



City of Delta Junction & A2A Rail Meeting

September 9, 2020





Agenda

1. Project Overview
2. Proposed Alignment
3. Proposed Rail Port of Entry
4. Feasibility Studies
5. Future Studies
6. Economics
7. Opportunities
8. Support for A2A
9. Next Steps - Process Moving Forward
10. Discussion & Questions

Project Overview

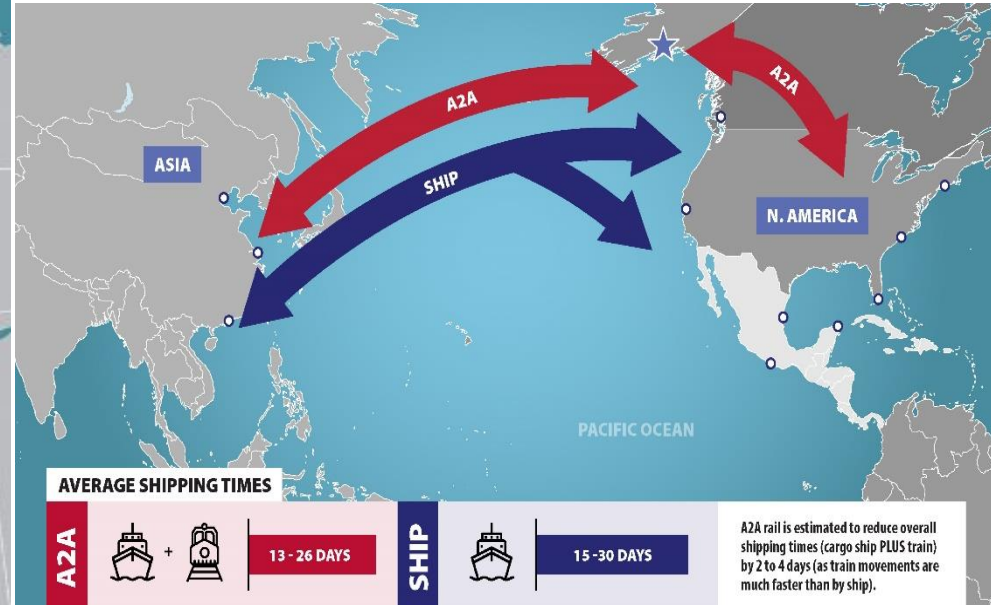


A2A Rail Team:

- Sean McCoshen, Chairman & Founder
- Robert Dove, Financing & Strategy
- JP Gladu, President & CA Indigenous Lead
- Mead Treadwell, Vice-Chair, Alaska
- Bill Hjelholt, HDR Engineering Project Principal
- Doug Ford, Communic Public Affairs (CA Indigenous Support)
- Jon Katchen, Alaska Lead, Holland & Hart
- Joy Huntington, AK Indigenous Lead, Uqaqti Consulting
- Sean Solie, Alaska Coordinator, New Frontier Consulting



