

**01/30/14
UPDATE:
ALASKA
STATE RAIL
PLAN, G7G,
& ARCTIC
PORTS**

<TARGET><BILL></BILL><SUBJECT>01-30-14 UPDATE ALASKA
STATE RAIL PLAN, G7G, and ARCTIC
PORTS</SUBJECT><COMM>STRA28</COMM></TARGET>



ALASKA DEEP-DRAFT ARCTIC PORT SYSTEM

2020 = BASE YR. OPTIMAL
2030 = GUESS



Presented to EDTT and Joint
Transportation Committee

30 Jan 2014

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.



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Study Authority

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

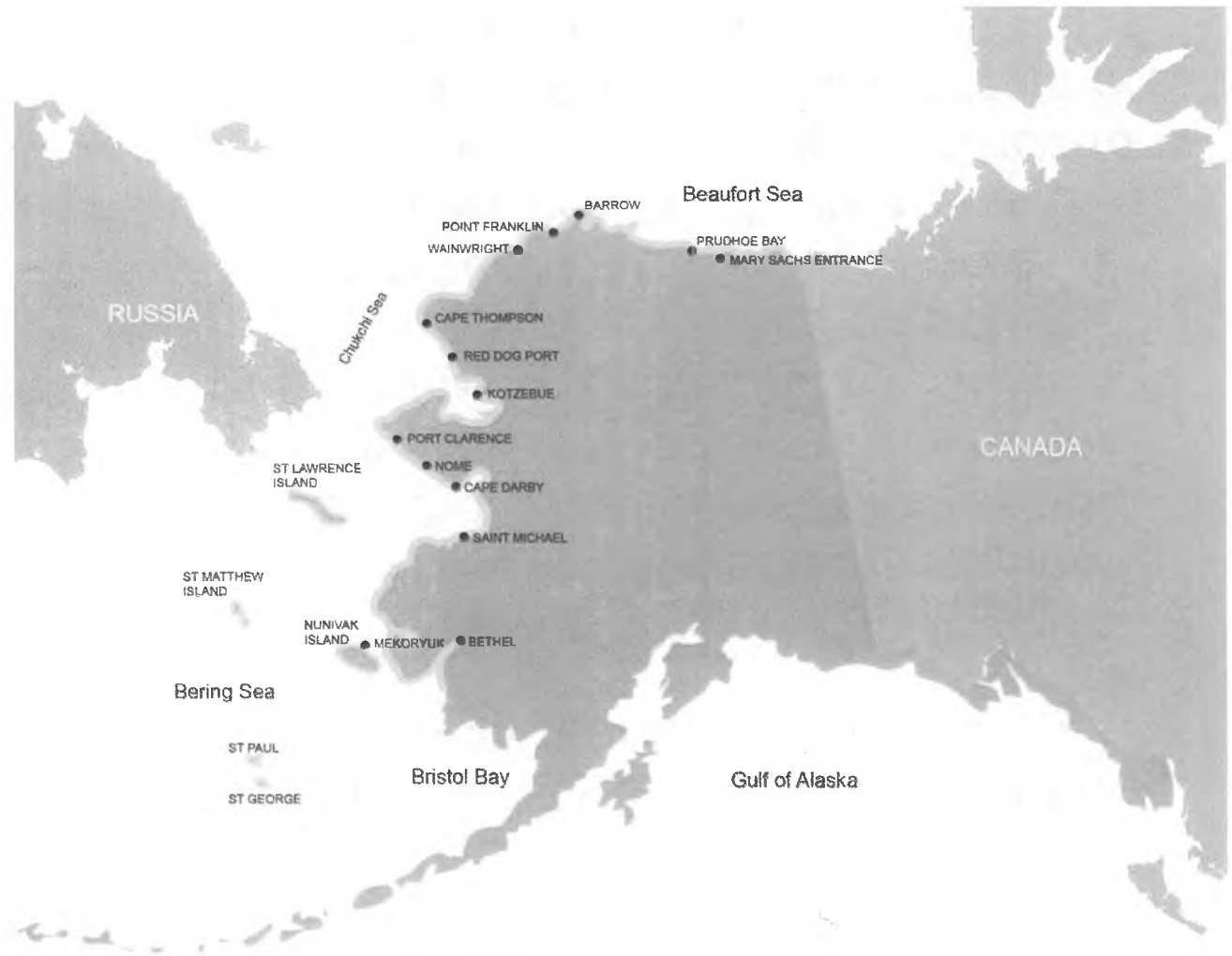
“Resolved by the Committee on Public Works of the House of Representatives, United States, that the Board of Engineers for Rivers and Harbors is hereby requested to review the reports of the Chief of Engineers on Rivers and Harbors in Alaska, published as House Document Numbered 414, 83rd Congress, 2nd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

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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

