.
- Vessels make one trip per year for haul-out repairs and maintenance.
- Vessels must haul-out every three years for inspections. This haul-out is assumed to take place the same time as repair and maintenance.
- The forecast assumes that the vessels in the under 60-foot category increase by 1.4 percent annually based on the historical usage of the existing haul-out facility.

Table 9 shows the hours of travel under the Base case (No Action), and the 150-ton travelift scenarios. In the base case when the existing haul-out facility closes, vessels must travel for 12,971 hours to arrive at alternate ports. This number drops to 3,101 hours with the 150-ton travelift.

Table 9 – Hours of Travel

Vessel type	# vessels	Base travel hours	150-ton travel hours
Fishing <40-feet	220	6,597	-
Fishing ≥40-feet	132	3,958	2,747
Freezer Canner >40-feet	1	40	-
Freezer Canner, Fishing <40-feet	1	40	-
Freezer Canner, Fishing ≥40-feet	13	324	271
Freeze Canner, Tender Packer, Fishing >40-feet	4	100	83
Tender Packer <40-feet	2	80	-
Tender Packer ≥40-feet and <60-feet	0	-	-
Tender Packer >60-feet	2	361	-
Tender Packer, Fishing <40-feet	9	270	-
Tender Packer, Fishing ≥40-feet and <60-feet	12	299	-
Tender Packer, Fishing ≥60-feet	5	902	-
Totals	401	12,971	3,101

The Vessel Operating Costs (VOCs) are then calculated for each of the vessel categories. Vessel Operating costs were taken from the Craig Small Boat Harbor Navigation Improvements Economics Appendix produced by the U.S. Army Corps of Engineers in December 2014. The VOCs were updated to today's dollars using the Implicit Price Deflator index produced by the Bureau of Economic Analysis.¹⁷ The index for the 1st Quarter of 2021 is 115.514 and the index for 2014 was 103.638. The calculation then was 115.514 divided by 103.638 and multiplied by the vessel operating costs from that report. Vessel operating costs for each of the vessel categories is as follows:

Table 10 – Vessel Operating Costs

Vessel operating costs:	Per Hour
Fishing <40-feet	\$ 124.63
Fishing ≥40-feet	\$ 242.41
Freezer Canner >40-feet	\$ 242.41
Freezer Canner, Fishing <40-feet	\$ 124.63
Freezer Canner, Fishing ≥40-feet	\$ 242.41
Freeze Canner, Tender Packer, Fishing >40-feet	\$ 242.41
Tender Packer <40-feet	\$ 124.63
Tender Packer ≥40-feet and <60-feet	\$ 242.41
Tender Packer ≥60-feet	\$ 271.64
Tender Packer, Fishing <40-feet	\$ 124.63
Tender Packer, Fishing ≥40-feet and <60-feet	\$ 242.41
Tender Packer, Fishing ≥60-feet	\$ 271.64

¹⁷ <https://apps.bea.gov/national/pdf/SNTables.pdf>

Total travel in the base case for the 20-year period of analysis is \$52.8 million. This travel cost compares to the 150-ton travelift with \$17.2 million in travel expenses. These total travel costs will be discounted in a subsequent step along with discounting of project costs in order to determine the net benefits and benefit to cost ratio. Following is the calculation used to determine total travel costs.

$$\text{Equation 1: } AD_{(year)} = C_{(year)} \times H \times VOC$$

Where: $AD_{(year)}$ is the value of the transportation cost in a particular year
 $C_{(year)}$ is the number of vessels traveling for the given year,
H is the average hours associated with each transportation occurrence ,
VOC is the vessel hourly operating costs.

Travel benefits will be discounted in a subsequent step along with discounting of project costs in order to determine the net benefits and benefit to cost ratio. See Table 10.

Table 11 – Vessel Travel Costs under Base Case and 150-ton Travelift Scenarios

Year	Travel - No Action	Travel with 150-ton Travelift
2023	\$ 2,347,632	\$ 751,731
2024	\$ 2,375,792	\$ 762,235
2025	\$ 2,404,345	\$ 772,887
2026	\$ 2,433,297	\$ 783,687
2027	\$ 2,462,653	\$ 794,638
2028	\$ 2,492,420	\$ 805,742
2029	\$ 2,522,602	\$ 817,001
2030	\$ 2,553,207	\$ 828,418
2031	\$ 2,584,239	\$ 839,994
2032	\$ 2,615,705	\$ 851,732
2033	\$ 2,647,610	\$ 863,634
2034	\$ 2,679,961	\$ 875,702
2035	\$ 2,712,765	\$ 887,939
2036	\$ 2,746,026	\$ 900,347
2037	\$ 2,779,753	\$ 912,929
2038	\$ 2,813,951	\$ 925,686
2039	\$ 2,848,626	\$ 938,621
2040	\$ 2,883,786	\$ 951,737
2041	\$ 2,919,438	\$ 965,037
2042	\$ 2,955,588	\$ 978,522
Totals	\$ 52,779,394	\$ 17,208,220