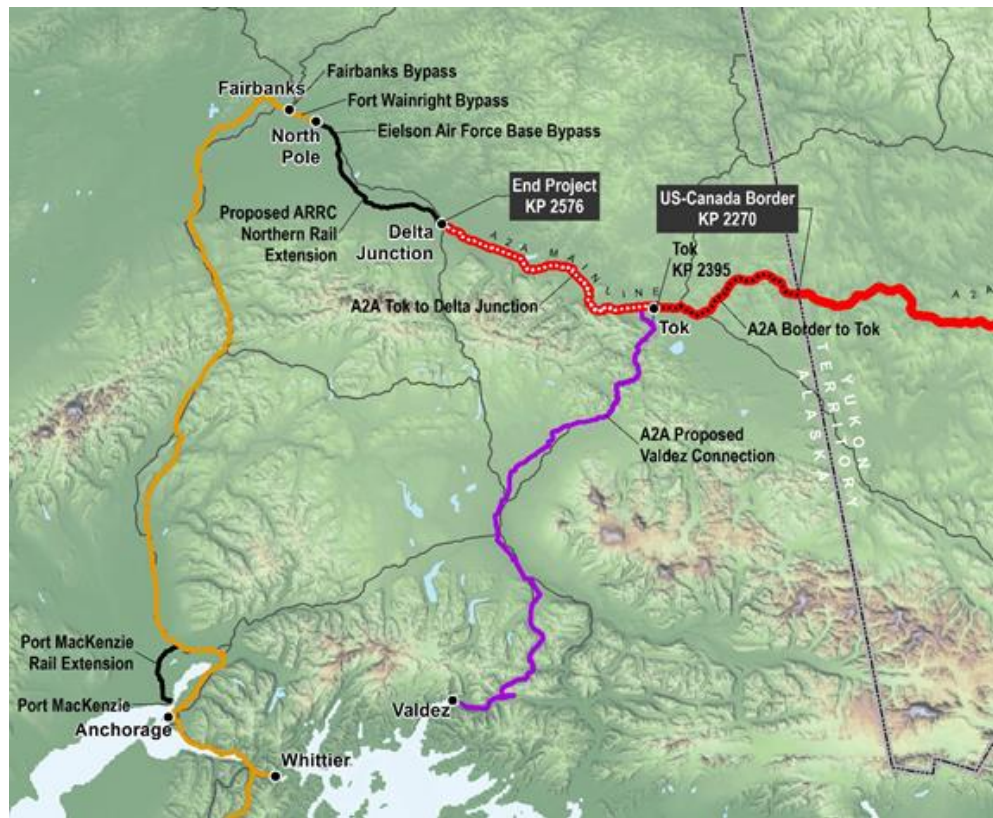
Project Overview



Project Overview

A2A Railroad – in Alaska

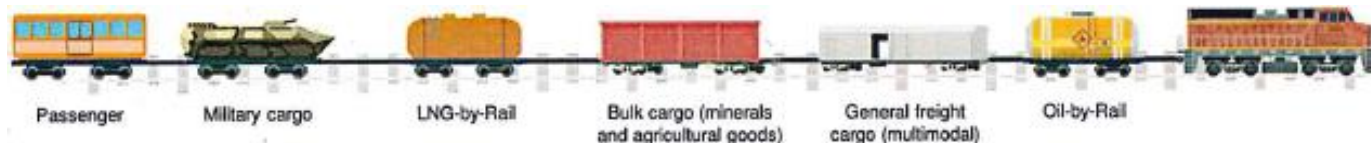
- 1600 miles (2576 kilometres)
 - Alaska 190 miles (306 kilometres)
 - Potential Valdez Route 270 miles (434 kilometres)
- ARRC
 - Northern Rail Extension, NRE, 83 miles (134 kilometres)
 - Bridge across Tanana in Salcha constructed (Phase 1 of 4)
 - Existing track North Pole to tidewater
- 286,000-pound cars
- Trains
 - 2 loco–96 cars–3 loco–96 cars–2 loco
 - 11,700 feet (3566 metres)
 - Unit trains with bulk commodities
 - Mixed freight & Intermodal (double stack)