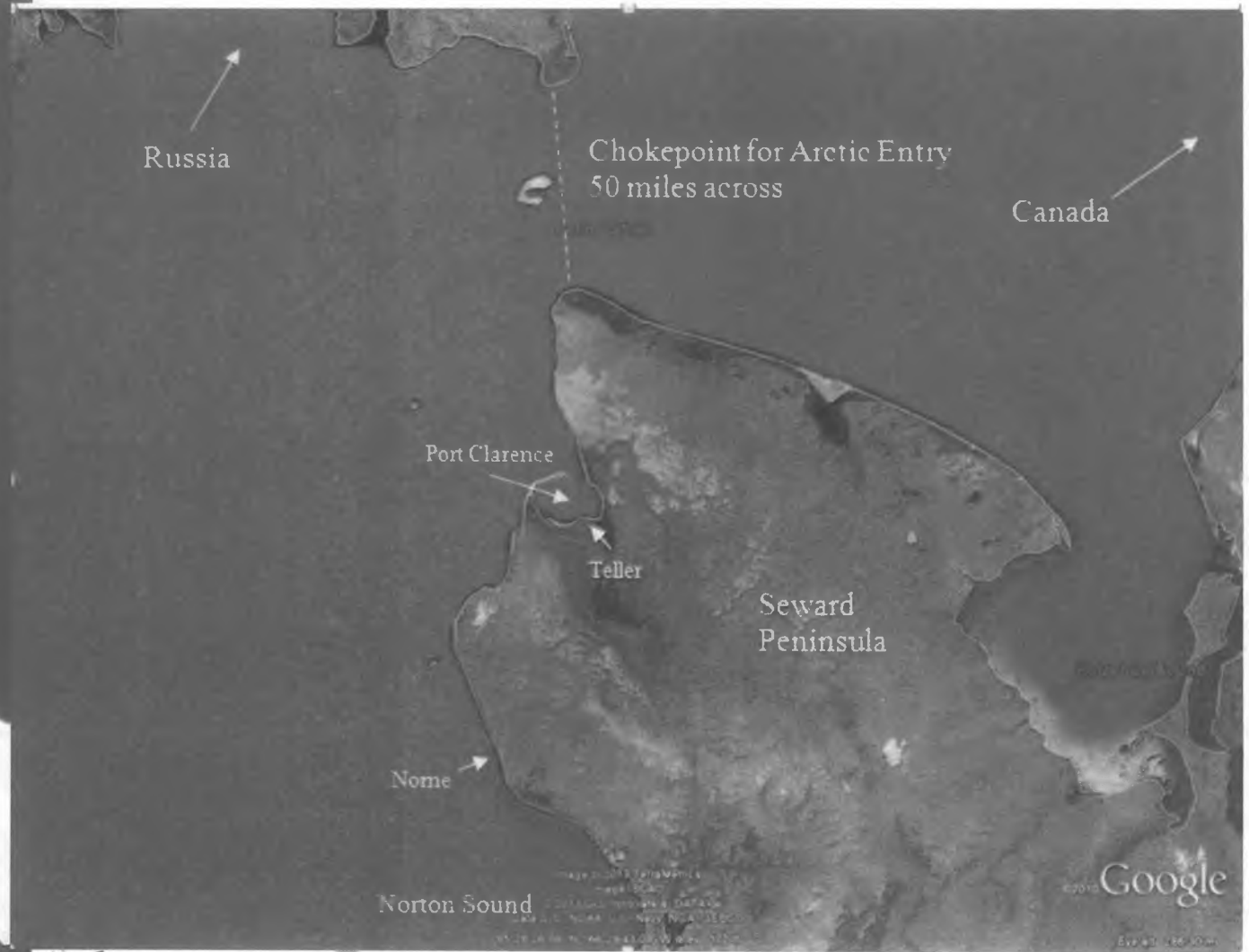
Site Shortlist

- 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)

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Study Area



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.

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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)

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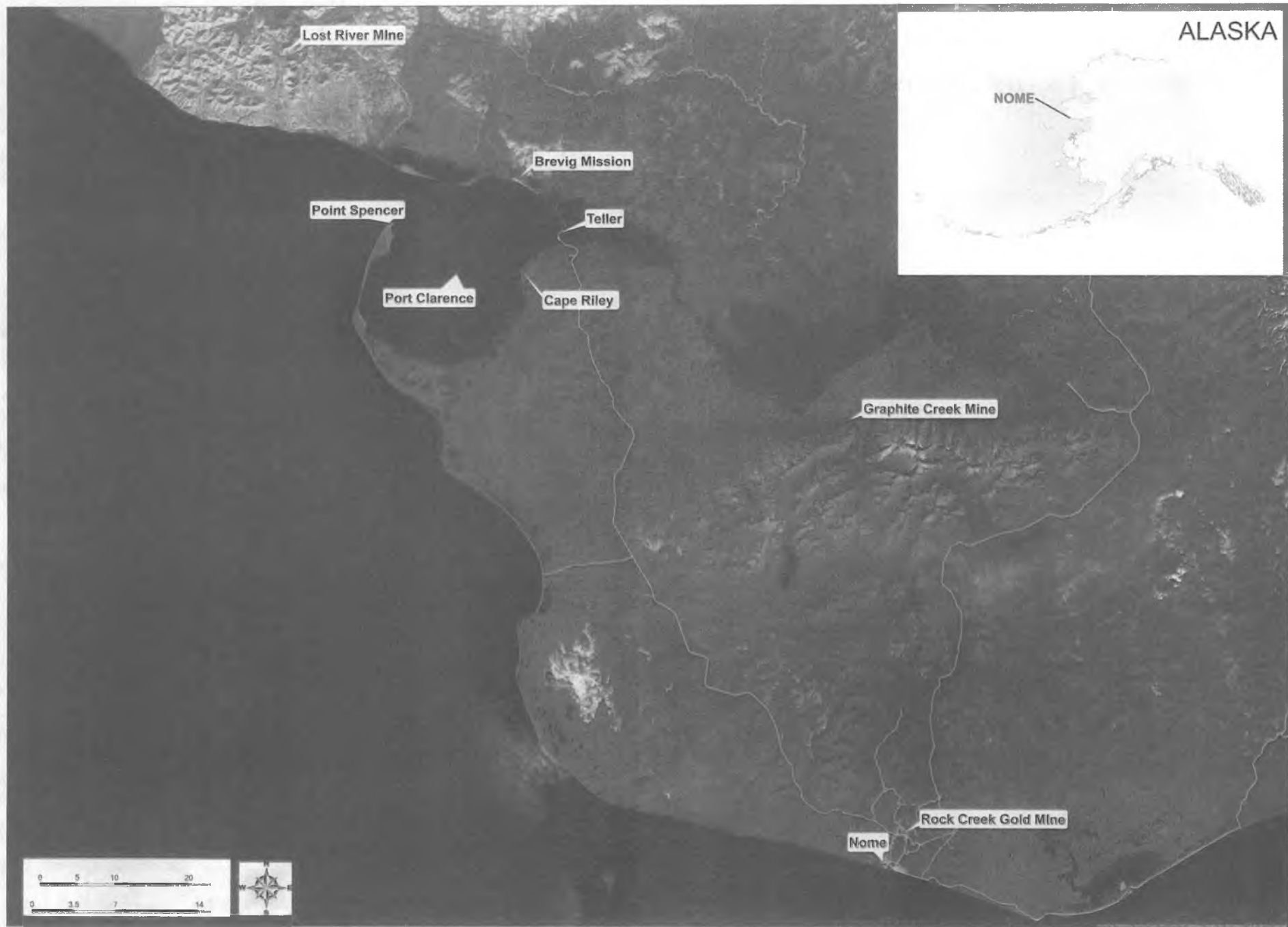


