

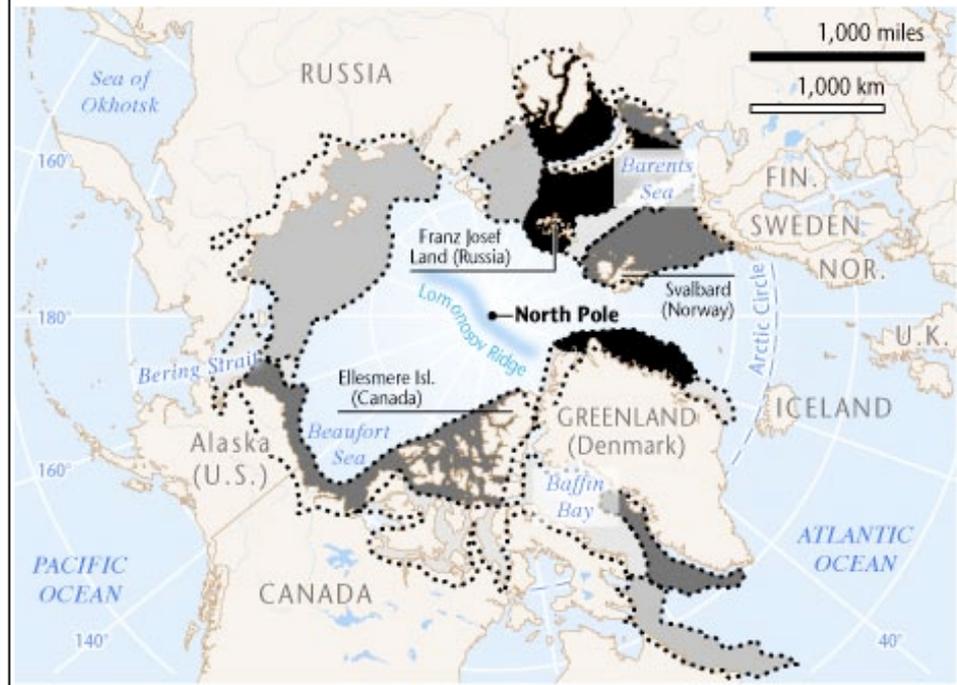
ARCTIC ENERGY CHALLENGES

Tom Barrett
Deputy Federal Coordinator
Office of the Federal Coordinator for
Alaska Natural Gas Transportation Projects
Alaska Export Council
January 06, 2010