Project Overview

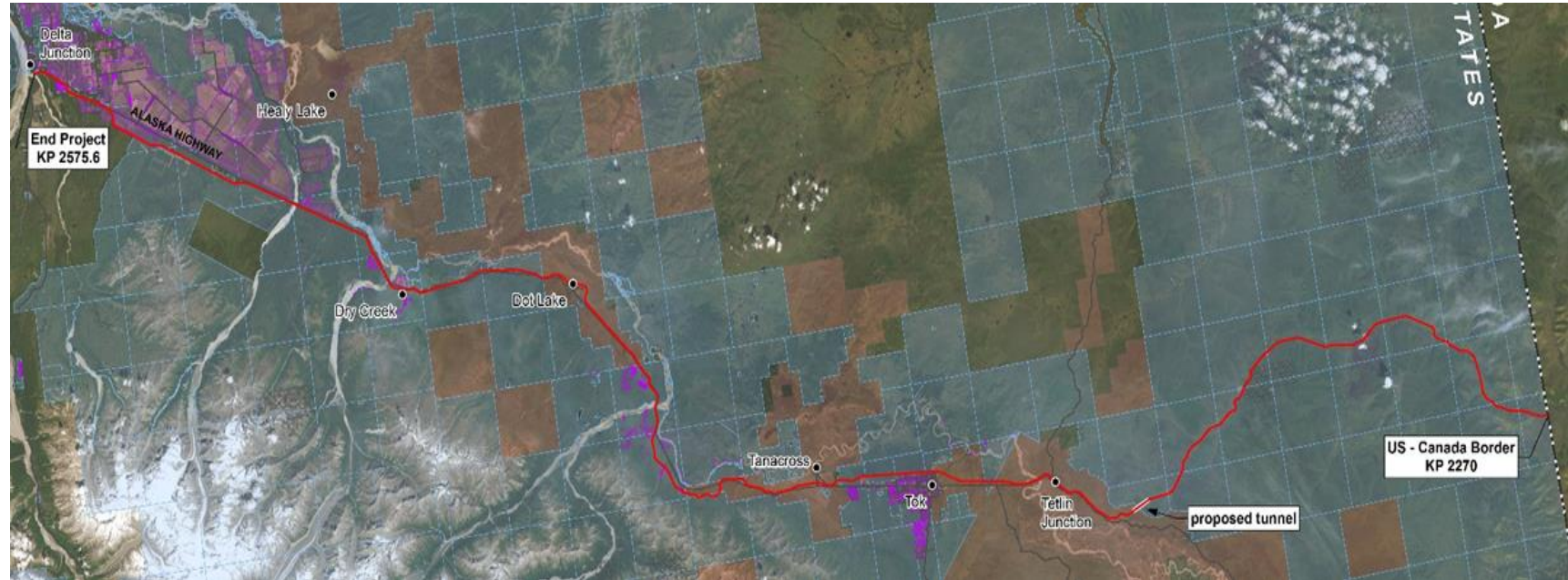
Movement of Goods and Commodities

- A2A Rail will operate as a heavy haul standard gauge railway, capable of moving a wide range of cargo, such as:
 - general cargo (boxes, crates, drums, etc.);
 - bulk dry & liquid cargo (grain, potash, sulfur, bitumen, gravel, propane, oil, minerals, wine, vegetable oils, etc.);
 - Bulk cargo (machinery, bundled steel, lumber, etc.);
 - refrigerated cargo (fruit, fish, meat, vegetables, dairy products, etc.);
 - roll-on/roll-off cargo (cars, trucks, semi-trailer trucks, trailers, etc.); and
 - container and passenger cargo.
- Additionally, A2A Rail intends to offer the Military a new viable option for moving cargo through Alaska or to installations such as, Eielson Air Force Base, Fort Wainwright, Fort Greely, Clear Air Force Station, Joint Base Elmendorf, etc.

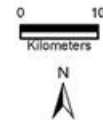


Proposed Alignment

Alaska Mainline (Border to Delta) Route – High Level Land Status



- A2A Proposed Alignment
- Private Conveyed Land
- State of Alaska Tentatively Approved or Patented Land
- Native (ANSCA) Conveyed Land
- State Mining Claim



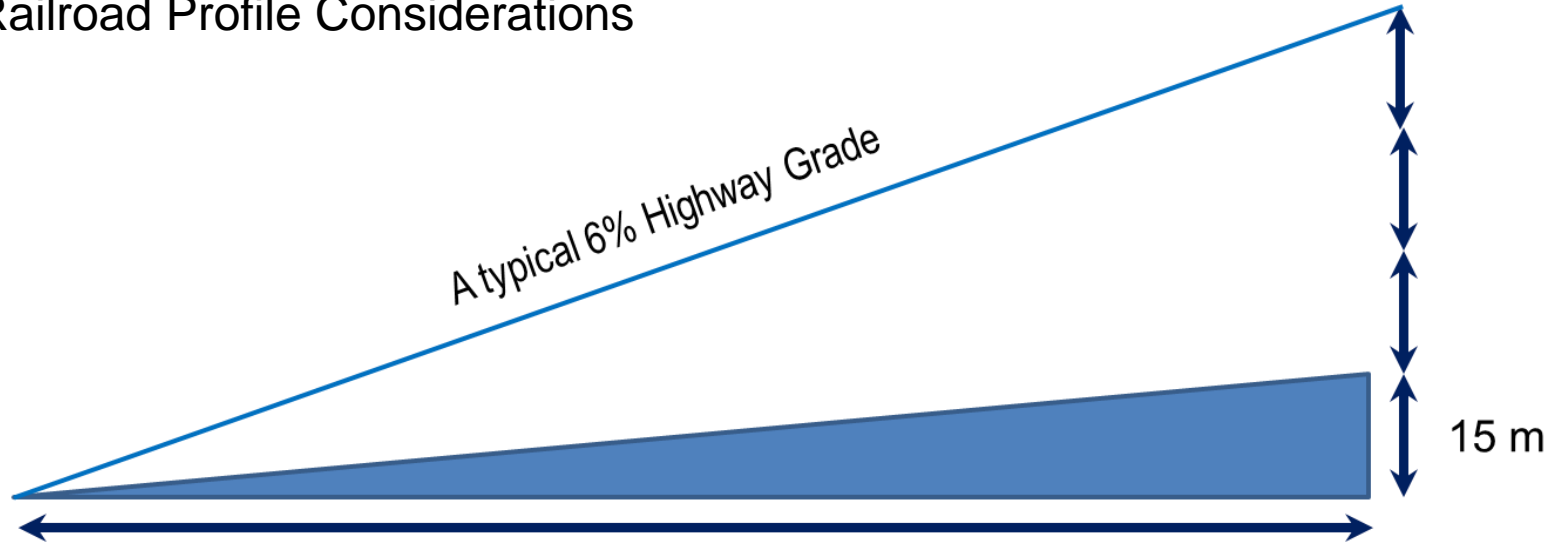
Proposed Alignment

Engineering Considerations:

- Attempt to follow previously used corridor (Road, Pipeline, Power Line) where design standards allow
- Used sidehill construction to minimize earthwork impacts, reduce tunnel lengths and reduce bridge heights
- As feasible, provide right angle crossings of streams and rivers, avoid wetlands and parallel alignments in flood plains
- Care taken, where feasible to stay on side opposite of an existing road or other disturbance when passing near National Parks, noted fisheries
- Trains need to stay above 10 MPH speeds and provide safe breaking for stopping ability
 - