



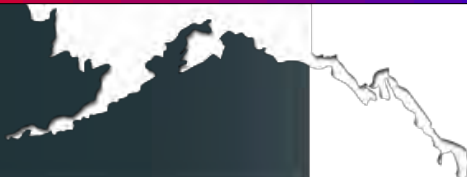
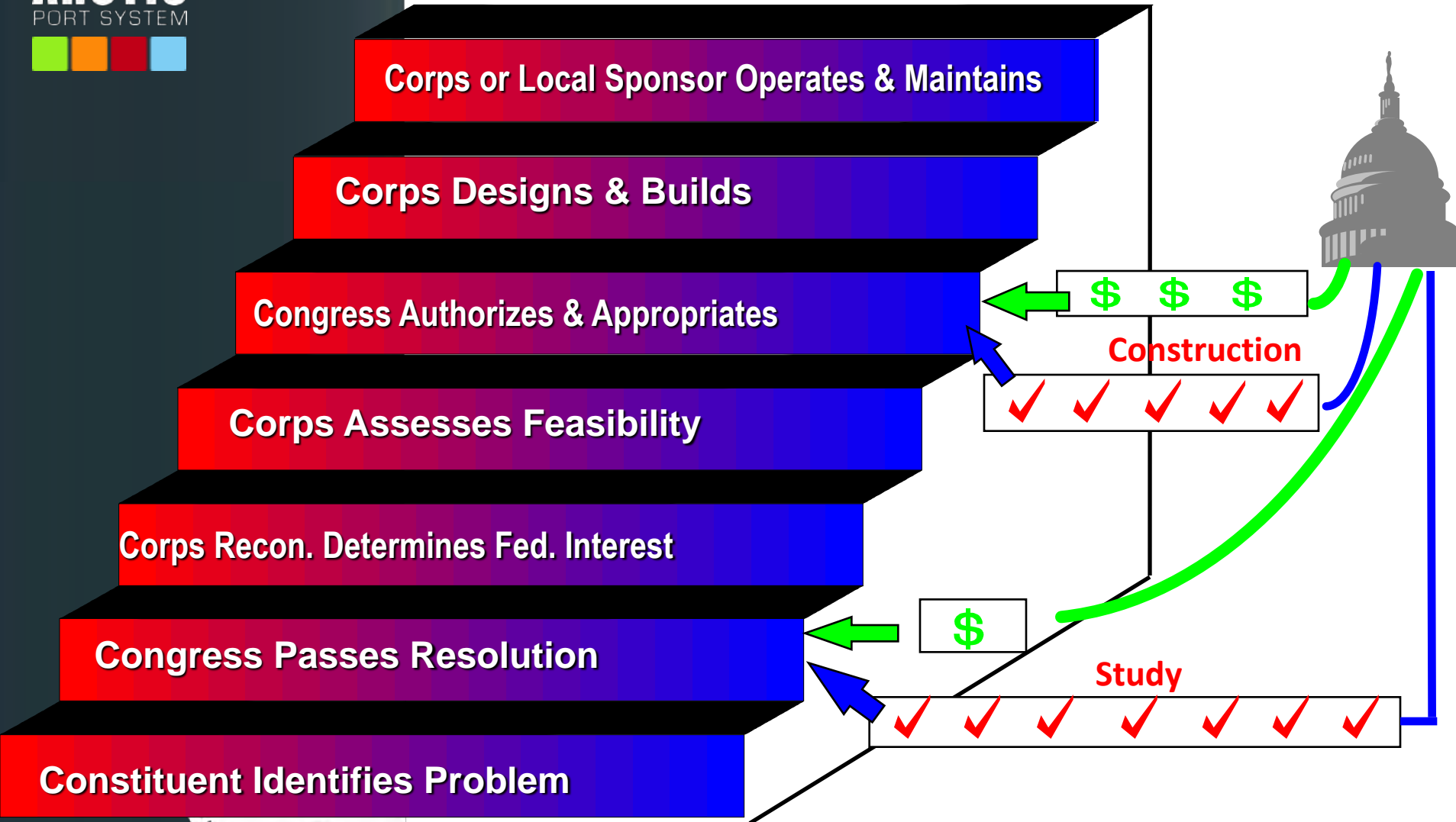
ALASKA DEEP-DRAFT ARCTIC PORT SYSTEM



