



PORTS AND HARBORS

What you need to know about Alaska's Ports and Harbors

Ports & harbors across Alaska provide services that support critical economic activities. These facilities play a vital role in the communities they serve by providing local employment opportunities, promoting economic diversification and meeting cultural and subsistence lifestyles. In 2015, \$28B and 40.8 million tons of goods were moved via marine transport out of state; and, \$4.8B and 3.4 million tons of goods into the state via marine transport. Ports & harbors ensure a thriving commercial fishing industry exist with over \$1.7B of fish product landed in Alaska in 2014, including six of the top ten fishing ports by volume in the US. Tourism plays a significant role in several communities with over 1 million passengers arriving via cruise ships in 2016. Other harbors rely on summer independent travelers who use facilities for recreational or charter fishing and mooring floats necessary to attract yacht cruisers.

Capacity

Alaska possesses 33,000 miles of coastline, more than the combined shoreline of the continental U.S., yet there are only 125 ports & harbors within the state. Alaska is dependent upon resource extraction, including fisheries, but lacks infrastructure to support vessels operating in Alaska. As a result, there is \$5B lost revenue opportunity to the Seattle port & harbors infrastructure. Recent infrastructure improvement to cruise ship docks in Southeast Alaska has enhanced the capacity to moor neo-panamax size cruise ships at ports supporting tourism. The largest ports by volume include Valdez (Trans-Alaskan Pipeline terminus), Nikiski (oil refinery), Anchorage (consumer products) and Kivalina (Red Dog Mine) which currently maintain their respective facility capacity to meet export demands. The Port of Anchorage has the capacity to receive necessary goods and products required for the largest population centers.

Condition

The condition of the ports and harbors across the state vary greatly. Ports and harbors that can leverage funding through State matching grants or have access to cruise ship "head taxes" have the potential to maintain, upgrade or replace. Often, however, funding can be limited and repairs limited to "band-aid" fixes. For example: The Port of Anchorage dock facility has exceeded its useful life and severe piling corrosion threatens to impact port operations serving 74% of the Alaskan population, including military facilities of national significance. It requires an estimated \$400 million to accomplish replacement and modernization of the facility. To date only a quarter of the funding needed has been secured. Engineering studies show that Port of Anchorage docks are severely corroded and its wharf piles have been classified as being in poor condition since 2000. Anchorage currently budgets more than \$5 million annually to maintain operational capacity of existing wharf piles and other aging Port



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infrastructure, but this work does little to enhance the facility's earthquake survivability. This situation imperils Alaska's economy because the State does not have cargo import capacity or infrastructure that could adequately substitute for the Port of Anchorage if it is significantly damaged by an earthquake or other disaster.

Operations & Maintenance

The majority of harbors, constructed circa statehood in 1959 and were maintained by the state until 2000, when Alaska Department of Transportation began program of divestiture to local municipalities. This has resulted in operations and maintenance inconsistency throughout the municipal harbors and the 24 state managed harbors. This is primarily due to municipalities possessing varying levels of resources (both financial & human capital) to maintain their respective infrastructure. Several port and harbor facilities (Anchorage, Homer, and Nome) are dredged annually to ensure navigability and access to key communities and are typically funded at the federal level. However, after several decades, there remain numerous harbors requiring maintenance dredging to which funding has yet to be prioritized.

Funding

There exists in excess of \$100M in recapitalization needs for the Alaska small boat harbors alone. The vast majority of harbors are maintained by the local municipalities with limited funding available from the state level. Additionally, waning state grant opportunities have challenged ports and harbors to conduct major preventative maintenance and to reconstruct facilities which are past their useful life. Many of the small boat harbors support subsistence lifestyles and thus are unable to collect sufficient fees to maintain or rebuild aging infrastructure. Small boat harbors, which cater to a cash economy, must generate sufficient revenue during the short Alaskan boating seasons, typically May through August. In 2006, the Alaska DOT established a 50%-50% matching grant program allowing for reconstruction of small boat harbors; however, the program has only fully funded all applicants twice. The ability for harbors to generate sufficient fund balances and the state's ability to continue to fund the program severely jeopardizes harbor reinvestment opportunities. A survey conducted of all Alaska harbormasters resulted in funding being the most significant challenge in providing services to maintain and recapitalize aging infrastructure.