ARCTIC ENERGY

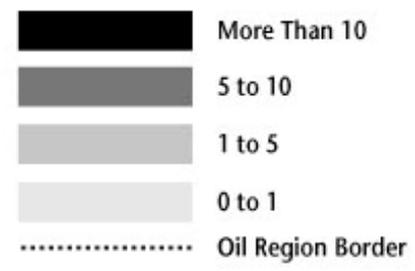
BACKGROUND
PROJECT UPDATE
CHALLENGES
FRAMING ISSUES

Arctic Oil and Gas Potential

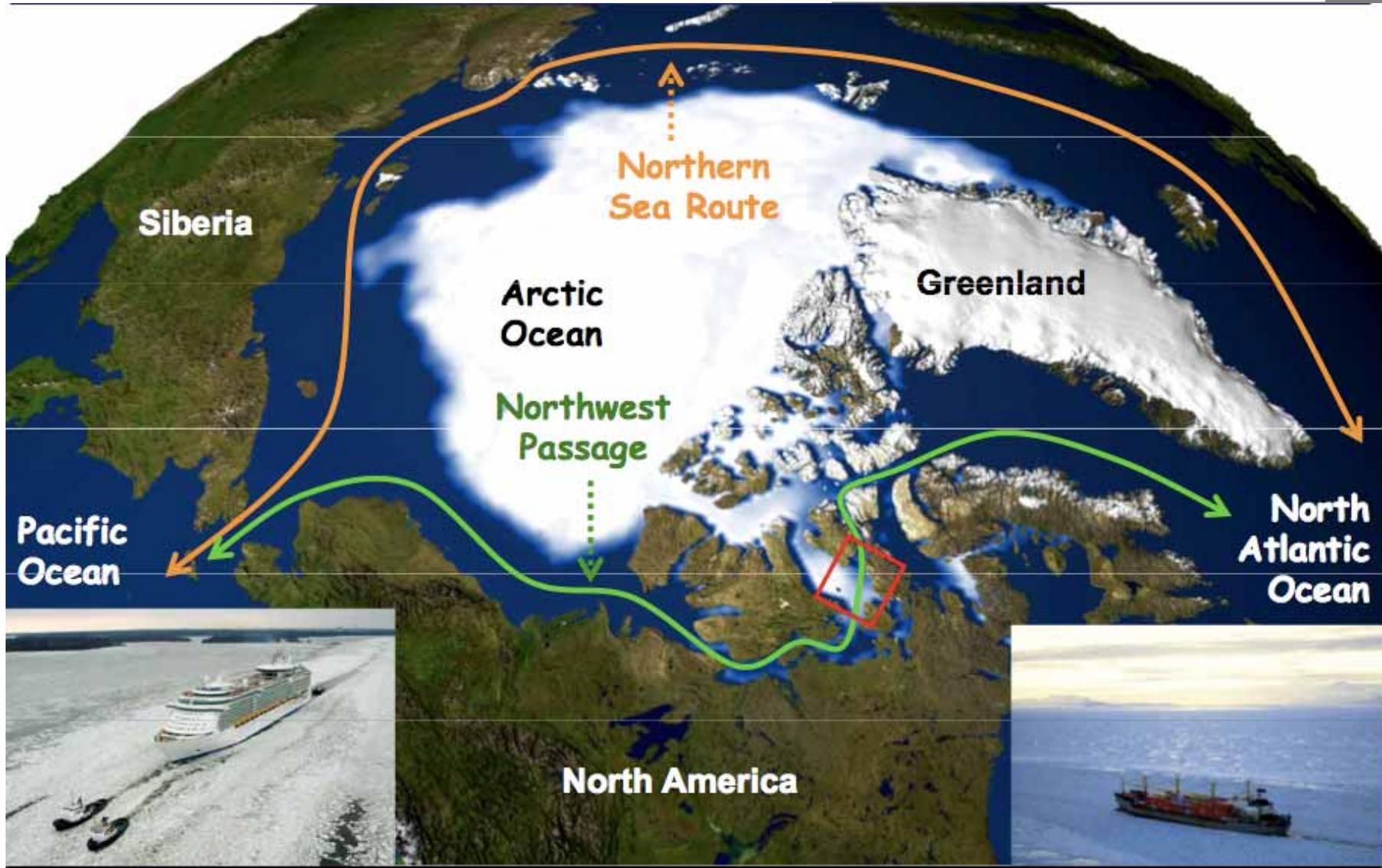


Estimated Oil, Gas Yet to Be Found

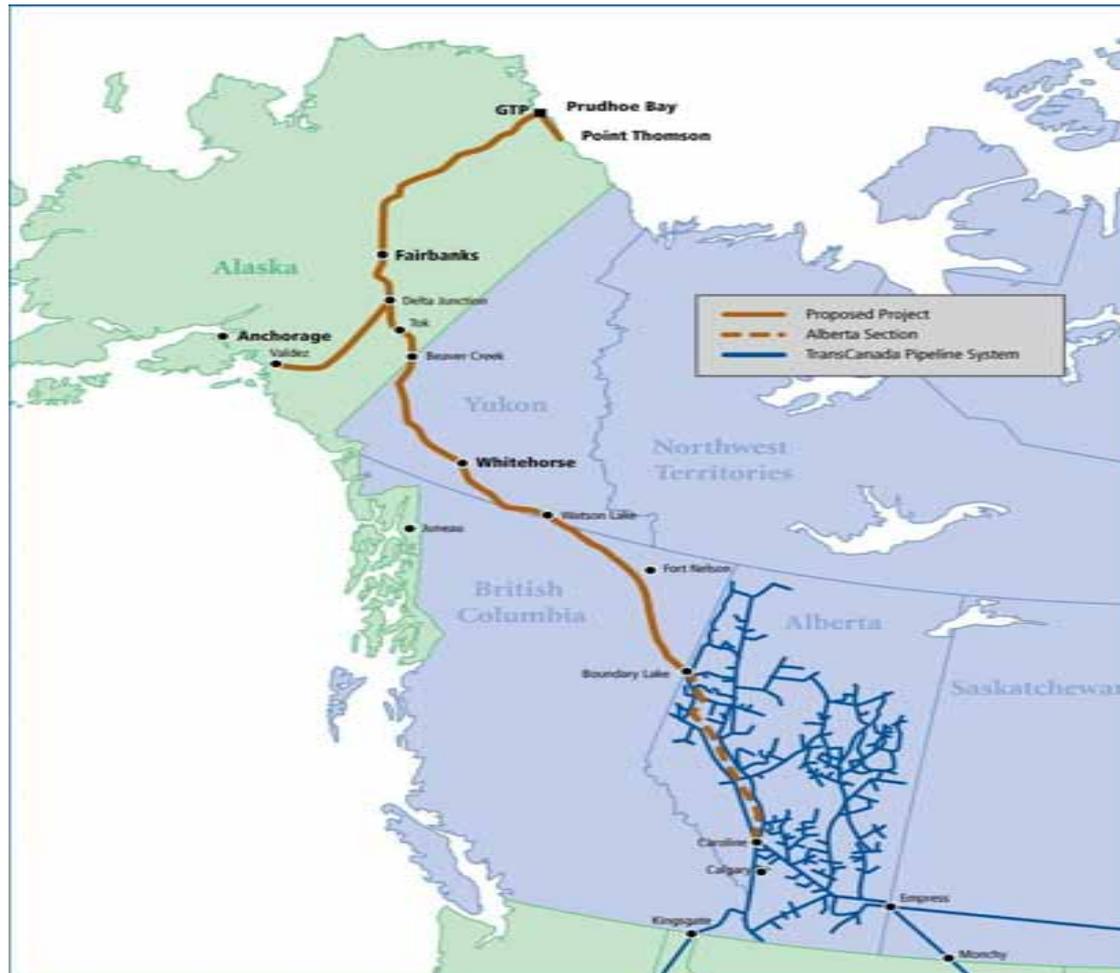
In billions of barrels of oil equivalent



