# A PURCHASE

# Alaska Department of Transportation & Public Facilities Alaska Deep Draft Arctic Ports Study Michael Lukshin, P.E.

July 8, 2011





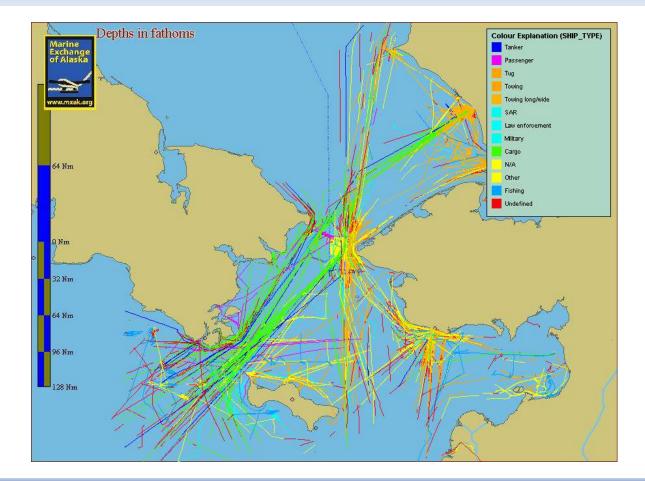




Captain William Deal (Commanding Officer of Coast Guard station Kodiak) flying the HC-130 Hercules over the coast near Barrow on the last Arctic Domain Awareness flight of the year. Photo by Dennis Zaki



# Arctic marine traffic is increasing





# May 16-17, 2011 planning charrette

State Government

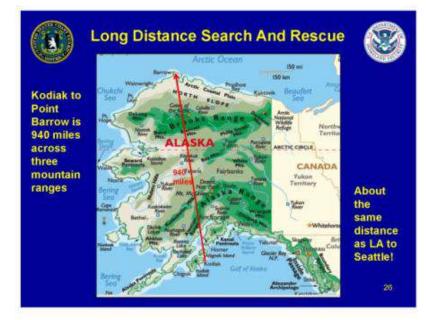
•Governor Parnell requested funding for a 3-year Arctic Ports Study to support a deep draft port (minimum of -35 feet depth) and economic development in Alaska.

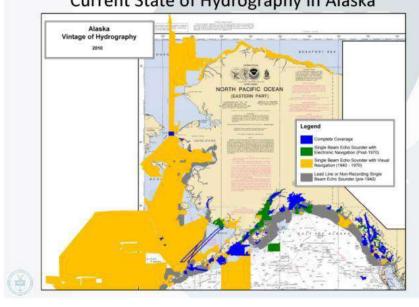
## **Federal Government**

•The Alaska Congressional delegation sponsored legislation highlighting the need for U.S. Arctic ports to support national sovereignty, environmental stewardship and life safety.



# **Panel #1 – Federal Interests**



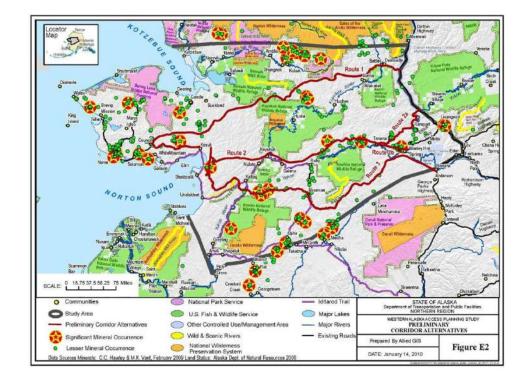


#### Current State of Hydrography in Alaska



# **Panel #2 – State Interests**







# **Panel #3 - Funding Options**

Who Pays?	Our Money	Other's Money
When?		
Now	Direct appropriation from GF (Example state or local capital budget)	Appropriation from Federal Government (Example: Federal Earmarks)
Future (Borrowing)	Our Child P3's-Private (Example: G capital funds; user's pay over time.	



# **Breakout #1 - Define Arctic Geography**



Arctic region defined in US law





## **Breakout #2 - Define Vessel Parameters**

- Diverse vessels types
- Desired depth 20-50'
- Increased traffic
  - SAR
  - Life safety
  - Spill response
- Need tugs
- Port infrastructure lacking

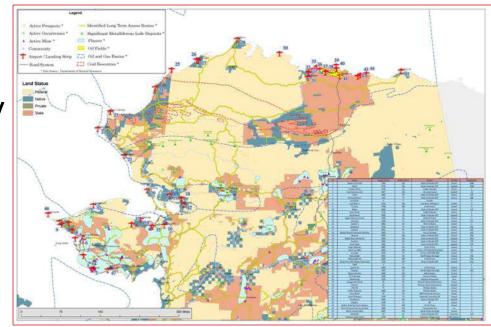






# **Breakout #3 - Port Siting**

- No one port solution
- Need port marine and upland facilities
- Partnerships necessary
  - Federal
  - State
  - Local
  - Resource development and industry





## **Breakout #4 - Draft Study Outline**

**1.Executive Summary** 

2.Introduction

**3.Driving Factors** 

**4.**Potential Port Sites

5.Land Access

6.Environmental Constraints

7.Vessel Parameters

8.Design Criteria

7.Port Site Evaluation

8.Port Structures

9.Port Layout Concepts

**10.Infrastructure** Requirements (Shore-side)

**11.Cost Estimates** 

**12.**Schedule

**13.**Conclusion



# Conclusion

What's Clear?

What's Unclear?

**Possible Interim Solutions** 

Next steps



# Questions

For more information, contact:

Michael Lukshin, State Ports & Harbors Engineer, DOT&PF michael.lukshin@alaska.gov

Eric Taylor, Transportation Planner, DOT&PF eric.taylor@alaska.gov

Conference presentations, maps and summary are posted online at <u>http://www.poa.usace.army.mil/en/cw/AKPortsStudy.htm</u>

# **Possible Questions**

## **Q: Will the Arctic be ice-free?**

A: No one is forecasting year-round navigation in the Arctic. It is not anticipated that there will be an ice-free port in the Arctic anytime soon. All this really means is that there may need to be multiple ports, some with seasonal use/ access only.

#### **Q:** Is an Arctic Ocean, between Europe and Asia, route faster?

A: Yes and no. It does save 3000 miles of shipping time but it carries a higher risk for ships because the Arctic is not ice-free. Timing is the essence of shipping. Like ballet dancers, the dancers don't need to be especially swift but they do need to hit their marks perfectly on cue. That's hard to do when you are dancing in and around a jumble of ice.

### **Q: Why cant we put the Arctic port on the STIP?**

A: Ports and harbors not eligible for FHWA/FAA funding are therefore are not included in the STIP.

### **Q:** Are public-private partnerships a new idea?

A: No. We used P3's to build the early US toll roads and the transcontinental railroad. So you can see that they have been around for a long time. But they are being pursued with new vigor by DOT's and state government given the challenging national and global financial market.