

# ALASKA'S ARCTIC DEEP-DRAFT PORT AT NOME

DRIVING REGIONAL EMPLOYMENT EXPANDING ALASKA'S ECONOMY SUPPORTING NATIONAL SECURITY

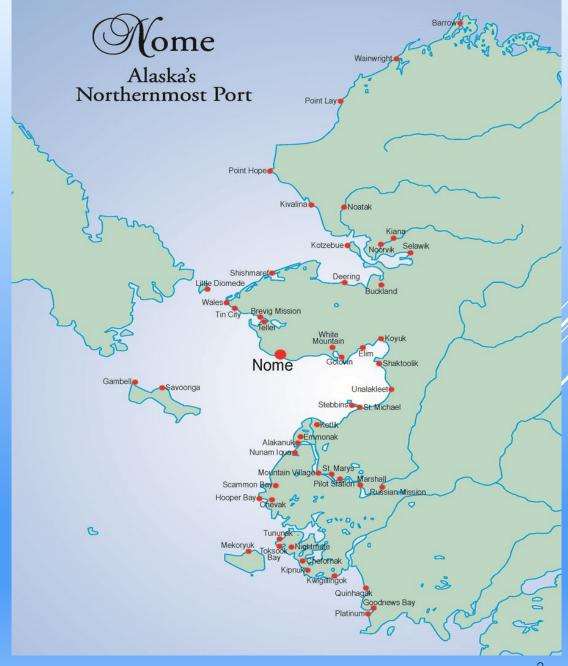
Finance Committee
Alaska State House of Representatives
March 2022





## REGIONAL TRANSSHIPMENT HUB

- Serving over 60 communities (Platinum to Barrow)
  - Maritime Hub Services
    - Community resupply (fuel, vehicles, equipment, buildings, appliances, groceries)
    - Commercial & Subsistence fisheries
    - Construction project equipment/materials
    - Environmental/Oil Spill Response
    - Resource Development
    - Search and Rescue
    - Scientific research
    - Industrial support
    - ▶ Tourism



## COMMODITY MOVEMENT









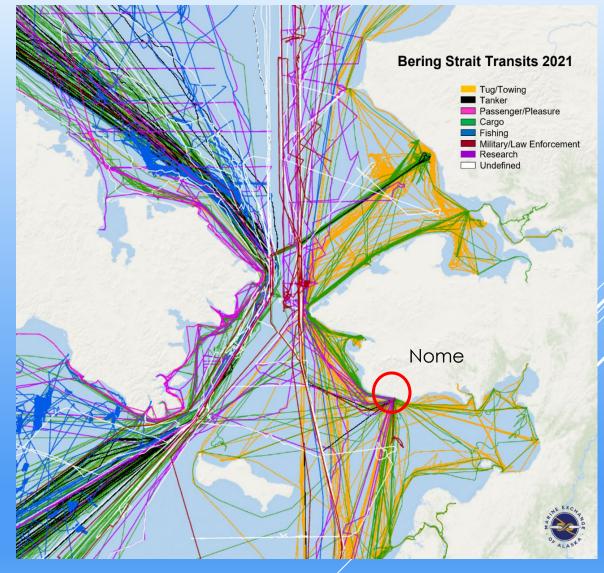
Deliveries to Shore



## BERING STRAIT VESSEL TRAFFIC

Year	Northbound	Southbound	Total
2009	136	126	262
2010	128	114	242
2011	124	115	239
2012	154	162	316
2013	171	173	344
2014	130	125	255
2015	232	220	452
2016	158	182	340
2017	164	196	360
2018	183	175	358
2019	241	236	477
2020	260	290	550
2021	278	277	555