Vessel Emissions

“Transportation activities contribute significantly to localized air pollution, and some transportation projects offer the potential to reduce the transportation system’s impact on the environment by lowering emissions of air pollutants that result from production and combustion of transportation fuels. The economic damages caused by exposure to air pollution represent externalities because their impacts are borne by society as a whole, rather than by the travelers and operators whose activities generate these. By lowering these costs, transportation projects that reduce emissions may produce environmental benefits.”¹⁸

Once the existing haul-out facility shuts down, there will be additional travel requirements imposed on the Sitka commercial vessels as they seek haul-out facilities elsewhere. This analysis takes a conservative approach and uses the 2010 total cost per cylinder for Stoichiometric Gasoline Direct Injections¹⁹ and assumes at least one 8-cylinder engine for each of the vessel types described in this analysis.

The 2010 cost per cylinder from the National Highway Transportation Safety Administration Final Regulatory Impact Analysis was \$67.00. Updating this to 2021 dollars using deflator indexes from the Bureau of Economic Analysis results in \$75.48 per cylinder in emissions reduction. (Calculation: $\$67 * 115.514(2021\$) / 102.532(2010\$) = \75.48)

The calculation to arrive at emissions due to transportation to alternate ports is displayed in Equation 2.

$$\text{Equation 2: } E_{(year)} = C_{(year)} \times H \times TC$$

Where: $E_{(year)}$ is the value of the emissions during a particular year
 $C_{(year)}$ is the number of vessels traveling for the given year,
 H is the hours associated with that travel,
 TC is the total cost per cylinder of the emissions.

Emissions under the base case total \$22.3 million. Emissions under the 150-ton travelift are \$5.4 million. Emissions will be discounted in a subsequent step along with discounting of project costs in order to determine the net benefits and benefit to cost ratio. Emissions avoided with the 150-ton travelift are \$16.8 million (\$22.3 million minus \$5.4 million). See Table 11.

¹⁸ Benefit-Cost Analysis Guidance for TIGER and INFRA Applications – July 2017

¹⁹ https://www.nhtsa.gov/staticfiles/rulemaking/pdf/cafe/FRIA_2017-2025.pdf

Table 12 – Emissions Costs under Base Case and 150-ton Travelift Scenarios

Year	Emissions No Action	Emissions with 150-ton Travelift
2023	\$ 990,739	\$ 237,347
2024	\$ 1,002,566	\$ 240,664
2025	\$ 1,014,560	\$ 244,027
2026	\$ 1,026,720	\$ 247,437
2027	\$ 1,039,051	\$ 250,895
2028	\$ 1,051,554	\$ 254,400
2029	\$ 1,064,232	\$ 257,955
2030	\$ 1,077,086	\$ 261,560
2031	\$ 1,090,121	\$ 265,215
2032	\$ 1,103,337	\$ 268,921
2033	\$ 1,116,739	\$ 272,679
2034	\$ 1,130,327	\$ 276,489
2035	\$ 1,144,106	\$ 280,353
2036	\$ 1,158,077	\$ 284,271
2037	\$ 1,172,243	\$ 288,243
2038	\$ 1,186,607	\$ 292,271
2039	\$ 1,201,172	\$ 296,355
2040	\$ 1,215,940	\$ 300,496
2041	\$ 1,230,915	\$ 304,695
2042	\$ 1,246,099	\$ 308,953
Totals	\$ 22,262,190	\$ 5,433,226

Opportunity Cost of Time

The opportunity cost of time measures the choice of the next best alternative to the thing chosen. In this case, vessel operators must stay on their vessel during travel to alternate harbors. Vessel operators could elect to do something else with their time. For instance, being with family, visiting with friends, and enjoying all that Alaska has to offer.