Ports accommodating cruise ships have access to additional funding through the Commercial Passenger Vessel Excise Tax (CPV). The CPV is collected by the state which redistributes a portion of the tax collected to the cities and boroughs in which cruise ships make port calls.



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Future Needs

Alaska lacks deep water Arctic ports. An emerging Arctic Ocean poses both opportunity and risk for trans-shipment, destination shipment and future resource extraction requirements along coastal Alaska. Enhancing port infrastructure – including deep-draft port facilities currently unavailable north of Unalaska/Dutch Harbor – would meet the State’s goal of encouraging economic development in remote areas. It would provide local and regional economic development opportunities (resource extraction, tourism, and research); decrease Arctic region operating costs; provide protected dockage to support offshore oil and gas endeavors, fishing fleet, and resource extraction vessels; and provide vessel repair and maintenance support as well as facilities for emergency response and assistance vessels. It would improve international relationships and increase U.S. exports, optimize the aforementioned benefits while preserving natural resources; raise awareness of U.S. as an Arctic nation; and provide upland support to vessels operating in the region (fuel, water, electricity, food, medical, and storage, laydown/staging for resource extraction).

Public Safety

Alaskan ports and harbors are experiencing challenges with abandoned and derelict vessels many, which are from WWII-era and wooden. Alaska ports & harbors face risk associated with removal and disposal from irresponsible owners. The distances between harbors and reliance on water transportation for access for emergency and freight services necessitates safe, secure and accessible ports and harbors. In 2012, the Port of Nome was unable to secure barge deliveries of heating and transportation fuels before the sea-ice made the harbor inaccessible resulting in an historic operation requiring a U.S. Coast Guard icebreaker and Russian ice-strengthen tanker to deliver fuel in mid-winter.

Resilience

The Port of Anchorage sees 85 percent of the consumer goods for Alaska. The Port of Anchorage is in an active seismic zone and has experienced the highest recorded earthquake in North America; seismic activity could result in a supply interruption thereby paralyzing much of Alaska, including strategic military facilities. In addition, a significant number of other Alaskan ports & harbors are not connected to the terrestrial road system. This increases dependency upon marine transportation hubs but also exposes the communities to risks associated with coastal erosion, weather impacts or natural disasters which disrupt logistical supply chains.

Innovation



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The goal is to build facilities that last longer, are more environmentally friendly and meet user needs well into the future. Alaska has some of the greatest tidal ranges in the world, most of the new cruise ship berths recently constructed utilize floating “pontoon system” to embark and disembark passengers which enhance the safety and efficiency of large passenger vessels. Several ports which have cruise ships embarking have successfully leveraged the use of state Commercial Passenger Vessel Excise Tax for building infrastructure which improves safety and efficiency for the cruise ships and its passengers.

Recommendations

1. With limited opportunities to fund port and harbor recapitalization projects at the federal level, it is imperative that the State of Alaska prioritize legislative grant appropriations and matching harbor grant opportunities to the maximum extent allowable. Without safe and efficient access to ports and the ocean, the main regional economic driver in many of our communities is gone.
2. The Port of Anchorage is in desperate need of capital infusion to rebuild aging infrastructure and construct resilient facilities which provides 85% of all consumer goods to three-quarters of the state’s population. Funding \$300M through State legislative appropriations or bonds are necessary to realize the port needs in Alaska’s largest city.
3. Several federal waterways are maintained the US Army Corps of Engineers through dredging and breakwaters projects within Alaska. Annual dredging at ports such as Dillingham and Ninilchik are necessary to maintain economic vitality for their rural regions. Other Army Corps projects include dredging on a 10-year cycle for the Cook Inlet Navigation Channel, Bethel, Ketchikan and Seward. The recent 2017 passage of the Waterways Infrastructure Improvement for the Nation (WIIN) Act will positively impact Alaska harbors directly by permanently requiring 10% of the annual Harbor Maintenance Trust Fund be directed to emerging ports, which move less than one million tons of commercial cargo across the docks. The WIIN Act will also provide funding to the Small, Remote, Subsistence Harbors program which will greatly benefit Alaska’s waterways; however, this program requires and merits federal appropriation on an annual basis. This program was made permanent in the last WRDA bill giving Alaskan ports and harbors access to a consistent stream of funding in keeping navigation channels open and our jetties repaired.
4. That the State of Alaska and the federal government work in concert to develop the necessary infrastructure and governance to meet the economic opportunity which a Deep Draft Arctic Port provides to this Nation.



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