

**United States Army Corps of Engineers - Arctic Ports Study FY2013 Request: \$1,500,000**  
**Reference No: 54074**

**AP/AL:** Appropriation **Project Type:** Climate Change / Erosion  
**Category:** Transportation  
**Location:** Statewide **House District:** Statewide (HD 1-40)  
**Impact House District:** Statewide (HD 1-40) **Contact:** Pat Kemp  
**Estimated Project Dates:** 07/01/2012 - 06/30/2017 **Contact Phone:** (907)465-3900

**Brief Summary and Statement of Need:**

This capital request is to fund year two of the Arctic Ports Study in conjunction with the United States Army Corps of Engineers (USACE). The purpose of this study is to identify potential Arctic deepwater port sites (minimum of -35 feet) that would be a long-term vital asset to national security and to the State's economy.

<b>Funding:</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017</b>	<b>FY2018</b>	<b>Total</b>
Fed Rcpts	\$500,000	\$500,000	\$500,000				\$1,500,000
Gen Fund	\$1,000,000	\$500,000	\$500,000				\$2,000,000
<b>Total:</b>	<b>\$1,500,000</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,500,000</b>

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input checked="" type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
0% = Minimum State Match % Required	<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill		

**Operating & Maintenance Costs:**

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
<b>Totals:</b>	<b>0</b>	<b>0</b>

**Additional Information / Prior Funding History:**

\$300,000 from Ch 5 FSSLA 2011 Sec 1 Pg 101 Ln 11 (was combined with the SDMI request).

**Project Description/Justification:**

One or more Arctic deepwater ports would provide new, northernmost bases for the United States Department of Defense and the United States Coast Guard (USCG) to protect and patrol the State's arctic waters. In addition, construction of a deepwater port would enhance in-state job growth, support resource development and exploration, and operate as a new intermodal hub between marine and aviation transportation facilities. Additional funding to complete the study would be required in FY2014 and FY2015.

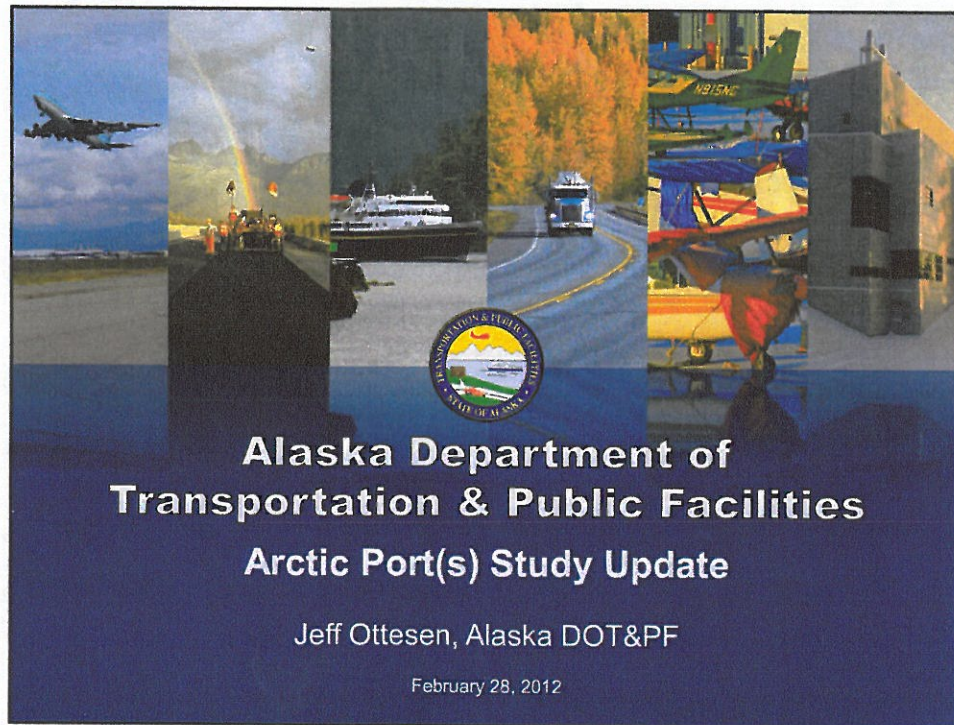
The Arctic coast is approximately 927 miles long or 1,492 kilometers, and a high priority for the State of Alaska and all federal agencies. It is in our interest to learn as much as we can about the region and its potential deepwater (-35 feet or greater) port sites by working with the Army Corps of Engineers conducting a combination of research and mapping in order to develop a list of potential port sites on the State's arctic coastline. An arctic port in Alaska would serve as a major infrastructure asset as the State, nation, and world continue to evolve their use of Arctic resources. In the short term, this would serve as the northernmost port for the USCG (USCG icebreakers and other vessels require a minimum of -35 feet), the US Navy (USN), and the National Oceanic and Atmospheric Administration (NOAA) in order for them to protect and patrol this region, and to develop a greater understanding of the factors involved in the potential economic development of the region. In the long