Presented to Alaska Support Industry
Alliance – 23 April 2015



Steps to a Civil Works Project



Project Need

- Large vessel traffic is increasing and more than 60% of these vessels are foreign flagged.
- Greater traffic heightens risk of incidents, accidents, and potential threats to subsistence and national sovereignty.
- Emergency response can be many days travel away.
- Community resupply costs are high.
- State policy calls for increased development of mineral, oil and gas resources in the Arctic.
- Increased national concern for energy sufficiency.



Study Authority

House Public Works Committee Resolution
dated 2 December, 1970 states:

“Resolved by the Committee on Public Works of the House of Representatives, United States, that the Board of Engineers for Rivers and Harbors is hereby requested to review the reports of the Chief of Engineers on Rivers and Harbors in Alaska, published as House Document Numbered 414, 83rd Congress, 2nd Session; and other pertinent reports, with a view to determining whether any modifications of the recommendations contained herein are advisable at the present time.”



USACE Planning Process



SMART Planning
S Specific
M Measurable
A Attainable
R Risk Informed
T Timely

Feasibility studies target completion in 18 months - but no more than three years, at a cost of no more than \$3 million, and of a "reasonable" report size.



The greatest need for Arctic marine infrastructure is the area from Bethel west and north and then east to the Canadian border.

Study Area



Site Selection Criteria

The primary criteria for evaluation of each site's physical suitability as a deep-draft Arctic port were:

- Ports Proximity to Mission(s)
- Intermodal Connections
- Upland Support
- Natural Water Depth
- Navigation Accessibility





Distance to Deep Water

Sites Considered from NWTF and Roads to Resources	miles to minus 35' (5.8 fathoms)	miles to minus 45' (7.5 fathoms)
Port Clarence/Teller	0.08	1.67
Cape Darby	0.08	0.13
St. Paul Island	0.18	0.5
Nome	0.24	0.54
Barrow	0.7	1
St. Lawrence Island	0.92	1.15
Wainwright	0.92	1.27
Point Franklin	1.3	2.2
Cape Blossom (Kotzebue)	1.7	4.6
Cape Thompson (Point Hope)	1.7	2.2
Mary Sachs Entrance	4.25	5.1
Mekoryuk (Nunivak Island)	4.3	7.1
Prudhoe Bay	6.9	7.8
Bethel	120	130



Site Shortlist

- All sites, all purposes, all criteria, equal weights:
 - Nome, Port Clarence (Teller), Cape Darby
- Oil and Gas sites – water depth limited to minus 35-feet
 - Nome, Port Clarence (Teller), Barrow
- Mining Sites – water depth limited to minus 45-feet
 - Nome, Cape Darby, Port Clarence (Teller)



Problem Statement

Increased vessel traffic coupled with limited marine infrastructure along Alaska's Western and Northern shores poses risks for accidents and incidents, increases response times for Search and Rescue, and requires international coordination.



Opportunities

- Develop local and regional economies (i.e. resource extraction, tourism, research)
- Decrease the cost to exist in the Arctic region
- Improve cooperation and sharing between Nome, Port Clarence, and Teller (and possibly Brevig Mission)
- Provide protected moorage to support offshore oil and gas endeavors, fishing fleet, and resource extraction vessels



Opportunities Cont'd

- Provide vessel repair and maintenance support
- Improve international relationships
- Increase U.S. exports
- Optimize economic benefits while preserving natural resources
- Raise awareness of U.S. as an Arctic Nation
- Provide upland support to vessels operating in the region (i.e. fuel, water, electricity, food, medical, storage facilities, laydown/staging area for resource extraction)



Screening Alternatives

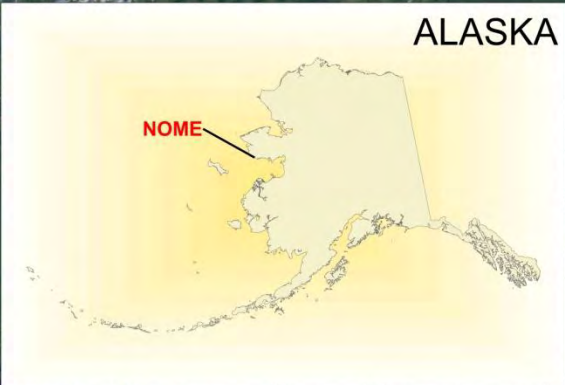
- Three geographic sites:
 - Nome
 - Point Spencer
 - Cape Riley
- Alternatives included various combinations of the sites



Project Purpose?

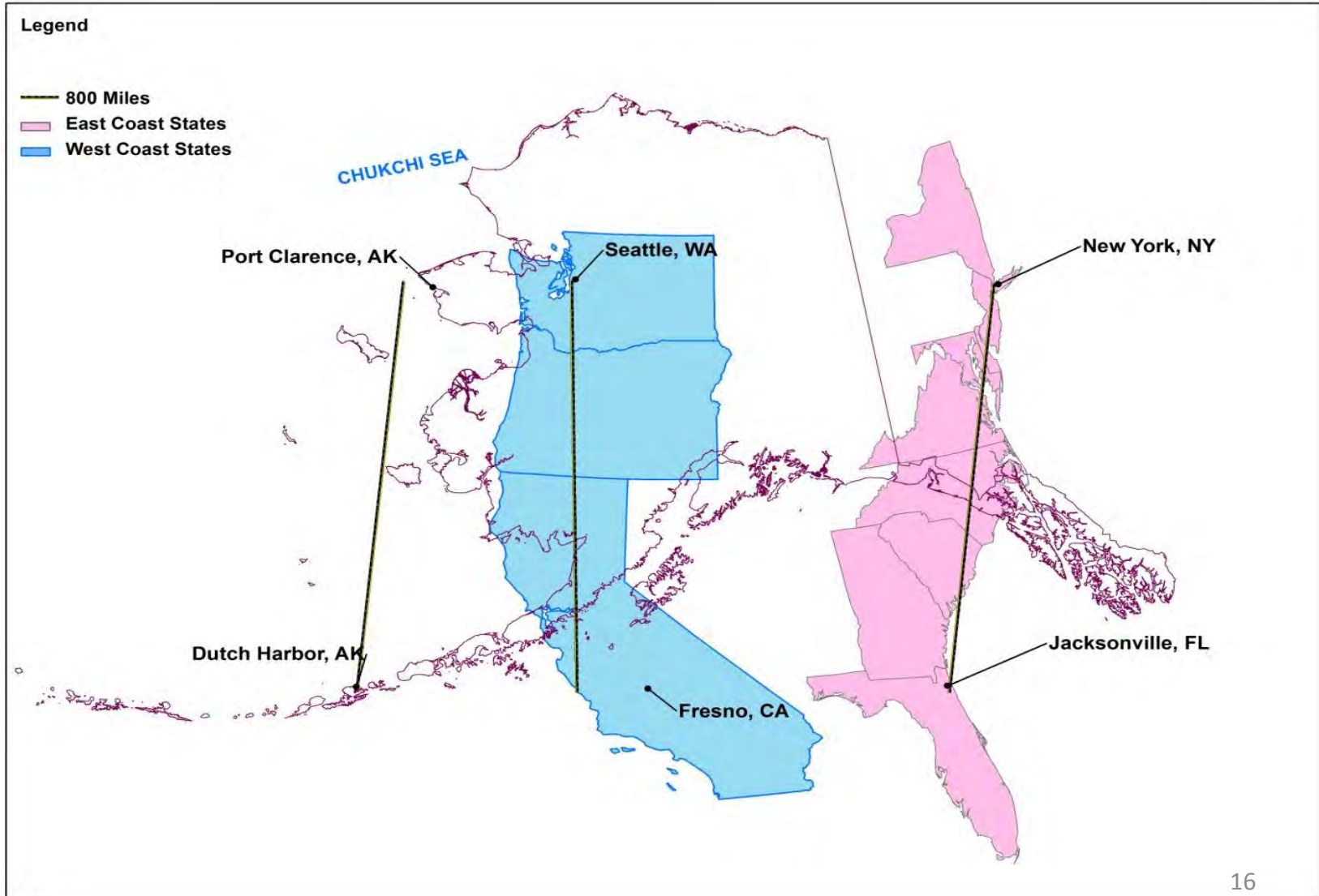
- Mining to support Governor's Roads to Resources program
- Ability to respond to Search and Rescue or Oil Spill Response
- Support to the offshore oil and gas activity
- Reduce existing congestion in area







What does 800 miles look like?