Given the hectic pace of the summer fishing season in Alaska, most vessel operators would choose to continue other productive work. However, failing data to support this assumption, this analysis assumes that vessel operators would choose leisure activity if transportation to alternate ports could be avoided with haul-out improvements. Leisure activity for purposes of this analysis is 1/3 of the wage rate for the various positions on each of the vessel types described. Wage rates were obtained from the State of Alaska Department of Labor and Workforce Development Occupational Database for May 2020 – Statewide wage rates, the most recent data available. These wage rates probably understate the actual wage rates of captains and mates working in Alaska waters. See Table 12.

Table 13 – Wage Rates for Captain and Crew

Vessel type	Workers	# Crew	Hourly rate	Leisure rate
Fishing <40-feet	Captain	1	\$53.83	\$17.94
Fishing ≥40-feet	Captain	1	\$53.83	\$17.94
	Deckhand	1	\$42.14	\$14.05
Freezer Canner >40-feet	Captain	1	\$53.83	\$17.94
	Deckhand	1	\$42.14	\$14.05
Freezer Canner, Fishing <40-feet	Captain	1	\$53.83	\$17.94
Freezer Canner, Fishing ≥40-feet	Captain	1	\$53.83	\$17.94
	Deckhand	1	\$42.14	\$14.05
Freeze Canner, Tender Packer, Fishing >40-feet	Captain	1	\$53.83	\$17.94
	Deckhand	1	\$33.37	\$11.12
Tender Packer <40-feet	Captain	1	\$53.83	\$17.94
	Deckhand	1	\$42.14	\$14.05
Tender Packer ≥40-feet and <60-feet	Captain	1	\$53.83	\$17.94
	Engineer	1	\$48.82	\$16.27
	Mate	1	\$34.70	\$11.57
Tender Packer ≥60-feet	Captain	1	\$53.83	\$17.94
	Engineer	1	\$48.82	\$16.27
	Deckhand	1	\$42.14	\$14.05
	Mate	2	\$34.70	\$11.57
Tender Packer, Fishing <40-feet	Captain	1	\$53.83	\$17.94
Tender Packer, Fishing ≥40-feet and <60-feet	Captain	1	\$53.83	\$17.94
	Engineer	1	\$48.82	\$16.27
	Mate	1	\$34.70	\$11.57
Tender Packer, Fishing ≥60-feet	Captain	1	\$53.83	\$17.94
	Engineer	1	\$48.82	\$16.27
	Deckhand	1	\$42.14	\$14.05
	Mate	2	\$34.70	\$11.57

Source: State of Alaska Department of Labor and Workforce Development Occupational Database – May 2020 – Statewide wage rates. All wage rates based on May 2020 Wages in Statewide Alaska.²⁰

1. Captain's wages based on 75th percentile wage Occupation Code 53-5021 for Captains, Mates, and Pilots of Water Vessels
2. Engineer's wages based on median wages for mechanical engineers Occupation Code 17-2141
3. Mate's wages based on 25th percentile wage for Occupation Code 53-5021 for Captains, Mates, and Pilots of Water Vessels
4. Deckhand's wages based on median wage for Occupation Code 53-5021 for Captains, Mates, and Pilots of Water Vessels

²⁰ <http://live.laborstats.alaska.gov/wage/index.cfm?at=01&a=000000#g53>

$$\text{Equation 3: } OCT_{(year)} = C_{(year)} \times H \times W \times R$$

Where: OCT_(year) is the value of time for workers on transported vessels in a given year

C_(year) is the number of vessels traveling for the year,

H is the average hours associated with travel to alternate ports,

W is the number of workers in that particular position on the vessel,

R is the wage rate from the State of Alaska Dept. of Labor and Workforce Development for May 2020 divided by 3 to determine the leisure rate.

Table 14 – Opportunity Cost of Time Calculations

Year	OCT No Action	OCT with 150-ton Travelift
2023	\$ 372,719	\$ 98,959
2024	\$ 376,356	\$ 100,342
2025	\$ 380,043	\$ 101,744
2026	\$ 383,782	\$ 103,166
2027	\$ 387,574	\$ 104,607
2028	\$ 391,418	\$ 106,069
2029	\$ 395,316	\$ 107,551
2030	\$ 399,268	\$ 109,054
2031	\$ 403,276	\$ 110,578
2032	\$ 407,340	\$ 112,123
2033	\$ 411,460	\$ 113,690
2034	\$ 415,638	\$ 115,279
2035	\$ 419,875	\$ 116,890
2036	\$ 424,171	\$ 118,523
2037	\$ 428,526	\$ 120,179
2038	\$ 432,943	\$ 121,859
2039	\$ 437,421	\$ 123,561
2040	\$ 441,962	\$ 125,288
2041	\$ 446,566	\$ 127,039
2042	\$ 451,235	\$ 128,814
Totals	\$ 8,206,890	\$ 2,265,315

Opportunity Cost of time for captain and crew who must accompany the vessel to alternate ports for haul-out maintenance and repairs totals \$8.2 million over the 20-year period of analysis.

Opportunity Cost of Time for the 150-ton travelift alternative is \$2.3 million. The difference between the base case and the 150-ton travelift is a benefit of \$5.9 million. Opportunity Cost of

Time will be discounted in a subsequent step along with discounting of project costs in order to determine the net benefits and benefit to cost ratio.

Summary Benefits Calculations

Base Case Calculations for Travel, Opportunity Cost of Time, and Vessel Emissions are found in Table 14. The difference between the base case and the 150-ton travelift forms the basis for the benefit calculations. Benefit calculations are determined using a 7 percent discount rate and a project period of analysis of 20 years.

Table 15 – Base Case Calculations

Year	Travel	OCT	Emissions	Total	NPV Factor	Net Present Value
2023	\$2,347,632	\$372,719	\$ 990,739	\$ 3,711,090	0.87344	\$ 3,241,410
2024	\$2,375,792	\$376,356	\$ 1,002,566	\$ 3,754,714	0.81630	\$ 3,064,965
2025	\$2,404,345	\$380,043	\$ 1,014,560	\$ 3,798,948	0.76290	\$ 2,898,199
2026	\$2,433,297	\$383,782	\$ 1,026,720	\$ 3,843,799	0.71299	\$ 2,740,576
2027	\$2,462,653	\$387,574	\$ 1,039,051	\$ 3,889,278	0.66634	\$ 2,591,590
2028	\$2,492,420	\$391,418	\$ 1,051,554	\$ 3,935,392	0.62275	\$ 2,450,764
2029	\$2,522,602	\$395,316	\$ 1,064,232	\$ 3,982,150	0.58201	\$ 2,317,648
2030	\$2,553,207	\$399,268	\$ 1,077,086	\$ 4,029,562	0.54393	\$ 2,191,815
2031	\$2,584,239	\$403,276	\$ 1,090,121	\$ 4,077,636	0.50835	\$ 2,072,863
2032	\$2,615,705	\$407,340	\$ 1,103,337	\$ 4,126,382	0.47509	\$ 1,960,414
2033	\$2,647,610	\$411,460	\$ 1,116,739	\$ 4,175,809	0.44401	\$ 1,854,109
2034	\$2,679,961	\$415,638	\$ 1,130,327	\$ 4,225,927	0.41496	\$ 1,753,609
2035	\$2,712,765	\$419,875	\$ 1,144,106	\$ 4,276,745	0.38782	\$ 1,658,595
2036	\$2,746,026	\$424,171	\$ 1,158,077	\$ 4,328,273	0.36245	\$ 1,568,765
2037	\$2,779,753	\$428,526	\$ 1,172,243	\$ 4,380,522	0.33873	\$ 1,483,834
2038	\$2,813,951	\$432,943	\$ 1,186,607	\$ 4,433,500	0.31657	\$ 1,403,533
2039	\$2,848,626	\$437,421	\$ 1,201,172	\$ 4,487,219	0.29586	\$ 1,327,606
2040	\$2,883,786	\$441,962	\$ 1,215,940	\$ 4,541,689	0.27651	\$ 1,255,815
2041	\$2,919,438	\$446,566	\$ 1,230,915	\$ 4,596,919	0.25842	\$ 1,187,931
2042	\$2,955,588	\$451,235	\$ 1,246,099	\$ 4,652,922	0.24151	\$ 1,123,741
Totals	\$52,779,394	\$8,206,890	\$ 22,262,190	\$ 83,248,474		\$ 40,147,783

The calculations for the 150-ton travelift are based on the reduced travel for vessels seeking haul-out at alternative ports. Table 15 shows the difference between the base case travel and the travel still required when there is a 150-ton travelift.

The addition of a 150-ton travelift to the Gary Paxton Industrial Park is estimated to result in \$28.2 million in benefits over the 20-year period of analysis. These benefits will be compared to costs in a separate calculation to determine the benefit to cost ratio.

Table 16 – 150-Ton Travelift Benefit Calculations

Year	Avoided Travel	OCT Diff from base case	Emissions Avoided	Total	NPV Factor	Net Present Value
2023	\$1,595,902	\$273,760	\$753,391	\$2,623,053	0.87344	\$ 2,291,076
2024	\$1,613,556	\$276,014	\$761,903	\$2,651,473	0.81630	\$ 2,164,392
2025	\$1,631,458	\$278,299	\$770,533	\$2,680,290	0.76290	\$ 2,044,780
2026	\$1,649,610	\$280,617	\$779,283	\$2,709,510	0.71299	\$ 1,931,843
2027	\$1,668,015	\$282,966	\$788,156	\$2,739,138	0.66634	\$ 1,825,203
2028	\$1,686,678	\$285,349	\$797,153	\$2,769,180	0.62275	\$ 1,724,506
2029	\$1,705,601	\$287,765	\$806,276	\$2,799,642	0.58201	\$ 1,629,417
2030	\$1,724,789	\$290,214	\$815,526	\$2,830,529	0.54393	\$ 1,539,620
2031	\$1,744,245	\$292,698	\$824,906	\$2,861,848	0.50835	\$ 1,454,819
2032	\$1,763,972	\$295,217	\$834,416	\$2,893,605	0.47509	\$ 1,374,731
2033	\$1,783,976	\$297,770	\$844,060	\$2,925,806	0.44401	\$ 1,299,093
2034	\$1,804,259	\$300,360	\$853,838	\$2,958,456	0.41496	\$ 1,227,654
2035	\$1,824,825	\$302,985	\$863,753	\$2,991,563	0.38782	\$ 1,160,180
2036	\$1,845,679	\$305,648	\$873,806	\$3,025,133	0.36245	\$ 1,096,447
2037	\$1,866,824	\$308,347	\$884,000	\$3,059,171	0.33873	\$ 1,036,247
2038	\$1,888,265	\$311,084	\$894,336	\$3,093,685	0.31657	\$ 979,382
2039	\$1,910,005	\$313,860	\$904,817	\$3,128,682	0.29586	\$ 925,664
2040	\$1,932,049	\$316,674	\$915,444	\$3,164,167	0.27651	\$ 874,919
2041	\$1,954,401	\$319,527	\$926,220	\$3,200,149	0.25842	\$ 826,979
2042	\$1,977,066	\$322,421	\$937,146	\$3,236,633	0.24151	\$ 781,689
Totals	\$ 35,571,174	\$5,941,575	\$ 16,828,963	\$58,341,713		\$ 28,188,641

Qualitative Considerations

Safety

The rural community of Sitka, Alaska is heavily dependent on a working waterfront. Sitka has the largest fleet of vessels and harbor system in the state, and is 8th in the state and 19th in the nation in value of fish landings.²¹ Sitka's only privately-owned shipyard, Halibut Point Marine, announced that they will close their operation in the spring of 2022. Ultimately, this amounts to a catastrophic failure to haul-out and marine services for Sitka's fleet.

Quality of Life

The GPIIP haul-out improvements will increase the transportation choices for individuals because marine transportation is the lifeblood of Southeast Alaska communities. Once the existing haul-out facility closes, Sitka residents will need to travel great distances to conduct essential services

²¹ *Fisheries of the United States 2019* – National Marine Fisheries Service Office of Science and Technology, Published May 2021.

supporting the marine industry. The ability to conduct business activity close to home, family, and community cannot be understated.

Community Cohesiveness

Many residents of Alaska's rural communities must travel for employment. This often means days at a time when a family member is away from town and unable to assist with the day-to-day activities of home life. The GPIIP haul-out improvements will improve the economic conditions in the community and potentially offer employment for residents who would otherwise have to travel. This is especially true for captains and crew on large vessels who will need to travel to Pacific Northwest ports for repair and maintenance once the existing haul-out facility shuts down. Being able to conduct repair and maintenance close to home will contribute to family and community cohesiveness.

The loss of the current haul out in Sitka would greatly affect the marine trades industry. The jobs would more than likely be lost to other communities.

Vessel and Infrastructure Damage

When vessels travel long distances to unfamiliar ports, the potential for incidents and accidents rises. Having a haul-out available in the community where these vessels operate will limit unnecessary vessel and infrastructure damages.

Employment

It is anticipated that local small business owners may relocate or open satellite offices in the Gary Paxton Industrial Park to support haul-out activities. Several interview respondents even noted this. While there is no estimate for increased employment at this time, it is anticipated that this infrastructure investment will reap economic benefits far in excess of the initial investment.

Cost Estimates

Initial costs and periodic maintenance for the 150-ton travelift follow. This cost estimate assumes a 2-year construction timeframe. Periodic maintenance is estimated at 1 percent of total project costs every 5 years during the 20-year period of analysis. Costs have been discounted with a 7 percent interest rate. See Table 16.

Table 17 – 150-Ton Travelift construction costs and periodic maintenance

Year	Construction	Periodic Maintenance	Total Cost	NPV Factor	Net Present Value
2022	\$3,550,800		\$3,550,800	0.93458	\$ 3,318,505
2023	\$4,531,560		\$4,531,560	0.87344	\$ 3,958,040
2024			\$ -	0.81630	\$ -
2025			\$ -	0.76290	\$ -
2026			\$ -	0.71299	\$ -
2027			\$ -	0.66634	\$ -
2028		\$80,810	\$80,810	0.62275	\$ 50,324
2029			\$ -	0.58201	\$ -
2030			\$ -	0.54393	\$ -
2031			\$ -	0.50835	\$ -
2032			\$ -	0.47509	\$ -
2033		\$80,810	\$80,810	0.44401	\$ 35,881
2034			\$ -	0.41496	\$ -
2035			\$ -	0.38782	\$ -
2036			\$ -	0.36245	\$ -
2037			\$ -	0.33873	\$ -
2038		\$80,810	\$80,810	0.31657	\$ 25,582
2039			\$ -	0.29586	\$ -
2040			\$ -	0.27651	\$ -
2041			\$ -	0.25842	\$ -
2042			\$ -	0.24151	\$ -
Totals	\$8,082,360	\$242,430	\$8,324,790		\$ 7,388,332

At the end of the 20-year period of analysis, there is still value to the project components. See Table 17 for residual value calculations. Even though residual values of the project components are in 2020 dollars, the future values have been discounted. Total residual value at the end of the 20-year period of analysis is \$2.7 million and discounted at 7 percent to \$645,878.

Table 18 – 150-Ton Travelift Residual Value Calculations

Improvement Component	Initial Construction	Expected useful life (years)	Residual value after 20 years
Upland Improvements	\$1,370,000	40	\$685,000
Washwater and Treatment Facility	\$734,000	40	\$367,000
Boat Haul-out Piers	\$1,966,000	40	\$983,000
150-ton Travelift	\$1,153,000	40	\$576,500
Power and Lighting	\$314,000	25	\$62,800
Total Residual Value of improved infrastructure			\$2,674,300
Net Present Value of Residual (7%)			\$645,878

Benefit-Cost Summary

Net benefits for the 150-ton travelift alternative are \$28.2 million over the 20-year period of analysis. See Table 18. The benefit to cost ratio from the 150-ton travelift infrastructure improvement at the Gary Paxton Industrial Park in Sitka is a 4.18 using a 7 percent discount rate and a 20-year period of analysis.

Table 19 – Comparison of Benefits and Costs

Summary of Calculations	150-ton Travelift
Benefit calculations - 2021 \$\$	
Vessel avoided travel	\$ 17,179,000
Opportunity Cost of time	\$ 2,886,000
Emissions reduced	\$ 8,124,000
PV Benefits summary	\$ 28,189,000
Cost Calculations - 2021 \$\$	
PV Cost of Project	\$ 7,388,000
Less residual value	\$ 646,000
Effective cost (PV)	\$ 6,742,000
PV Net benefits (benefits - costs)	\$ 21,447,000
Benefit/cost ratio (benefits/costs)	4.18

GPIP Interview Protocol and Results

The City and Borough of Sitka conducted interviews of the previous users of the Halibut Point Marine to determine how their behavior would change once the haul-out facility closes. CBS conducted 50 interviews from May 12 through May 22, 2021. Responses to the interviews have informed the benefit/cost analysis for this grant application. **Responses to the interview questions are summarized in this orange color font.**

Hello, my name is _____ and I'm assisting the City and Borough of Sitka in a Federal grant application for improvements at the Gary Paxton Industrial Park. My questions will take about 10 minutes of your time. Is this a good time to talk? *(If the answer is no, ask for a better time for you to connect with them.)*

1. Sitka's only privately-owned shipyard, Halibut Point Marine, is closing their operation soon. Do you currently use this facility? _____ yes _____ no *(If no, ask them if a 150-ton travellift would work for their vessel and skip to Question 8, otherwise, thank them for their time)*

49 = Yes, 1 = No (the vessel responded no because their vessel is too large for the current haul-out) This respondent answered questions about use of future haul-out.

2. How many vessels do you have that use the Halibut Point Marine facility? _____ *(make sure to get a number - if more than three, you will have to add additional question about vessel characteristics.)*

There were 42 responses indicating 1 vessel using Halibut Point Marine, 5 users with 2 vessels, 1 user with 3 vessels, and 2 respondents left this question unanswered.

3. On average, how often do you pull your vessel (1) out of the water during a year? _____ *(make sure to get a number - if they can't give a number ask for a range of numbers)*

Respondents on average pull their vessel once a year, with a minimum of once every other year and a maximum of twice a year.

- a. What are the dimensions of vessel (1)?
 - b. Length _____ (feet) **Average length is 45.6 feet with a minimum of 24-feet and a maximum of 73-feet.**
 - c. Draft _____ (feet) **Average draft is 6.4 feet with a minimum of 3-feet and a maximum of 12-feet.**
 - d. Beam _____ (feet) **Average beam is 13.5 feet with a minimum of 8-feet and a maximum of 20-feet.**
4. On average, how often do you pull your vessel (2) out of the water during a year? _____ *(make sure to get a number - if they can't give a number ask for a range of numbers)*

Respondents who had two vessels pulled their second vessel on average once a year, with a minimum of once every other year and a maximum of once a year.

- a. What are the dimensions of vessel (2)?

- b. Length _____ (feet) Average length of the second vessel is 36.6 feet with a minimum of 21-feet and a maximum of 47-feet.
- c. Draft _____ (feet) Average draft of the second vessel is 5.3 feet with a minimum of 3-feet and a maximum of 8-feet.
- d. Beam _____ (feet) Average beam of the second vessel is 12 feet with a minimum of 8-feet and a maximum of 14-feet.
5. On average, how often do you pull your vessel (3) out of the water during a year?
 _____ (make sure to get a number - if they can't give a number ask for a range of numbers)

There was only one vessel response for this question.

- a. What are the dimensions of vessel (3)?
- b. Length _____ (feet) 30-feet
- c. Draft _____ (feet) 5-feet
- d. Beam _____ (feet) 10-feet
6. If you were unable to pull your vessel in Sitka using the Halibut Point Marine, what would you do? *(This is going to be a range of answers. You might need to coax respondents a bit. I'm giving you a list of possibilities that you can choose from but there could be more that I haven't thought of.)*
- a. _____ Travel to another community. Which community? 37 of the 50 respondents, or 74 percent, replied "yes" to this question. 32 of the respondents provided information on the alternate location they would use for haul-out. Some of these respondents had more than one vessel, more than one annual pull, and some provided more than one location so column totals will not add to 32.

Number of vessel pulls	Where?
3	Conduct repairs in water
5	Petersburg
28	Hoonah
7	Seattle, Washington
50.2	Wrangell
1	closest

- b. _____ Conduct repairs in water. Is this more expensive than using the haul-out? If so, what are the additional expenses? One respondent indicated they would conduct repairs in-water and said there would be no additional expenses.
- c. _____ Forego repairs until end of season. And then travel to? 12 Respondents said they would pull their vessel and conduct repairs on a grid about 10 times annually. Additional comments were that the grid would then be in high demand and one respondent said that now he is older conducting work from the grid is much harder.
- d. _____ Other reason? One respondent said they would convert to a trailer.
- e. _____ Other reason? _____

7. If the Gary Paxton Industrial Park were upgraded with a 150-ton travel-lift, washdown area, boat storage, security and surveillance, would you use this facility? _____yes
_____no **49 respondents (98%) replied yes and one respondent declined to answer.**
- a. If no, why not? _____
(Skip to question 10)

The next couple questions are for vessel owners not currently using Halibut Point Marine because their vessels are too large for the facility.

8. If the Gary Paxton Industrial Park were upgraded with a 150-ton travel-lift, washdown area, boat storage, security and surveillance, would you use this facility? _____yes
_____no **One respondent is not currently using the Halibut Point Marine and said they would use it if available.**
- a. If no, why not? _____
9. On average, how often would you pull your vessel (1) out of the water during a year?
_____ (make sure to get a number - if they can't give a number ask for a range of numbers) **The one respondent replied that they would haul their vessel once annually.**
- a. What are the dimensions of your vessel (1)?
- b. Length _____ (feet) **80 feet**
- c. Draft _____ (feet) **6 feet**
- d. Beam _____ (feet) **22 feet**

Resume questions for all respondents.