Bering Strait transits have increased by 112% since 2009



Extent of vessel movements during the ice-free season

## GENERAL NAVIGATION FEATURES (GNF) COST-SHARED WITH CORPS

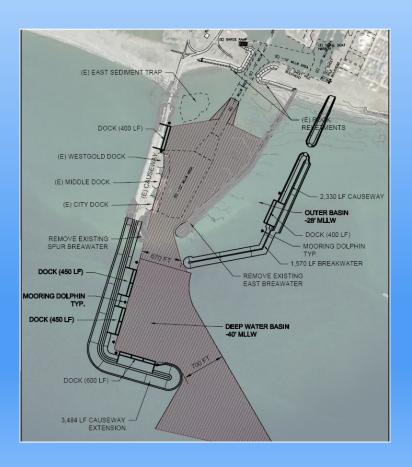
#### PHASE 1

- Stub BW removal
- Causeway extension
- Dock construction



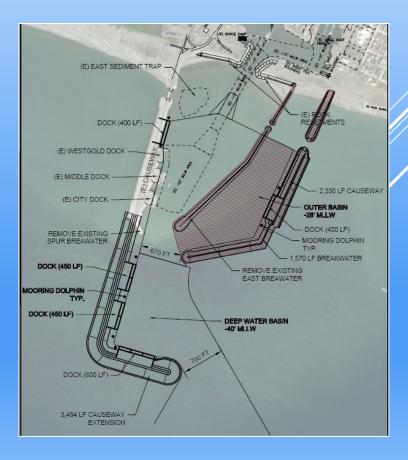
### PHASE 2

- Deep water basin dredging
- Outer basin expansion



#### PHASE 3

- East BW demo
- Outer basin expansion
- East causeway construction





## PORT OF NOME

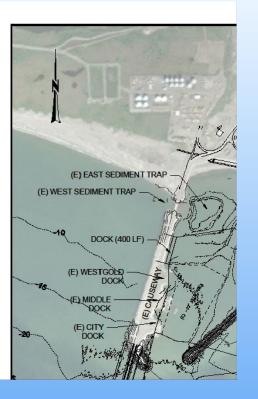




## ARCTIC DEEP DRAFT PORT MODIFICATIONS

## PROJECT PURPOSE AND

- Only deep-Water port in the U.S. Arctic.
- Serves as critical link for regional communities to rest of Alaska.
- Existing port facilities in the region are overcrowded, with insufficient draft to accommodate larger, deep-draft vessel traffic.
- Purpose of this project is to provide safe, reliable, and efficient maritime transportation for movement of commerce, national security, and tourism at the Port of Nome.
- Proposed project objectives:
  - Search and Rescue, Oil Spill Response, Resource Exploration
  - Reducing draft limitations for more efficient vessels.
  - Increasing dock space for safety & to avoid delays.
  - Widen navigable space for more efficient vessel maneuvering.



## TARGETED BENEFITS OF ARCTIC DEEP-DRAFT PORT AT NOME

National Security & Life Safety
Strengthen U.S. presence in Arctic
Critical refuel/resupply support for SAR

Environmental Safety

Regional staging for oil spill response assets Reducing need for offshore fuel transfers

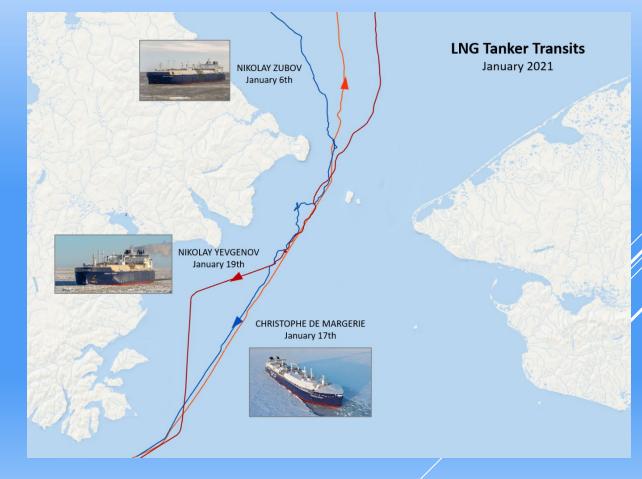
Economic/Cultural Sustainability

Lowering regional transportation costs

Bringing economic opportunity to the region

Research & Resource Development Enhanced mission support through hub services

Tourism & Recreation



Support increased ship calls (23 ships scheduled 2022) with more ice-hardened hulled vessels coming online

## NATIONAL SECURITY/MARINER SAFETY

- National Security
  - Strengthen U.S. presence by expanding Arctic Ports to stage strategic assets
  - ► Establish year-round Arctic facilities to drive further infrastructure development
- Life Safety
  - Enable Coast Guard to operate more efficiently in Arctic with base support
  - Increase response capacity to meet nearly double the demand in activity
  - ► Expand on role as a port of refuge



## ARCTIC PORT RECEPTION FACILITY

- Polar Code changes have escalated the need for port reception facilities in the Arctic to provide ships an alternative to discharging waste into the water.
- As the only coastal port in the region, Nome commissioned a feasibility study in 2017 to investigate serving that role.
- Increased vessel transits in the Bering Strait highlight the need to accelerate development.
- Nome is currently seeking to obtain funds to finalize design and construct an APRF.

## HOW THE **POLAR** CODE PROTECTS THE ENVIRONMENT

OIL



Discharge into the sea of



STRUCTURE ottom required for all oil less than 5,000dwt (A/B



HEAVY FUEL OIL MARPOL). Ships are encouraged not to use or carry heavy fuel oil in the



or water-based systems

#### INVASIVE SPECIES



INVASIVE AQUATIC SPECIES aquatic species through ships ballast water and biofouling

SEWAGE

discharges treated sewage as far as practicable from the earest land, any fast ice. ice shelf, or areas of specified

to discharge of sewage

in polar waters allowed



DISCHARGES II · Sewage not comminuted or disinfected can be discharged at a distance of more than 12nm from any ice shelf or fast ice · Comminuted and disinfected sewage can be discharged more than 3nm from any ice shelf or tast ice

#### GARBAGE





FOOD WASTES I Discharge of food wastes onto the ice is prohibited



ground (no greater than 25mm) can be discharged only when ship is not less than 12nm from the nearest land, nearest ice shelf, or