Location Update

- Cape Riley no longer under consideration:
 - Could serve the Graphite One Mine and potential transfers from Point Spencer
- Point Spencer no longer under consideration:
 - Could serve the oil and gas industry, regional fuel transfer, search and rescue
- Neither location pencils out right now for a positive benefit/cost ratio



Nome proposal

- Accommodate line haul fuel barge, ice breakers, cargo barges, tanker, Coast Guard cutters, NOAA, research vessels, landing craft, tugs
- Extend existing causeway 2,150 feet
- Demolish existing spur breakwater
- Construct 450-foot dock
- Potential dredging, breakwater, and additional dock configurations
- Dredging to minus 28-feet – optimization of this depth underway





Port of Nome

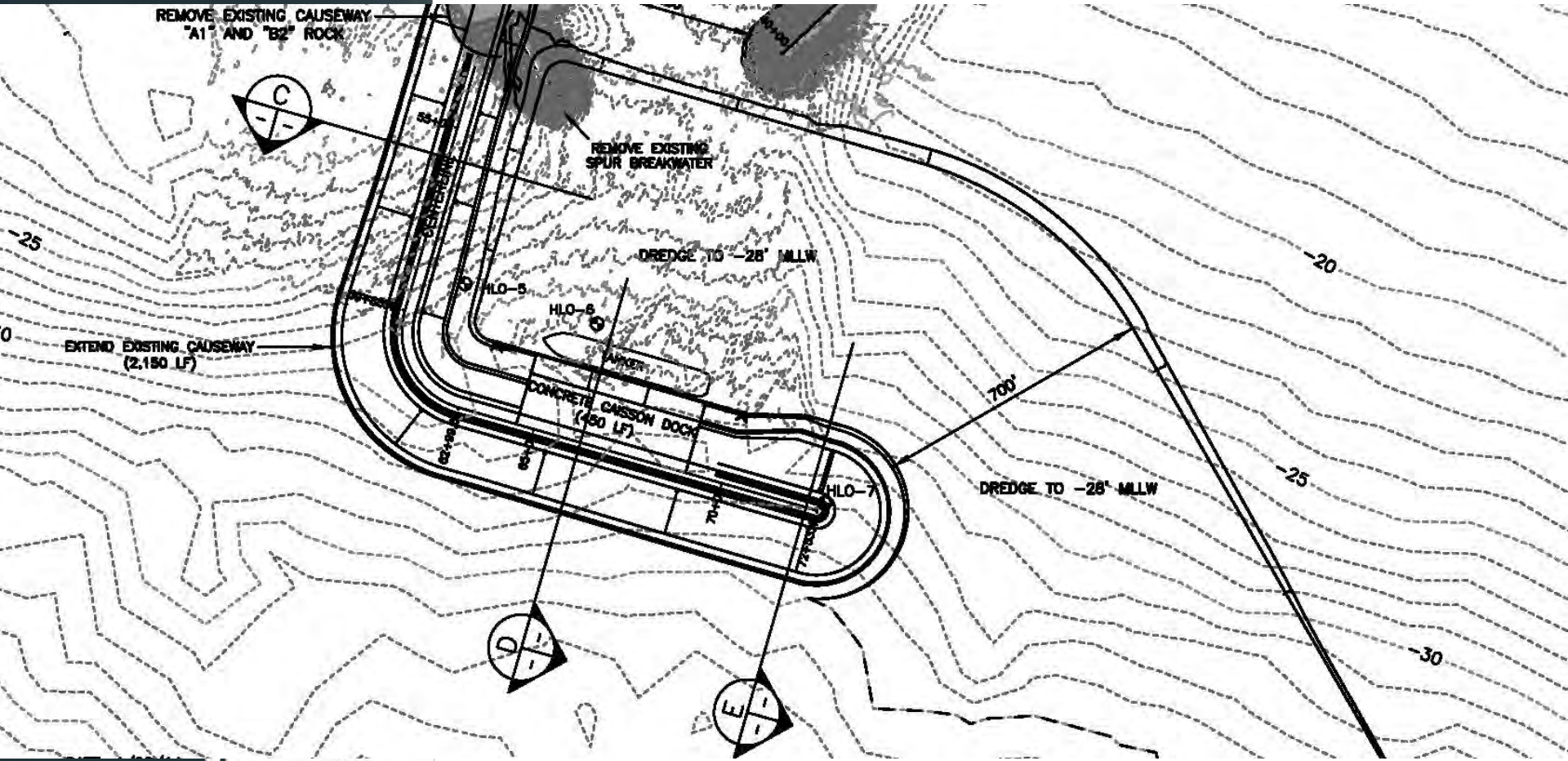
Port of Nome

August 2011





Nome Proposal



Scenario Analysis

Scenario Name	Total Present Value Transportation Costs		Average Annual Benefits
	Future Without Project	Future With Project	
Base Case	\$667,694,000	\$638,414,000	\$1,220,000
No Growth	\$582,690,000	\$565,839,000	\$702,000
Oil and Gas Scenario	\$2,860,570,000	\$2,583,621,000	\$11,542,000



Tentatively Selected Plan

Item	Value
Total Cost	\$207,818,000
Average Annual Cost	\$9,195,000
Total Benefits	\$276,948,000
Average Annual Benefits	\$11,542,000
Net Annual Benefits	\$2,347,000
Benefit to Cost Ratio	1.26

Note: Estimates of costs and benefits as of Feb 2015. Updates to study from the review process may result in changes to these numbers.

Environmental

- Water Quality
- Air Quality
- Noise
- Biological Resources
 - Terrestrial (beach nourishment)
 - Marine (habitat conversion)
 - Threatened & Endangered Species
- Historic & Cultural Resources
- Cumulative Impacts



Environmental

- CEQ NEPA Efficiency Guidance (2012)
 - “NEPA reviews should coordinate and take appropriate advantage of existing documents and studies, including through adoption and incorporation by reference”