10. A portion of this grant application pertains to social equity and environmental justice. For that reason, we are asking respondents if they identify as a minority group. Do you identify as: **11 respondents answered this question.**
- a. **11** White/Caucasian
- b. _____ Alaska Native
- c. _____ Black/African American
- d. _____ Asian or Pacific Islander
- e. _____ Other _____
11. Do you have any additional comments or suggestions that you would like to pass along to the City and Borough of Sitka? **Additional comments are summarized on the next page.**
- _____

On behalf of the CBS, I'd like to thank you for your time today.

Additional comments for the City and Borough of Sitka to Consider:

Support for the Haul-out:

- Grateful that the city is working on it. It is very important.
- Worried what will happen with so many people dependent on a haul-out. Sitka would lose services and business. He hoped the CBS appreciates the importance to make sure we have the best marine services for the industry.
- Cost & fees for a facility would not matter - it would be better than traveling to Wrangell
- It would be horrible if Sitka did not have a haul-out. He has used the grid for emergency situations, but it is not user friendly with scheduling and timing of low tides.
- It is important to have a haul-out rather than boats having to go somewhere else.
- Important to have a haul-out to get revenue.
- In support of a haul-out. Lots of boats are reliant on a haul-out. It is a must. Necessary for business.
- Heard same size as HP Marine. Needs to be 3 times that because of the size of the fleet.
- Fantastic idea - great location. Welding shops, being put down there. Support the economy.
- Would be a huge asset to have in place.
- A haul-out in Sitka is needed. Sitka has the biggest harbor system in the state.
- Important project. Would be an asset to the city.
- A haul-out is essential.
- Glad it's being pursued. Just to have capability that Halibut Point Marine has would be great and then add on later
- A haul-out would be nice.
- Pre COVID he would take his boat to Seattle to be hauled out he would use Wrangell if Sitka didn't have a facility.
- Make it happen. Sitka is a boating community. We need this.
- Having a place to haul out a boat is necessary.

Support for the Haul-out as it concerns jobs/economy:

- Not having a haul-out would be devastating for the Sitka fleet. A GPIIP Haul-out would create jobs and if structures were built boats the facility would be used all year round because maintenance never stops.
- Replicate what HP Marine does. The city should figure out the price point. It would create jobs and keep people in town.
- More jobs in town with a new haul-out. Just start the ball rolling. Could use a ramp at first and expand better position is GPIIP money is tight.
- It is a good move for the city. People will probably leave town without a haul-out.
- Extremely important to get something started out there. It would be a benefit to everyone in the community.
- Set up shop - see himself working on other boats out there. Would benefit him in two ways.
- Much needed. Would bring business to town also a good thing.

- Employs 2 part time Alaska Native employees - Not having a haul-out in Sitka affects many, from the welders, painters, to restaurants and grocery stores. The entire community if he has to leave town to haul-out elsewhere that money goes with it.
- Making land available for projects, businesses that can work on the boats
- Need to support fishing industry. Important to keep it viable. Last year when tourism ended fishing was all that was left.

Support for the Haul-out as it concerns the City's economy:

- Would be nice to have the facility. Hope it doesn't become a financial burden to the city
- City should run the travel-lift, washdown area but keep the yard open to contractors, there shouldn't be a monopoly for the space.
- Could use a 350-ton travel lift. Vessels that transit to Seattle would stay in Sitka and do all the work here. Talented workers will come. Largest lift possible maybe 2 lifts one for smaller. Space is there, it would be a great boost to Sitka.
- A haul-out should have been built years ago. Every boat is a small business and if we don't have one, it won't keep people here. A haul-out is a must.
- A haul-out is desperately needed. What about emergencies and the maintenance and painting needs.
- Support proposal to work with the city and have a public/private partnership
- In favor of proposal that was just made or if the city built one.

Support for the Haul-out as it concerns timing:

- Hurry up.
- Can't believe it's taken this long. More boats than any other city in Alaska. Supportive of a new haul-out being built.
- Timing is of concern and cost.
- Depends on price. Long waiting list right now. Hurry up.
- It should be up and running already.

Other Comments:

- I trust Jeremy and Linda and support their proposal.
- GPIIP Board - have not been better disappointed in Garry White's job. Yes supports a haul-out.
- Average is 30-50' 150-ton travel lift is more universal.
- Ridiculous that we don't have one on Japonski Island has lots of space. Linda Behnken, she is an amazing person