Initial Array of Alternatives

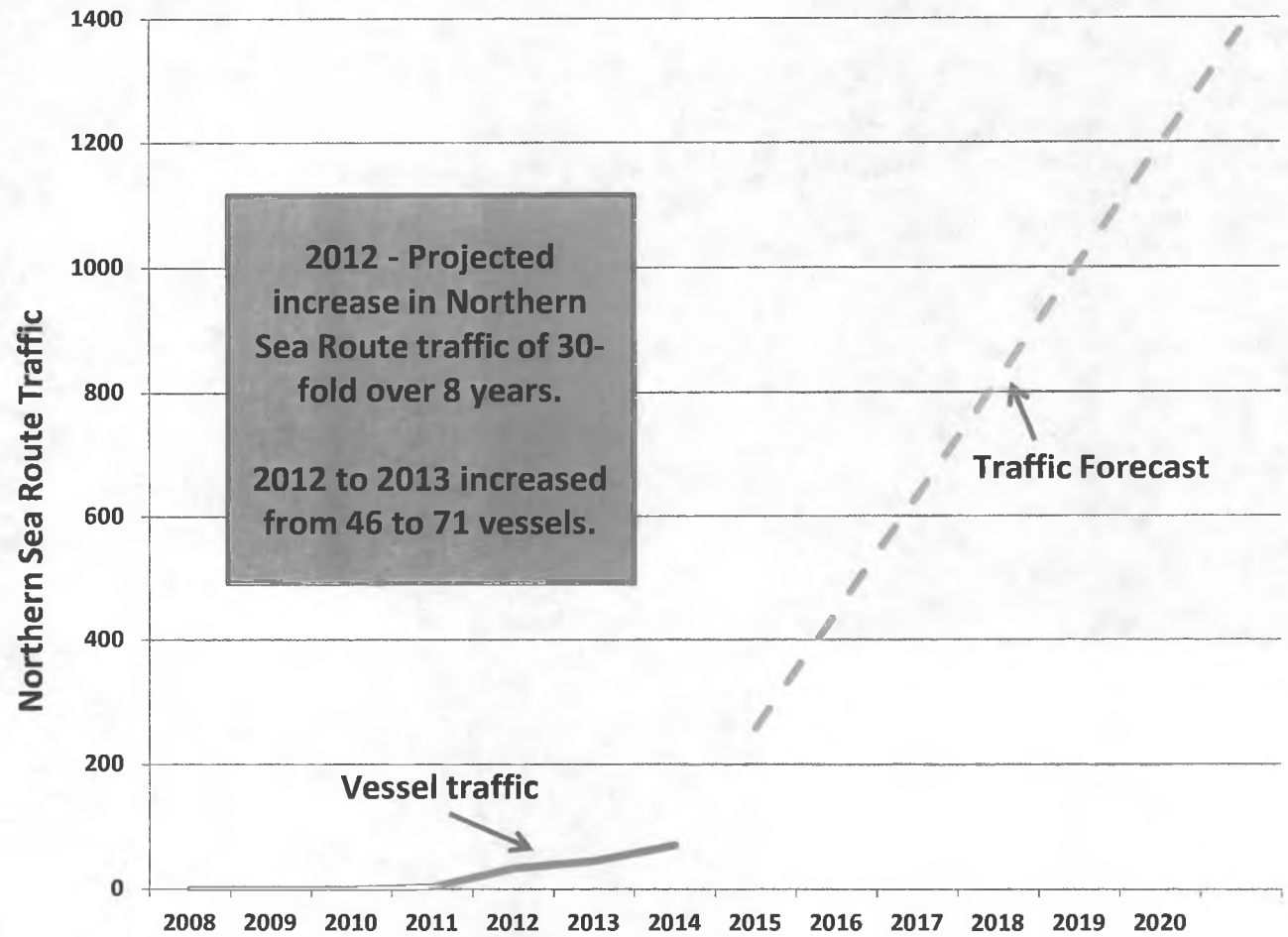
| Alternative Number | Alternative Name |
|--------------------|-------------------------------|
| 1 | No Action |
| 2 | Cape Riley alone |
| 3 | Point Spencer alone |
| 4 | Nome alone |
| 5 | Point Spencer/Cape Riley |
| 6 | Nome/Point Spencer |
| 7 | Nome/Point Spencer/Cape Riley |
| 8 | Nome/Cape Riley |

Screening Alternatives

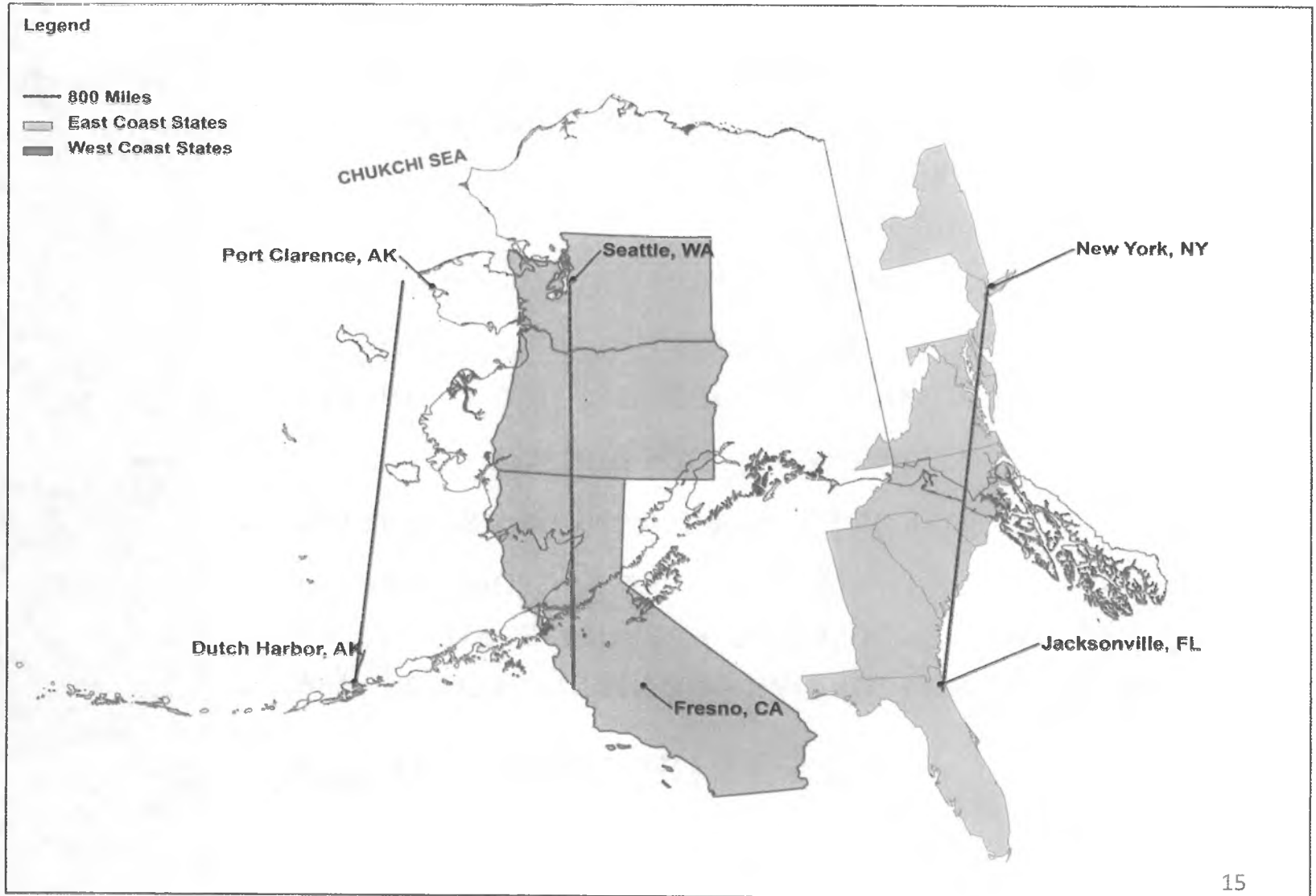
- Three geographic sites:
 - Nome
 - Point Spencer
 - Cape Riley



Arctic Traffic Trends



What does 800 miles look like?



Nome proposal

- Will 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 600-foot concrete caisson dock, (maybe an additional 400-foot caisson dock)
- Connect City Dock and West Gold Docks
- Dredge outer channel and maneuvering area to minus 35-feet, dredge between existing causeway and main breakwater to minus 22-feet. Disposal in existing offshore disposal area or used for beach nourishment.
- Extend utilities to caisson dock
- Armor stone on seaward face is 22-ton average and harborside face is 8-ton average



Port of Nome

Port of Nome

August 2011



Point Spencer proposal

- Will accommodate line-haul barge, tug assist, ice breakers, oil and gas support vessels, heavy lift barge
- Construct 200, 600, or 1,000-foot caisson dock
- Turning basin and entrance channel dredged to minus 35-feet
- Upland facilities include fuel tanks and 15-acre laydown area
- No connecting road to Nome/Teller Hwy.

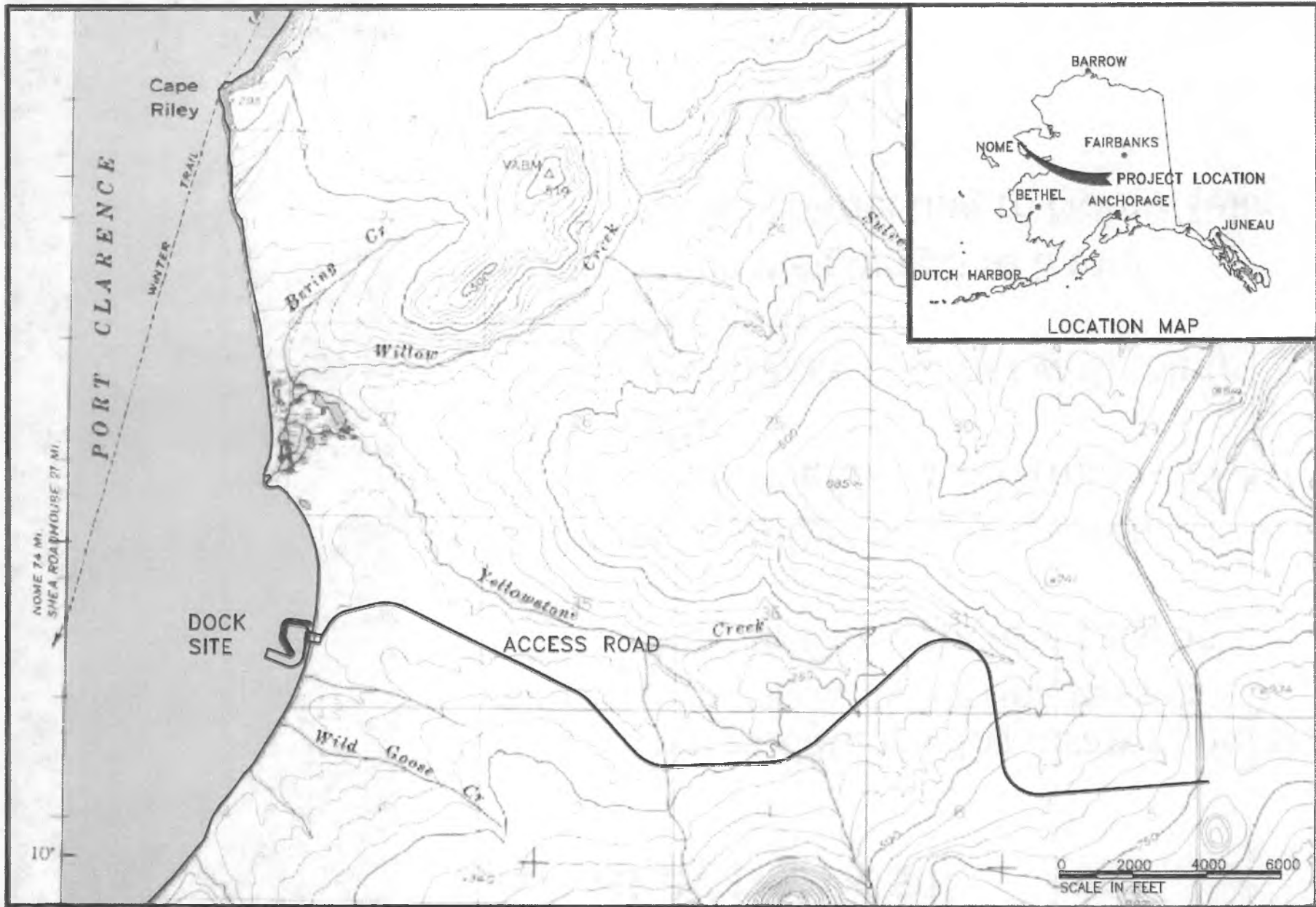


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Cape Riley proposal

- Can accommodate shallow draft mineral extraction vessels, lightering vessels
- 250-foot by 40-foot concrete caisson dock
- 200-foot by 360-foot staging area
- 550-foot turning basin with minus 12.5-foot depth
- 305-foot entrance channel with minus 12.5-foot depth
- Armor stone weighing 3 to 6 tons
- 5.5 mile road connecting to Nome/Teller Hwy.



ALASKA DISTRICT
CORPS OF ENGINEERS
CIVIL WORKS BRANCH

CAPE RILEY SHALLOW-DRAFT MINERAL EXTRACTION DOCK
ARCTIC DEEP DRAFT FEASIBILITY STUDY

#

Timeline (USACE Process Schedule)

- Alternatives Milestone – May 15, 2013 (Actual)
- Tentatively Selected Plan concurrence – November 2013 (not yet)
- Public Review – March 2014
- Agency Decision Milestone – June 2014
- MSC Submittal final report – July 2014
- Civil Works Review Board – August 2014
- Chief's Report – December 2014

What happens then?

- Once Tentatively Selected Plan concurrence received
 - State DOT&PF has opportunity to select different plan
 - Narrows the footprint for H&H, Econ, Geotech, NEPA work and coordination
 - Public, Agency, IEPR review starts



What happens after feasibility study signature?

Once the Chief of Engineers signs the feasibility study:

- Final feasibility report goes to Congress for action:

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

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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

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Thank You

Lorraine Cordova

(907) 753-2672

Lorraine.a.cordova@usace.army.mil



All Commodity Rail Transport to and from Northern Pacific Tidewater

presented
January 30, 2014

ALASKA STAKEHOLDERS

Dedicated to Alternative Solutions for the benefit of all



DISCLAIMER

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Generating for Seven Generations

KEMERER, Ward Ward has been in the Renewable Energy business in British Columbia for over twenty five years, being a founding Director of the Independent Power Producers Association of BC. Ward's early stage prospecting work has led directly to over 60 MW of operating small hydro plants and another 80 MW permitted and in pre-construction with BC Hydro PPAs. Ward then began to prospect for Wind Energy potential. Since 2001, Ward has studied and secured some of the best potential sites available in BC and Alberta. Ward is dedicated to Environmental concerns and the introduction of innovative clean Business Practices in the Energy Sector.

VICKERS, Matt (Gunaatsk) Matt specializes in establishing links in cross-cultural business environments. He has a successful track record of matching Aboriginal with non-Aboriginal potential business partners. Matt's in-depth knowledge of the Aboriginal market stems from his First Nation roots (Tsimshian/Heiltsuk & Haida) and his extensive work with Aboriginal communities in areas of organizational reviews; business plan development; feasibility studies; roles and responsibility training for elected leaders and staff; five year funding agreements; policy development; board training, as well as goals and objectives setting sessions.

Matt's dedication to institutions of higher learning includes: a founding board member of the University of Victoria's Administration of Aboriginal Government certificate program; the University of British Columbia's advisory board for their Bachelor of Commerce program and a founding member of the Chinook Program; Simon Fraser University's Presidents Advisory Board and the Banff Centre's Advisory Council as well as Head of Faculty for their Principles and Practice of Good Governance Program since 2000. Matt has been recognized with several awards for his performance in business and for his passionate support of diversity in the workplace.

WILSON, Len Len has spent most of his working life in Management with almost twenty years as General Manager with an Alberta Manufacturing Company that specializes in the innovation, design, production and distribution of Forestry Equipment. After Len successfully sold his personal project to Caterpillar, and looking for a rewarding change, Len began to focus on the needs of Canadian Aboriginals. To this end, Len holds the honour of being the only non-Aboriginal to complete the necessary courses at the Banff Centre to receive his Certificate of Aboriginal Leadership, Governance and Management Excellence. It was during his Banff Centre training that Len decided to focus on what he and Ward have dubbed the Aboriginal Energy Ownership Initiative. This Initiative is designed to introduce Renewable Energy opportunities and training within the Aboriginal Traditional Territories complete with an equity stake for the Community.

JACKSON, Tom Tom was born on the One Arrow Reserve near Batoche, Saskatchewan, to a Cree mother and an English father. Appointed an Officer of the Order of Canada in 2000 for his music and humanitarian work, Tom is well known to Canadians as an accomplished musician and actor dedicated to helping the less fortunate. At the 2007 Junos, the Canadian Academy of Recording Arts and Sciences bestowed Tom with the Humanitarian Award in recognition for his positive contributions to the social landscape of Canada. That same year, the Academy of Canadian Cinema & Television also presented Tom with their prestigious Humanitarian Award at the annual Gemini events. Tom received the Queen's Jubilee medal in 2002 and Centennial Medals from Alberta and Saskatchewan in 2005. Time Magazine named him one of Canada's best activists and honorary Degrees have been conferred upon him from the University of Alberta, Laurentian, Winnipeg, Victoria, Trent, Lakehead, Calgary, Lethbridge and Regina. Tom began a 3 – year appointment as Chancellor of Trent University in September 2009.

Tom's Musical Tours, The Huron Carole, Singing for Supper and Swinging for Supper, have raised millions of dollars for local food banks across Canada.

STRATEGIC PARTNERS



FIRST NATIONS :

G7G is dedicated to “making a difference” for the general population and for Mother Earth. The best way to achieve this is to collaborate with the original stewards of the land since time immemorial the **First Nations**. G7G has the traditional and cultural knowledge to adequately consult and inform the First Nations that will be directly affected by the Project. But, unlike standard Industry approach, G7G is also including the First Nations that will be indirectly affected by the Project. In the spirit of true accommodation, the First Nations will hold 50% equity ownership in the Project. To this point G7G has received Letters of Support from the First Nation Leadership for the Project concepts as presented.

AECOM Canada Ltd :

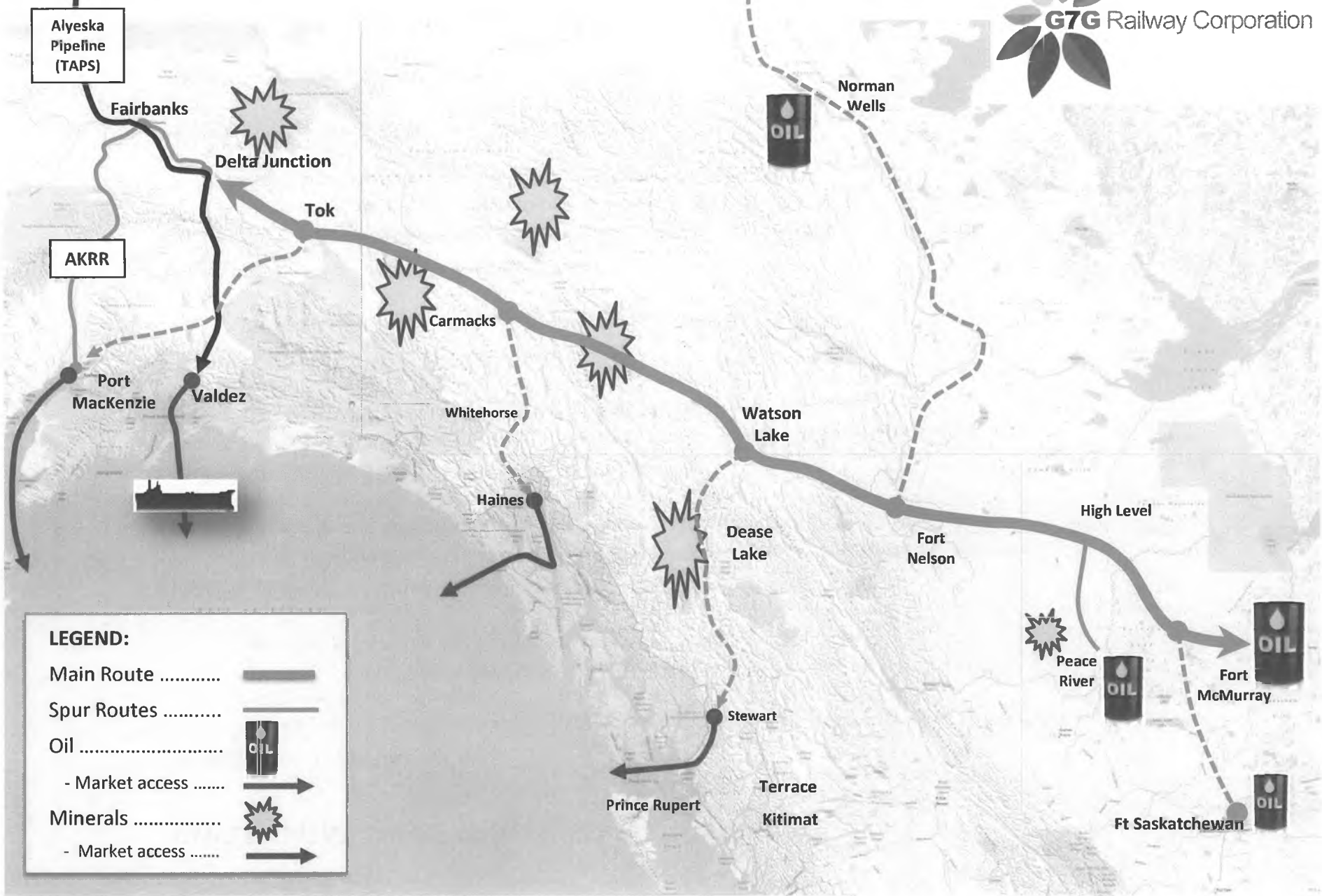
G7G received a Letter of Intent from AECOM to partner with G7G on project proposals. Specifically to, but not limited to, the rail project. This was followed up with a Memorandum of Agreement. Following is an excerpt from the Letter of Intent:

“AECOM is pleased to provide this letter of intent to work in partnership with G Seven Generations Limited in the development of the Alaska to Fort McMurray Rail Project. We see this project as a major initiative to enhance West Coast access to the abundant resources in Western Canada. In our development of the business case and feasibility studies, we will work in partnership with G7G, the First Nations and other stakeholders to minimize the environmental impact of the project while meeting the needs of the potential users of the development. We will implement “green” technology to create sustainable infrastructure that can be used for generations to come.

AECOM is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government and is ranked as the #1 design firm in the 2011 Engineering News-Record. With approximately 45,000 employees around the world. AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation and technical excellence in delivering solutions that create, enhance and sustain the world’s built, natural and social environments. A Fortune 500 company, AECOM serves clients in approximately 125 countries and had revenue of \$7.7 billion during the 12 months ended June 30, 2011. AECOM is ranked by *Ethisphere* as one of the world’s 110 most ethical companies for 2011.

AECOM immediately took on the task of performing a Scoping Document to confirm the viability of the Project.

THE PROJECT



LEGEND:

- Main Route
- Spur Routes
- Oil
- Market access
- Minerals
- Market access

GOVERNMENT SUPPORT and INTEREST

ALASKA: Sean Parnell, Governor

"Thank you for the opportunity to write in support of the Generating for Seven Generations (G7G) proposed rail project."

"The potential economic benefits of a rail link for both Alaska and Canada have been a vision as far back as the Harriman Expedition in the mid-1800's."

YUKON TERRITORY: Currie Dixon, Minister of Economic Development

"A rail development, such as the project proposed by G7G could significantly decrease transportation costs and improve competitiveness of key industries in Yukon."

ALBERTA: Premier Alison M. Redford, QC

"I appreciate being informed of projects that relate to Alberta's strategic objective to diversify our energy products and market portfolio."

BRITISH COLUMBIA: Premier Christy Clark

"We will, of course, follow your project's progress with interest."

CANADA: Joe Oliver, Minister of Natural Resources

"... the Government is supportive of any private sector project that would contribute to shipping our growing Canadian crude oil supply to international markets as long as the project meets all the applicable regulatory requirements."

SASKATCHEWAN: Has not been approached to date.

NORTHWEST TERRITORY: Has not been approached to date.

UNITED STATES: Has not been approached to date.

GOVERNMENT SUPPORT and INTEREST

Quote from April 30, 2013 Letter to
G Seven Generations Ltd. from the
Government of Alberta – Department of Energy
with regard to the G7G Railway Project

“The Government of Alberta has provided a grant of \$1.8 million to the Van Horne Institute to allow them to work with G7G, the project proponents and with the University of Alaska, Fairbanks, Michigan Tech, and other organizations or companies on the potential routing, cost, and business case for such a railway. The Van Horne Institute will provide the information they obtain to the Government of Alberta and other stakeholders.

This information will include a feasible route description and initial cost of facilities. It will also include an assessment of the potential for oil, mineral, and other products that could be exported and imported via this line.”

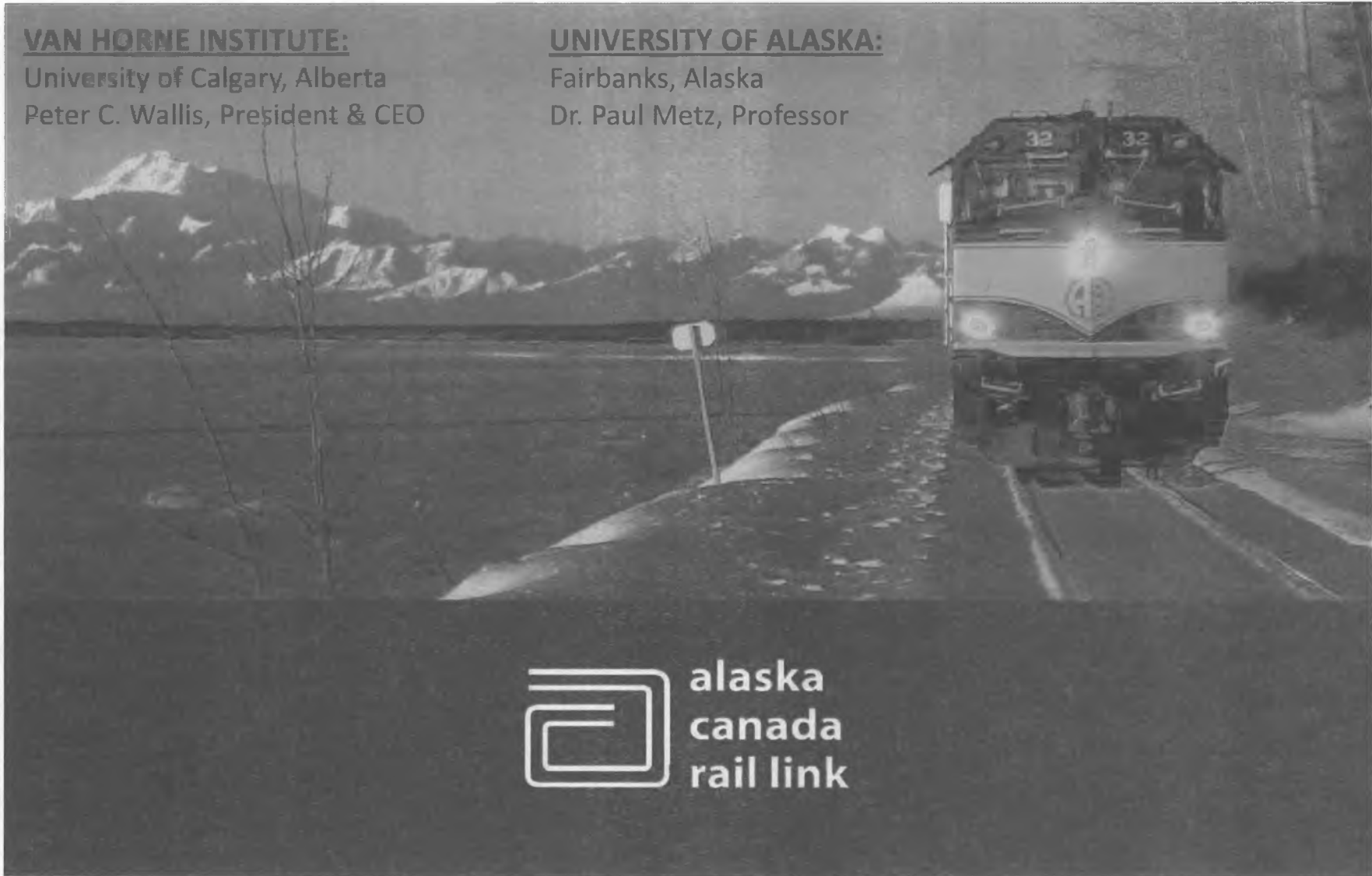
INSTITUTE INVOLVEMENT

VAN HORNE INSTITUTE:

