

Port of Alaska is a Muni-owned and -operated marine facility that serves Anchorage, the state of Alaska and the nation

Anchorage Assembly renamed "Port of Alaska" in October 2017 to reflect its regional, state and national significance



Alaska is a maritime state . . . a virtual island

- 90 percent of all Alaska inbound freight is marine cargo (either ship or barge)
- Air and truck carriers each account for about five percent of statewide, inbound freight

State's biggest industries – oil, tourism, fishing, mining, timber – all rely upon marine commerce



Port of Alaska is the state's primary inbound cargo-handling facility.

Handles about half of state's inbound marine freight . . . some 3.5 million tons of fuel and freight annually

Half of this freight is delivered to final destinations outside of Anchorage

PoA's cargo business level is relatively stable and closely-tied to the state population and economic activity



Seward was the original gateway to Interior Alaska starting in late 1800s . . . Iditarod trail, Alaska Railroad and Alaska highway system start in Seward

Anchorage opened its deep-water port 1961 to support regional economic development



Everything changed when 1964 Good Friday earthquake hit (9.4 megathrust earthquake on March 27, 1964) triggered tsunamis that destroyed every deep-water port in Southcentral Alaska except Anchorage

Inadvertently discovered that Upper Cook Inlet geography is tsunami-proof – rendered 26-ft wave that rolled past mouth of Kachemak Bay into ripple about time it rolled past Nikiski

Anchorage instantly became Alaska's main inbound cargo port and supported regional reconstruction, Cook Inlet oil boom and Alaska economic growth and development

Port has generated positive revenue since 1964

Alaska's most versatile port



Today Port of Alaska is state's most versatile port and handles wide-variety of domestic and foreign cargo carriers:

- Three general cargo terminals . . . with lift on/lift off, roll-on/roll-off and break bulk capability
- Two petroleum terminals
- Dry bulk (cement)
- Dry barge landing
- 11 scheduled cruise ship visits in 2018 . . . plan to return in 2019, plus the MS Queen Elizabeth

NOTE: PoA is fourth biggest AK port by tonnage, behind export facilities in Valdez, Nikiski and Red Dog Mine's facility on the Chukchi Sea



Anchorage docks leverage/are leveraged by hundreds of millions of dollars of freight-related, private-sector infrastructure:

- 125 acres of cargo-handling infrastructure, including intermodal cargo transport connections
- 3.4 million barrels liquid fuel storage (plus another 700,000 barrels of capacity under development)
- 60,000 tons cement storage

Port links Alaska's primary marine, road, rail, pipeline and air cargo systems



Port connects:

- Lynden/Alaska Marine Line and NorthStar barge terminals that serve Western Alaska
- Alaska highway system . . . 60 percent of all Alaska residents live within a two-hour drive of the Port and 75 percent of all Alaskans live on the Anchorage-connected road system
- Multiple rail connections to port . . . Alaska Railroad's main cargo yard is adjacent to port
- Ted Stevens International Airport and JBER runways within sight of dock
- Port valve yard and related pipelines connect on-/off-port tank farms, truck-loading racks, rail-loading racks, JBER, Ted Stevens International Airport and Nikiski refinery infrastructure

All of this connected infrastructure gives the port more inbound cargo handling capacity than every other port in Southcentral Alaska combined



Port has three basic purposes/responsibilities

- 1. Commerce
- 2. National defense
- 3. Resiliency / disaster recovery



Commerce (for muni, state and nation) . . . business of bringing freight and fuel into the state . . . for residents and to support Alaska businesses and economy.

Commerce functions generate vast majority of port revenues and pay for port operations.

85 percent of Alaska residents receive **direct benefit** of using goods shipped across Anchorage docks

Entire state receives **indirect benefits** from port . . . for example:

- 90 percent of liquid fuel shipped into Southcentral Alaska crosses dock . . including most of the jet fuel used at JBER and Ted Stevens International Airport
- Virtually all of the Avgas used statewide
- 90 percent of all cement used in Alaska is shipped through port three biggest cement users this year are: Liberty (energy) Project in shallow waters off Alaska's North Slope (developed by Hilcorp, BP and ASRC Exploration), Eielson Air Force Base F-35 infrastructure, and Pogo (gold) mine
- Methanol . . . Delta Western operates a 70,000-barrel tank . . . methanol is anti-icing used down hole and in pipelines to maintain winter production in Cook Inlet and

North Slope oil fields



Port provides critical support to Alaska and U.S. business . . .