SOURCE: Wood Mackenzie
Map based on a *Financial Times* graphic



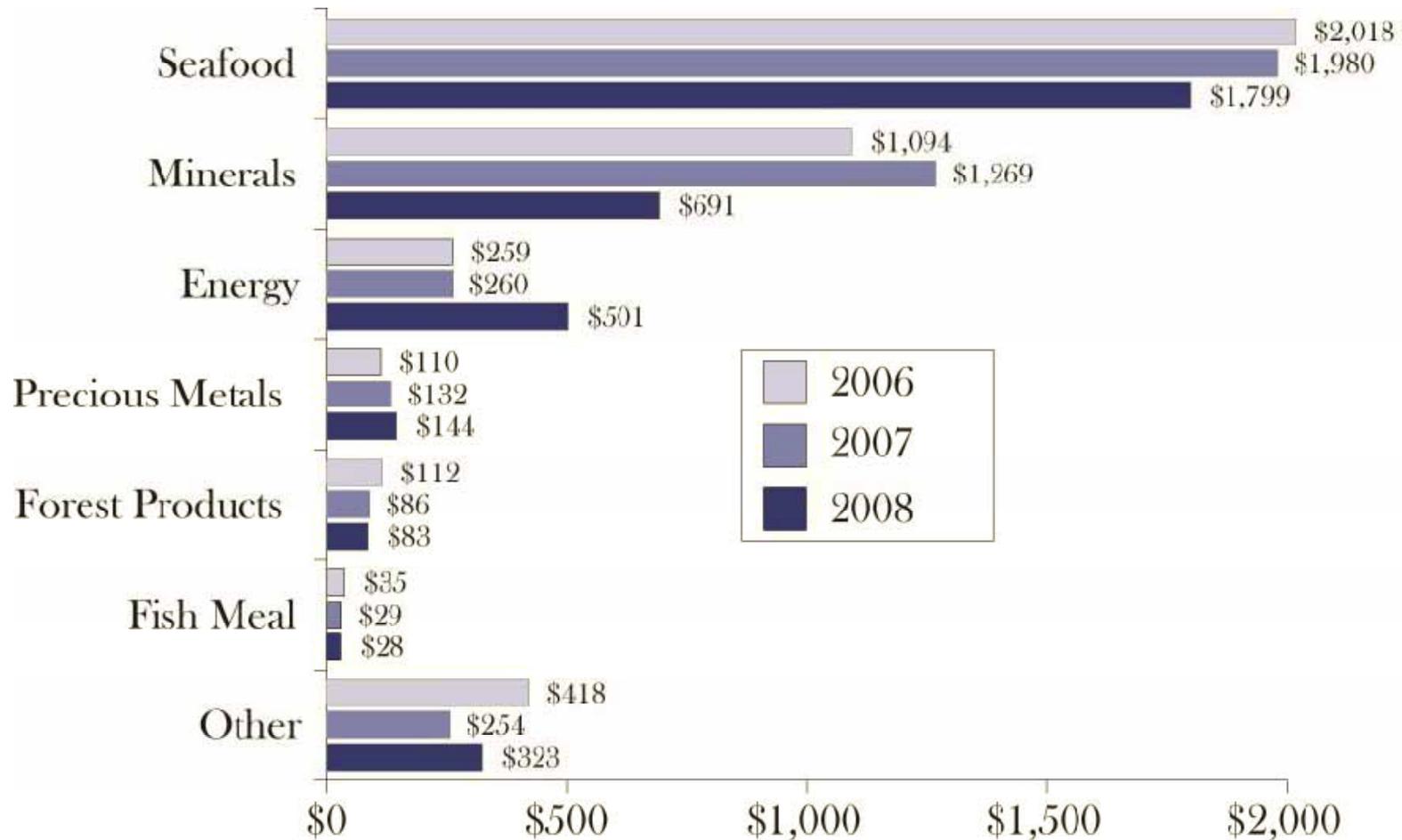
APP Gas Pipeline Route



Energy State Economic Driver

- ALASKA
 - 40 per cent of economy-90% of tax base-from oil/gas
 - 30 per cent federal spending
 - 30 percent tourism, fishing and mining(everything else

Alaska's Major Exports



Pipeline Applicants



ALASKA Pipeline Project

Denali Status

- Entered FERC Pre-File Process June 2008
- Argonne National Labs ID'd as FERC 3rd party contractor
- Discussions with potential shippers
- Offering routes from North Slope to Alberta (and beyond if needed)
- Open Season 2010

Alaska Pipeline Project Status

- Offering two routes: North Slope to Alberta Hub and North Slope to Valdez, Alaska (LNG Option)
- Discussions with potential shippers
- Entered FERC Pre-File Process May 2009
- Open Season 2010

Open Season Process

- Applicant files open season plan with FERC
- 30-day third party review/public comment
- Applicant has 15 days to respond to third party comments followed by 15-day FERC review
- 30-day period for applicant to finalize open season plan
- Applicant commences open season for at least 90 days
- FERC visit this month to help explain process



Challenges

1. Arctic Environment
2. Federal/ State/Canadian Permit requirements
3. Political/Policy Uncertainties

The Arctic

Cold still cold, $-40\text{F} = -40\text{C}$

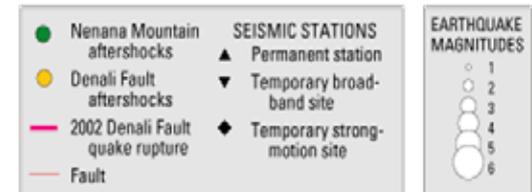
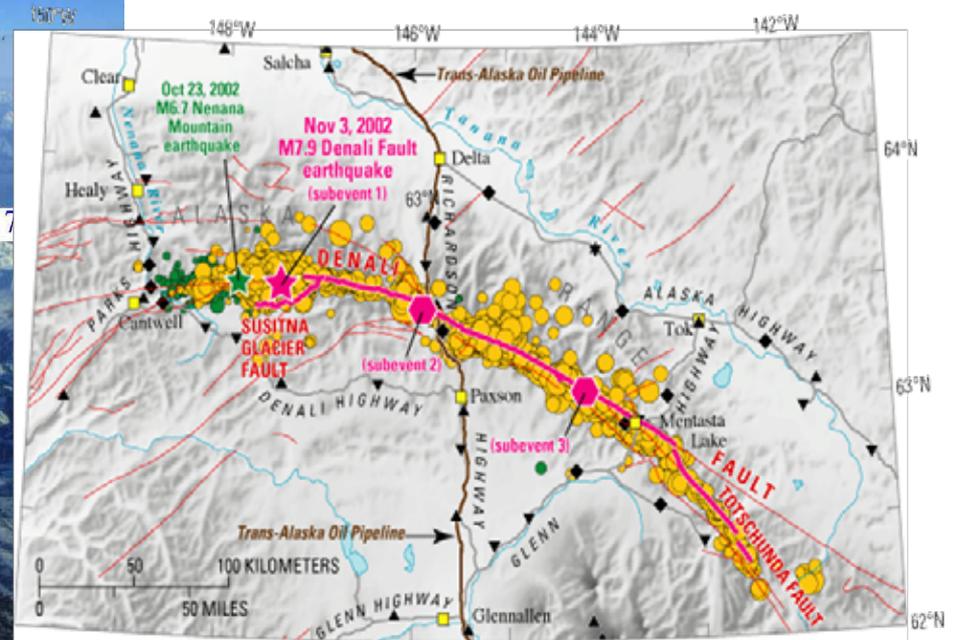
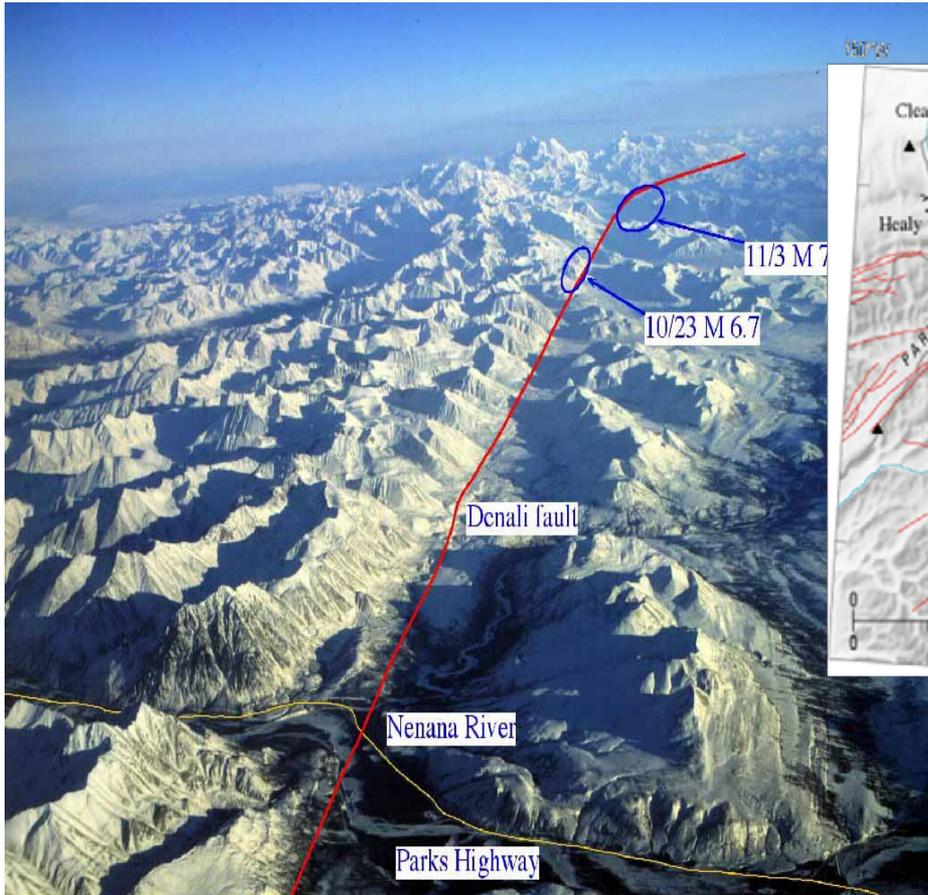
- WORST WEATHER
- Vast Distances (transportation \$\$ very high)
- Limited port, airport, road, rail,
telecommunications infrastructure