University of Calgary, Alberta
Peter C. Wallis, President & CEO

UNIVERSITY OF ALASKA:

Fairbanks, Alaska
Dr. Paul Metz, Professor



SOCIAL LICENSE NOW A PRE-CONDITION FOR MAJOR INFRASTRUCTURE DEVELOPMENT

- **What is social license?**
 - Early engagement and broad support among First Nations and other affected communities
 - “Duty to Consult and Accommodate” – where a government decision may affect Aboriginal and treaty rights, the Crown is required to consult with potentially affected First Nations, minimize infringement on Aboriginal and treaty rights, and address the potential effects through accommodation, as interpreted by Canadian courts
 - Public support for development , taking into account socio-economic and environmental impacts
- Social license is a necessary condition for securing major infrastructure project approvals across Canada
 - This is also summarized by the World Energy Council’s stated goals of “accessibility, availability and acceptability”

A FIRST NATION SUPPORTED PROPOSAL COMPLETE WITH EQUITY INVOLVEMENT

Community Consultation

- G7G's indigenous initiative lays out a precedent-setting approach to aboriginal consultation and accommodation.
- G7G has met with the leadership of the First Nations villages, communities and tribes along the proposed project route, already receiving letters of support for the concept as proposed.
- Along with the aboriginal communities; all of the other community stakeholders will be consulted as part of this work element.
- G7G expects this critical element to be an approximately one year process per community, performed simultaneously.
- G7G will use the following criteria as a guideline:

Vickers and Associates

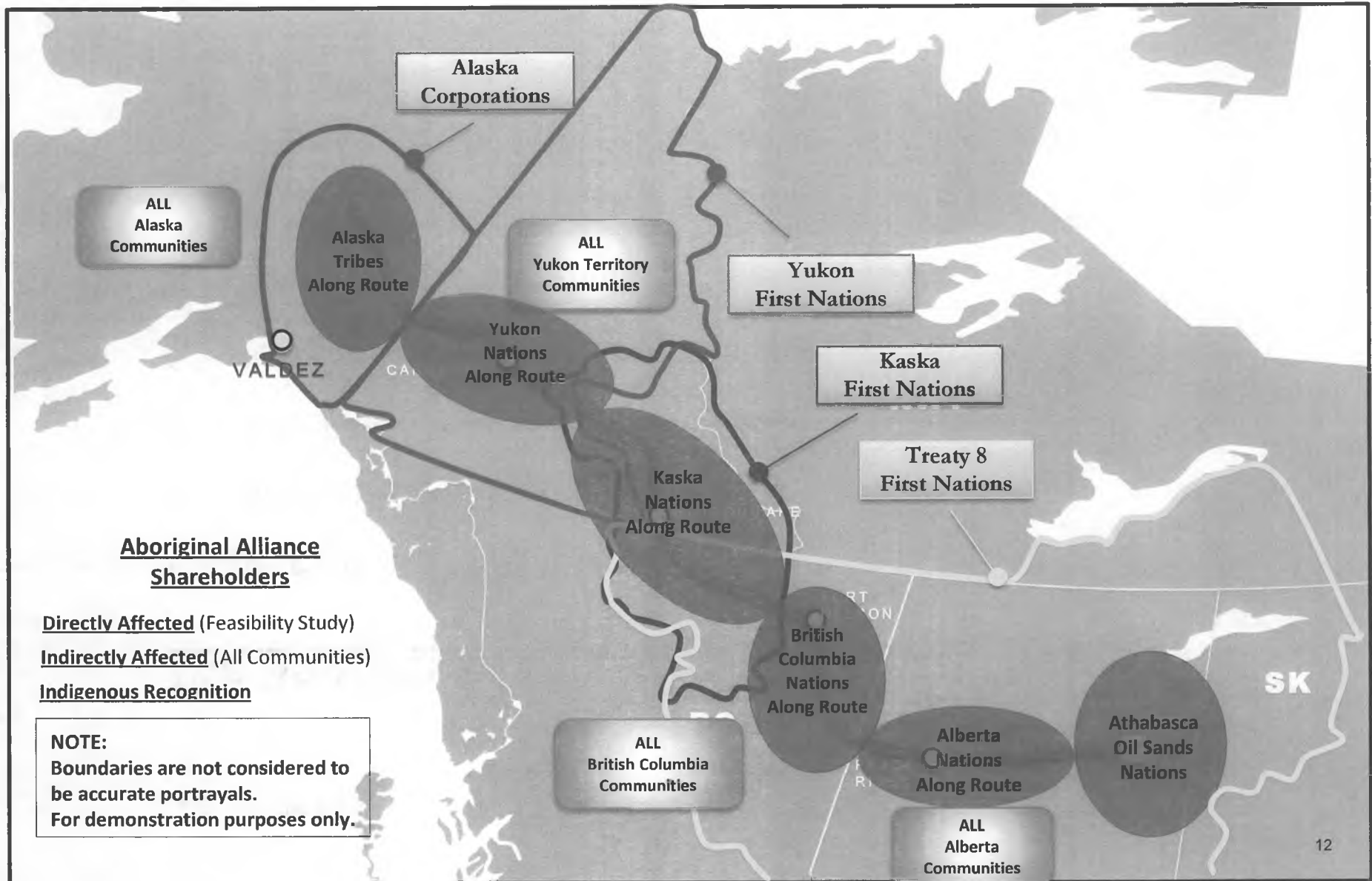
*Summary of Best Practices for First Nations
in Consultation and Accommodation*

The Benefits

The Benefits of this Project for First Nations:

1. Recognition – Rights and Title
2. Respect – early engagement
3. Relationship – personally informed
4. Partnership – 50% equity/profit sharing
5. Employment Opportunities
 - construction
 - operation
 - maintenance
 - management

ABORIGINAL ALLIANCE STAKEHOLDERS



The Benefits

The Benefits of this Project for Canada :

