

Statewide Digital Mapping Initiative - Arctic Coast Region **FY2012 Request: \$4,250,000**
and Arctic Port Reconnaissance - Was Arctic Ports Study **Reference No: AMD 50770**

AP/AL: Appropriation **Project Type:** Research / Studies / Planning
Category: Transportation
Location: Statewide **House District:** Statewide (HD 1-40)
Impact House District: Statewide (HD 1-40) **Contact:** Marc Luiken, Commissioner
Estimated Project Dates: 07/01/2011 - 09/01/2018 **Contact Phone:** (907)465-3901

Brief Summary and Statement of Need:

This is a new capital request to fund the study and mapping of potential arctic deepwater port sites, in conjunction with the United States Army Corps of Engineers (USACE). 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 United States Coast Guard (USCG) to protect and patrol the State's arctic waters. USCG icebreakers and other vessels require a minimum of -35 feet. Additional funding to complete the study would be required in FY2013 and FY2014.

Funding:	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	Total
Fed Rcpts	\$2,500,000	\$500,000	\$500,000				\$3,500,000
Gen Fund	\$1,750,000	\$500,000	\$500,000				\$2,750,000
Total:	\$4,250,000	\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$6,250,000

<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 checked="" 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	
Totals:	0	0

Additional Information / Prior Funding History:

This project is focused on studying and mapping the Arctic coast in conjunction with the Army Corps of Engineers for a deepwater port site. A separate statewide digital mapping project has received prior capital funding: DNR: \$6,000,000 GF total, \$7,000,000 federal receipts. DMVA also received \$11.4 million in federal receipts in FY06 for this project under what was known as the Alaska Aviation Safety Program.

Project Description/Justification:

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. In the short term, this would serve as the northernmost port for the USCG, 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, a potential arctic port 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 digital mapping and 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.

Attached are two digital mapping charts, one illustrating existing legacy IFSAR elevation data while the other illustrates the 2010 elevation collection. The legacy data is sporadic (i.e. mountain passes and etc.) and with exception of the northern oil and gas regions, the digital data is old and inadequate.

Accurate elevation data supports all types of resource, infrastructure and economic development through the streamlining of permitting and construction of supporting networks. This is accomplished through a thorough understanding of the terrain and how the terrain will impact engineering, construction and supply. It also impacts the mitigation of spills, contamination and cleanup.