66N

Ice, darkness, permafrost, seismic, fires

- Incomplete/inaccurate mapping/resource data
- All Translate to COSTS(\$\$\$)
- ALL HAVE BEEN OVERCOME(for oil)

Seismic



Seismic



This rupture of the Tok Cutoff Highway in Alaska resulted from a magnitude 7.9 earthquake along the Denali Fault in 2002.



Peter Haeussler, USGS, prepares to measure the offset of a crevasse on the Canwell Glacier.

(OFC) and Permit Process

- Prevent Delay
- Lower Costs
- Avoid Unnecessary Conditions
- Agencies Cooperative

Constant Communication

- Gap analysis of permitting processes
- Permit matrix –advance ID data requirements
- Implementation plan for each applicant
- GIS prototype
- Technical review team

OFC GIS Prototype

- Authoritative base map
- Data integration
 - habitat analysis
 - cultural resource mapping
 - geotechnical data integration
 - infrastructure planning and analysis
 - wetlands



Uncertainties

Gas Market/Global Energy Dynamic

State Fiscal Terms

Climate Change Reactions

Carbon Caps/Cap and Trade Legislation

Conservation Issues

Optics

- Washington, D.C.
 - We passed legislation in 2004, why hasn't the project been built? What more can we do?
- Alaska
 - Competing visions and projects
 - Statewide energy needs and policy
- Canada
 - Mackenzie Gas line Project, Oil sands, and First Nations

Framing Issues

- Environment (Wilderness/Controlled Development)
- Polar bears
- Arctic People
- Jobs
- Existing Infrastructure

Economy/Jobs



Thanks!

- ❖ Appreciate your time and interest
- ❖ How can we help you?



**Office of the Federal Coordinator
Alaska Natural Gas Transportation Projects**

**Washington, DC Location:
1717 H Street, NW, Suite 801
Washington, D.C. 20006
(202) 478-9750**

**Anchorage, AK Location:
411 W 4th Ave. 2nd Floor
Anchorage, Alaska 99501
(907) 257-1364**

**<http://www.arcticgas.gov>
info@arcticgas.gov**