ANIMAL CARCASSES Discharge of animal carcasses is prohibited



The same requirements apply to

#### **BACKGROUND INFO**

- THE INTERNATIONAL CODE FOR SHIPS OPERATING IN POLA
- IT PROVIDES FOR SAFE SHIP OPERATION AND PROTECTS.
  THE ENVIRONMENT BY ADDRESSING THE UNIQUE RISKS

#### DEFINITIONS



designed to operate in polar

E) at least thin first-year ice C) open waters/ice condition

FAST ICE: Sea ice which forms and remains. fast along the coast, where it is attached to the shore, to an ice wall, to an ice front, between

> CE SHELF: A floating ice sheet of considerable thickness showing 2 to 50m or ore above sea-level, attached to the coast

#### CHEMICALS

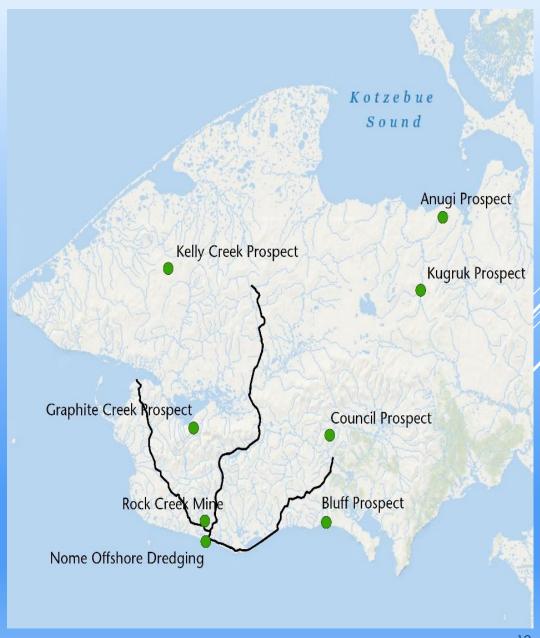


Discharge of noxious liquid substances (NLS) or mixtures containing NLS is



## MINING & RESOURCE DEVELOPMENT

- Development of onshore mineral deposits
  - Gold, graphite, lead, zinc, and silver
  - Supplies/equipment mobe/demobe
  - Mineral export active & potential
- Active quarry stone mining at Cape Nome
  - Highest-grade quality basalt
  - Estimated production of .5 million tons since 1984
  - Quarry life expectancy = 100+ year estimate
- Project rock quarry at Cape Darby
- Offshore mining activity continues to grow



## ECONOMIC BENEFITS - DURING CONSTRUCTION

## **ACROSS 4-5 SUMMER SEASONS\***

- Regional:
  - Jobs: 818 Income: \$77.6M + \$100M secondary spending
- <u>Statewide (below includes regional):</u>
  - Jobs: 2,938 Income: \$207M + \$291M secondary spending
- National (below includes regional and statewide):
  - Jobs: 5,515 Income: \$365M + \$545M secondary spending

\*Source: USACE Modifications Feasibility Study – Economics Appendix

## ECONOMIC BENEFITS – POST CONSTRUCTION

## LONG TERM OPERATIONS AND MAINTENANCE\*

Regional:

Jobs: 5 Income: 607K + \$802K secondary spending

<u>Statewide (below includes regional):</u>

Jobs: 34 Income: \$2.4M + \$3.3M secondary spending

National (below includes regional and statewide):

Jobs: 60 Income: \$4M + \$5.9M secondary spending

<sup>\*</sup>Source: USACE Modifications Feasibility Study – Economics Appendix

## PHASE 1 – FINAL DESIGN & CONSTRUCTION

					GNF	+10%
(In Millions)	75%	25%		100%	+LSF	GNF
		GNF		LSF		
	COE	NFS	TOTAL+	NFS	NFS Total	NFS
Phase 1	\$250	\$83	\$333	\$81	\$164	\$33
Final Design/Bid/LSF Inspect.	N/A	N/A	N/A	\$8.6	\$8.6	
Phase 2 – Design/Inspection	N/A	N/A	N/A	\$2.4	\$2.4	
NFS/CITY TOTAL		\$83		\$92	\$175	

GNF – General Navigation Features (cost-shared)

NSF – Non-Federal Sponsor (City)

LSF – Local Sponsor Facilities (100% City)

<sup>+</sup> Cost up front is 75%-25% with another 10% paid over time

## PROJECT DESIGN AND CONSTRUCTION SCHEDULE

	DE	SIGN	CONSTRUCTION			
PHASE	STARTS	100%	BIDS	AWARD	BEGINS	ENDS
1	July 2021	Jan 2023	March 2023	Sept 2023	Spring 2024	Fall 2025
City (NFS)		Sign PPA*	Provide Funds			
2	Nov 2022	TBD	TBD	TBD	Spring 2026*	Fall 2026**
3	TBD	TBD	TBD	TBD	Spring 2027*	Fall 2027**

<sup>\*</sup>Project Partnering Agreement

# ALASKA'S ARCTIC DEEP-DRAFT PORT AT NOME

## THANK YOU

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