PoA is U.S. Dept. of Commerce Foreign Trade Zone no. 160 – provides import tariff benefits that improve federal, state and local business competitiveness

- Businesses used trade zone status to manage cash flow and increase competitiveness of locally manufactured products
- Ted Stevens International Airport fuel-cost advantage

Note: ANC handles some 500 wide-body cargo landings per week and is fifth or sixth busiest cargo airport in world . . . Number two in North America behind Memphis International Airport (Fed Ex) and two places ahead of Louisville International Airport (UPS).



2) National Defense -- "U.S. Commercial Strategic Seaport" -- supports DoD missions in Alaska, Pacific Rim and the Arctic

• About 20 percent of all PoA cargo is military related.

NOTE: Strategic seaport mission is effectively an unfunded federal mandate . . . port maintains DoD-required minimum facilities and capacities that are otherwise unneeded to support Alaska's relatively small market . . . E.G., DoD expects at least 2,200 horizontal-feet of cargo dock and 25 acres of yard that can be available for exclusive DoD use with one-week-notice . . . PoA is not compensated for providing this capability.

3) Natural disaster response/recovery -- Port is key to state and federal disaster recovery – vital to timely and successful natural disaster response and to virtually every state and federal government disaster response and recovery plan. Costs significantly more to build a resilient, earthquake-ready dock than a merely commerce-ready dock.

NOTE: if port fails . . . Alaska has seven-to-ten days worth of food in state . . . other Southcentral ports, roads, etc. will almost certainly be compromised . . . airlift to replace Port of Alaska sealift capability would require some **1500 C-17 flights per week** (or 686 747 flights per week). To give those numbers some perspective: Ted Stevens International now handles about 500 wide-body flights (mostly 747s) per week . . . and Boeing has only manufactured 279 C-17s.



Half-century-old docks are suffering a slow-motion disaster of corrosion and obsolescence

- Docks supported by 1,423 hollow-steel wharf piles that average 24-inches in diameter and originally averaged 7/16-inch thick.
- Aging piles have lost up to three-quarters of their original thickness and are unlikely to survive another significant earthquake
- Wharf-pile repair started in 2004 . . . jacketed 659 piles through end of 2018 . . . also installed safety chains to 113 sets of fender piles to protect them ships and ensure continued operations if they break off while ships are docking. Spend about \$3 million annually rusty wharf pile maintenance

Pile jackets are one-time fix that lasts 10-15 years – docks losing load ratings and will close within10 years, regardless of seismic activity or anything else

- Docks have exceeded their design life (35 years . . . and there were no special seismic standards when originally constructed)
- Docks have exceeded their economic life (i.e., docks built for 1960s-70s ships and cargo-handling technology . . . modern ships are longer, wider and deeper draft)
- New docks will significantly improve cargo-handling efficiency

Anchorage Port Modernization Program

- Replace aging docks and related infrastructure
- Improve operational safety and efficiency
- Accommodate modern shipping operations
- Improve resiliency –to survive extreme seismic events and Cook Inlet's harsh marine environment



NOT an expansion project – It is a series of dock replacement projects needed to fulfill Port of Alaska's primary missions of commerce, DoD support and disaster recovery

Current dock is operating at about 35-percent capacity . . . best port practices experts start considering dock expansion when docks exceed about 70 percent capacity

Modernization will increase port capacity by improving cargo-handling efficiency (e.g., turn ships faster . . . cement offload time . . . 4 X Matson cranes)

The Plan • Optimized to reduce costs and maintain ongoing port operations • Dock replacement expected to last at least 8 years • Employ 300+ workers during peak construction



- First construction is underway . . . shoreline stabilization where the new petroleumcement terminal will connect to land.
- Modernization/replacement program encompasses series of projects that will replace aging terminals and related infrastructure and repair problems caused by failed Port Intermodal Expansion Plan
- Final project scope is still being determined . . . based on user needs and funding . . . especially funding.
- Total program including PIEP repairs is likely to exceed \$1 billion dollars . . . depending upon final scope . . . that will be driven by:
 - Market/User needs (users will pay for user-requested betterments . . . e.g., cranes)
 - 2) DoD needs . . . will new dock provide and who will pay?
 - 3) Resiliency needs . . . will new dock provide and who will pay?

Near-term construction

- South backlands stabilization 2018
- Transitional dredging 2019
- In-water petroleum and cement terminal construction 2020



PCT and related south backlands stabilization and transitional dredging work expected to cost some \$225 million

North extension stabilization work will repair damages from failed PIEP . . . Not really part of modernization program, but must be completed before general cargo terminal replacement project can proceed.

North extension repair is expected to cost some \$250 million-to-\$350 million, depending upon final design and staging of steps 1 and 2

USDOT Maritime Administration (MARAD) was responsible for PIEP. Muni's litigation against MARAD for damages arising from mismanagement, etc. is expected to go to trial in fall 2019 – proceeds expected to pay offset/pay for north extension repair work.

NOTE: To date, Anchorage has expended some \$13.5 million in litigation-related expenses and recovered \$19.35 million from private parties. Final MARAD litigation seeks to recover some \$350 million in total damages.



Alaska logistics mean Anchorage dock replacement is more expensive than similar, Lower-48 project

- 1) Distance from resources
- 2) Short construction season
- 3) Extreme conditions (hundreds-of-feet deep silt, tides, seismic hazard, weather)
- 4) Port must remain operational throughout construction
- 5) Endangered marine mammals (beluga whales)
- 6) Must build in extra resiliency because Alaska market isn't big enough to support redundant facilities
- Commercial scope will be driven my market demand (i.e., user demand) . . . PoA's commerce responsibility
- DoD and resilience scope will be driven by federal and state policy makers . . . and their ability to provide timely funding.
- Typical lower-48 port would finance the commerce portion of this project with revenue bonds . . . repaid with cargo tariffs, most of which would be collected from either outbound cargo and/or cargo that is delivered to final destinations in a different region or state.
- Virtually all PoA cargo is inbound and stays in state . . . consequently virtually all cargo fees and tariffs will ultimately be paid by AK businesses and residents

Scope drives funding drives scope . . .



Port and Muni officials are working on finance plan . . . expect to start increasing port fees and tariffs in Q1-2019 to pay for PCT construction

- Must determine final scope to finalize funding plan
- Market demand is well established closely linked to Alaska population and economic conditions

NOTE: DoD strategic port and resiliency/disaster preparedness requirements are essentially unfunded mandates that add significant additional costs and generate no additional revenue

Alaska residents cannot economically pay full commercial, DoD and resilience scope with cargo fees and tariffs.

- Project is so big that raising cargo fees and tariffs to pay bulk of costs will significantly impact Alaska Consumer Price Index (by raising cost of most goods shipped into AK)
- Reducing DoD capabilities would likely reduce DoD activities/base footprint in AK
- Should Alaska prepare for another earthquake or natural disaster . . . and who will pay for that preparation?

NOTE: Port does not have a monopoly . . . if we fail to economically scope, fund build new docks in timely manner, then private investors may build commerce-only dock . . .

will not accommodate DoD and resiliency requirements. AK residents will ultimately pay for privately-funded dock with increased shipping costs.

Moving forward

1) Elected officials must determine how much DoD capability and resiliency they will fund

2) Elected officials must determine optimum funding balance between state government sources and cargo fees and tariffs

3) Time is of the essence



- Port has plenty of space to accommodate future expansion if population / market grows
- Project needs elected officials in Washington, D.C. and Juneau to quickly determine how much DoD capability and resiliency they want and will fund
- Project needs elected officials in Juneau to quickly determine what how much of the dock should be state government funded . . . as opposed to state resident and business funded via cargo fees and tariffs . . . to optimize cost/benefit ratio for statewide economic and quality of life impact
- Timing is critical because docks are failing and delay increases cost of timely completion
- Project will move forward as fast as it is funded



Thank you