term, potential arctic ports could be expanded upon to allow for greater utilization to the state. It could help further diversify the state's economy in many ways. Including:

- The possibility of an arctic port becoming a direct shipping point for resources developed in the western and northern regions of Alaska.
- A major strategic American commercial and military port along the Arctic Coast as vessel traffic increases.
- A major infrastructure asset to any future potential endeavors to produce oil and gas from deepwater reserves in the Arctic Ocean.

Vital information that could potentially be gathered through studies in collaboration with the USACE includes, but is not limited to: depth of water, size and number of vessels, security requirements, hydrographic surveys, ice thickness and movement, operational needs, maintenance requirements, social, economic, and environmental impacts, potential arctic infrastructure development, coastal erosion, storm surge analysis, tsunami inundation analysis, sea rise, disaster preparedness, mitigation and recovery, climate change research, and an understanding of the capabilities of other arctic nations.

This project contributes to the Department's Mission by reducing injuries, fatalities and property damage and by improving the mobility of people and goods



The slide features a collage of six images at the top: an airplane taking off, a rainbow over a body of water, a large cargo ship, a truck on a road, a small propeller plane, and a modern building. Below the collage is the title "Study History". The main content is a bulleted list of events related to the study.


**Study History**

- January 2008 Port and Harbor Conference sparked wide interest in focusing attention on Alaska's ports
- November 2010 Port and Harbor Conference built on this and identified a long list of ongoing and new needs including an Arctic port.
- May 2012 Arctic Port Kickoff Meeting (charette) was held with numerous stakeholders
- December 2012 Army Corps of Engineers and Alaska DOT&PF execute \$3 million Alaska Deep-Draft Arctic Ports Study Feasibility Study Cost Sharing Agreement.

Legislative Definition


Arctic - ~~North~~ Nunavut Island & North






## 2012 Funding Purpose

- “Study and identify potential arctic deepwater port sites. A deepwater Arctic port would be a long-term vital asset to national security and to the State’s economy.
- It would provide a new, northernmost port for the US Coast Guard to protect and patrol the State’s arctic waters. Such vessels require a minimum of -35 feet.”




## Army Corps Partnership Schedule

- Use multi-criteria decision analysis technique to screen potential sites
- Identify Potential Sites Final List by September 2012.
- Evaluate Public-Private Partnership (P3) finance mechanism
- 2013-2014 Site Specific Feasibility Phase



### **Ports Vital to Many Needs**


- Sovereignty/Homeland Protection
- Resource protection
- Offshore oil and gas exploration/development
- Search and rescue/Incident response
- Onshore resources export
- Community supply and economic activities
- Fisheries



### **Port Needs Vary**

- Different needs, require different port characteristics:
  - Mining export: very deep draft, proximity to resource
  - Oil and gas services: intermediate depth, proximity to on-shore services, and off-shore leases
- Potentially, no one port site ideal for all needs






## Natural Harbor Sites Scarce

- Few natural harbors with wind and wave protection
  - Marine structures must withstand significant ice forces
- Water depth is generally shallow in Arctic shore areas
  - Dredging will likely be necessary, on-going