- Previous Environmental Studies at Nome Harbor
 - Navigation Improvements Final Interim Feasibility Report and Environmental Assessment (July 1998)
 - Environmental Assessment and Finding of No Significant Impact, Maintenance Dredging of Nome Harbor Entrance Channel (October 2012)



Timeline (USACE process schedule for completed Feasibility Study)

- Alternatives Milestone – 15 May 2013 (Actual)
- Tentatively Selected Plan concurrence – 16 December 2014 (Actual)
- Public/ATR/IEPR/Policy Review of draft report (started 20 February 2015)
- Agency Decision Milestone
- MSC Submittal final report
- Civil Works Review Board
- Submit Chief's Report



What happens then?

- Now that we have Tentatively Selected Plan concurrence:
 - Draft report updates(ongoing)
 - Respond/address all comments
 - Get required review certifications
 - Prepare for meeting with senior leaders at USACE HQ for ADM



What happens after feasibility study signature?

Once the Chief of Engineers signs decision document:

- Final feasibility report goes to

Congress for action:

- Authorization to construct (WRRDA type action)
- Appropriations to construct (funding)



What happens after Congress acts?

- Once Congress authorizes the project and appropriates the funds:
 - Enter the Preconstruction Engineering and Design Phase
 - Identify project sponsor and sign cost-share agreement
 - PED estimated to last about 2 years



What happens after PED?

- After the PED phase:
 - Enter the Construction Phase
 - Identify the project sponsor
 - Find the money
 - Construction estimated to take about 3 years



More Information....

State website and email

<http://www.dot.alaska.gov/stwddes/desports/arctic.shtml>

dot.jhq.arcticportstudy@alaska.gov

Federal website and email

<http://www.poa.usace.army.mil/Library/ReportsandStudies/AlaskaRegionalPortsStudy.aspx>

Akregports@usace.army.mil



Time for Questions

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