1. Unlock the bottleneck for transporting Canadian oil, minerals and other commodities to offshore markets
2. Accelerated increase of royalty and tax revenues
3. Economic hauling, export and import of all commodities
4. Increase long term and permanent employment
5. Positive impact on stakeholder relationships

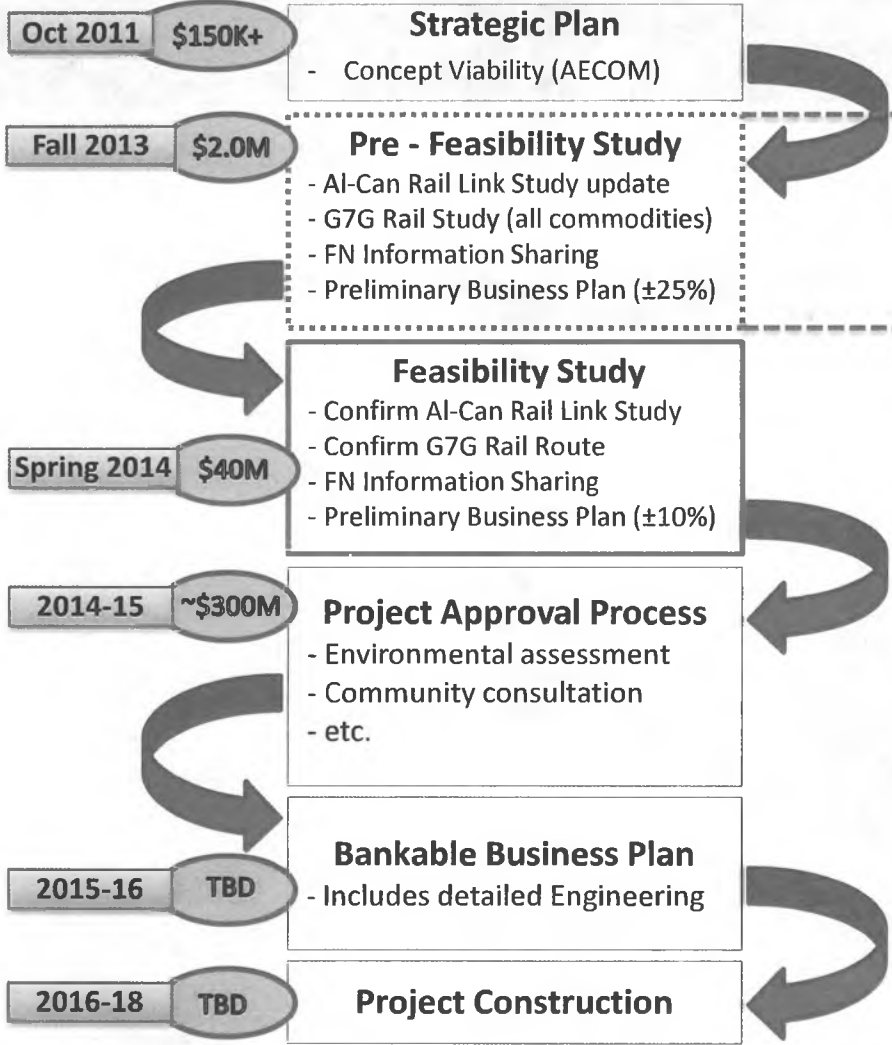
The Benefits

The Benefits of this Project for Alaska :

1. Connection to the rail network of North America, specifically the Lower 48 States.
2. Enhance utilization of infrastructure (TAPS, Ports, etc.)
2. Economic hauling, export and import of all commodities
2. Accelerated increase of royalty and/or tax revenues
2. Increase long term and permanent employment
6. Positive impact on stakeholder relationships



G7G Project Timeline



Pre – Feasibility Study (\$2.0 million)

- Conducted by Van Horne Institute
- Government of Alberta \$1.8 million Grant
- Government of Yukon Observer

Project Equity Partners

- Aboriginal Alliance Trust 50%
- AECOM Canada Ltd (Letter of Interest) 10%
- G7G Finance/Investment Firms or Industry 40%

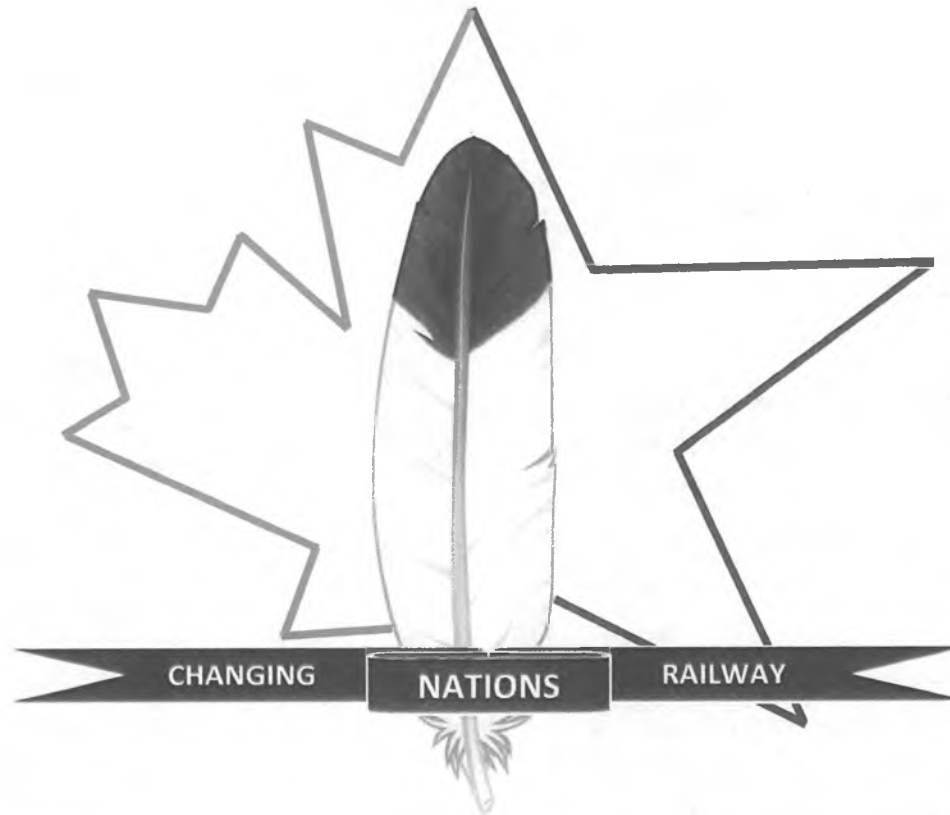
Other Opportunities

| | |
|--------------------|-------------------------|
| Project Management | Operation & Maintenance |
| Shipper Contracts | Commercial Agreements |
| Rolling Stock | Material Supply |



G7G RAILWAY CORPORATION

AECOM



Generating for Seven Generations

Contact: Matt Vickers, CET
matt@mattvickers.com

Len Wilson
len.wilson@askienterprises.com