## Linking Need to Funding

- Funding should relate to overall purpose:
  - Sovereignty/Homeland – **federal**
  - Resource protection – **federal** and state
  - Search and rescue – **federal** and state
  - Off-shore resources – **federal**
  - On-shore resources – state/private
  - Community/Economic development – state/local
  - Fisheries – state/local



## Funding Issue

- Little *National Economic Benefit* as measured by federal rules
  - Corps, other federal agencies reluctant to participate
- Despite strong federal nexus, federal funding in doubt
- Public Private Partnership (P3) tool being evaluated




## P3's – Public Private Partnerships

- Increasingly common means to achieve public goods, typically infrastructure
- General characteristics:
  - Contract between public-sector and private party for a public service or good
  - Substantial private sector role; typically design, finance, build and operations involved
  - Costs borne by users rather than public
  - Requires robust economics to cover risks
  - Private entity often a new special purpose company


LLC





## Why the Trend to P3's?


- Someone else's money involved
- Off books of government spending or debt
- Brings private sector expertise and management skills
- Possible tax advantages to private investors
- Aligns risk and reward to single entity
- What's old is new again
  - Early American toll roads, continental railroad were P3's by another name
- Canada currently uses P3's at far greater level
  - British Columbia requires P3 consideration for all public projects



## Fitting P3's to Alaska


- Many Alaska projects require government help
  - Thin economics due to low user base
  - High costs due to environment, geography
  - Other ways to tap into private expertise ✓
- AIDEA has long been in business to assist beneficial quasi-public projects
  - Skagway ore terminal
  - Red Dog road and terminal
  - Ketchikan Shipyard and Drydock





### Related Efforts

- Congressional Delegation working on several fronts to help: icebreakers, hydrographic surveys, federal port funds, international interest
- Statewide digital mapping effort will focus on northwest Alaska this year to update onshore mapping information in Arctic port study area
  - (Some mapping costs eligible as state match)




### 2013 Appropriation Request

- Governor's capital budget request:
  - #54074 \$1 million GF to continue the Arctic Ports Study
  - Matched by \$0.5 million federal funds
  - Based on the 2012 effort, carry on the site specific port feasibility investigation.



## Canada's "Northern Strategy"

- Sovereignty
  - Deepwater port, vessels and year round military base
- Environment
  - Monitor and protect on- and off-shore resources
- Social and Economic Development
  - Improve circumstances of residents
  - Enable resource development for jobs and tax base
- Governance
  - Working for sustainable local governance



## Key Take-Aways

- Multiple ports likely necessary to serve many needs
- No single governmental entity likely to cover full costs of arctic port: federal, state or local.
- Resource user(s), may bring economies of scale to help finance.
  - Today's push for minerals and energy could expand opportunities
  - Some form of private participation seems desirable (AIDEA, P3's or ?).
- Need to shift federal focus to national security need versus economic purpose



22 February 2012

## INFORMATION PAPER

SUBJECT: Alaska Deep-Draft Arctic Ports Study.

1. BLUF: The State of Alaska and the U.S. Army Corps of Engineers, Alaska District (Alaska District) executed a \$3M Feasibility Cost Sharing Agreement (FCSA) to study the feasibility of implementing Alaska Deep-Draft Arctic Ports (minimum -35 feet depth). The State is very interested in resource extraction from western and northern Alaska, and the diminishing sea ice is making development more economically viable. The Alaska Congressional delegation has sponsored legislation highlighting the need for U.S. Arctic ports to support national sovereignty, environmental stewardship and life safety. The U.S. Navy (USN), U.S. Coast Guard (USCG), and National Oceanographic and Atmospheric Administration (NOAA) all have an increasing mission in the Arctic, but so far have not been a contributing partner for developing a deep-draft port. The State would welcome Federal participation in selecting, funding, and designing deep-draft port(s) in the Arctic that would incorporate the Federal mission.

2. Background: The Alaska District initiated the Alaska Regional Ports Reconnaissance Study in 2003. In 2008, they determined there was Federal interest in participating in cost-shared feasibility studies addressing regional ports and harbors in the state of Alaska. On 21 September 2009, the State of Alaska and the Alaska District executed an FCSA for the Alaska Regional Ports Feasibility Study. Two Statewide Ports and Harbor Conferences were conducted in January 2008 and November 2010. As a result of the November 2010 Conference, Gov. Sean Parnell requested a more specific effort to evaluate Deep-Draft Arctic Port(s) primarily focused on the extraction of resources. On 16-17 May 2011, the State and the Alaska District conducted a "planning charrette," which has led to the development of a specific FCSA and Project Management Plan (PMP) for the Alaska Deep-Draft Arctic Port(s) Feasibility Study. The documents were signed by both parties on 8 December 2011. The Corps has \$350K+/- and State of Alaska has \$300K+/- to initiate the estimated \$3M three year study. The study was not in the President's budget for FY11 or 12.

Sen. Murkowski unsuccessfully introduced legislation in 2009 for the study of an Arctic Deepwater Port. She reportedly reintroduced it in 2010. Sen. Begich obtained Legislative Drafting Assistance in 2010 for an Arctic Deep Water Port. So far we have not seen evidence that it was introduced. Congressman Young successfully introduced legislation in February 2010 that provided funding for hydrographic surveys to support safe navigation and deep draft studies in the Arctic. It has been suggested that Congress is interested to have DoD study and construct a Deep-Draft Port in the Arctic, but nothing has been formalized.

During the Planning Charrette, the terms Arctic Deepwater and Arctic Deep-Draft were discussed. The differentiation is that Deep-Draft implies we can create the depth of water as compared to it occurring naturally. There are few naturally occurring deep water sites in the US Arctic. The Planning Charrette helped define "arctic" (north of Nunivak Island even though many official definitions go all the way to the Aleutian Chain) and "deep-draft" (greater than or



## 2. SCHEDULE & MILESTONES

Name	Start	Finish
<u>Task 1: Develop Work Plan</u>		
Execute Tier 1 Amendment to FCSA	9/20/11	12/05/11
Kick-off Meeting		10/27/11
Establish Steering Committee		11/30/11
<u>Task 2: Define Study Area</u>		
Establish Study Area Working Definition	12/15/11	
Confirm Definition w/Steering Committee		12/30/11
<u>Task 3: Identify Other Agency Efforts</u>		
Initial Write-up of Agency Efforts		1/25/12
Final Compilation of Agency Efforts	2/22/12	
<u>Task 4: Evaluate Public/Private Partnerships (PPP)</u>		
Evaluate PPP Approach and Potential	1/25/12	2/22/12
<u>Task 5: Periodic PDT and Steering Committee Meetings</u>		
Meetings to occur the last Wednesday every month		
<u>Task 6: Examine Problems and Opportunities</u>		
Draft Write-up Problems/Opportunities	1/25/12	2/22/12
Final Write-up Problems/Opportunities	2/22/12	3/30/12
<u>Task 7: Establish Criteria</u>		
Draft Scenario Analysis	3/30/12	4/25/12
Final Criteria Established	4/25/12	5/30/12
<u>Task 8: Conduct Scenario Analysis</u>		
Scenario Analysis Developed by PDT	5/30/12	6/27/12
Scenario Analysis vetted thru Stakeholders	6/27/12	7/25/12
<u>Task 9: Identify Potential Sites</u>		
Potential Sites Preliminary List	7/25/12	8/08/12
Potential Sites Final List	8/08/12	8/22/12
Final Site Selection Document	8/08/12	9/26/12
<u>Task 10: Engage Public</u>		
Public Meetings around the State	10/03/12	10/31/12
<u>Task 11: Rescope Study Plan for 2013</u>		
Draft Scope	11/01/12	11/14/12
Final Scope	11/14/12	11/28/12
<u>FY13 and FY14: Site Specific Feasibility Phase</u>		
Conduct Feasibility Study	11/28/12	04/25/14
Value Engineering Study	03/01/13	07/01/13
Feasibility In-House Review		04/28/14
Alternative Formulation Briefing		05/16/14
Feasibility Review Conference		06/18/14
Finalize Feasibility Report		09/16/14
Division Commander Notice		10/03/14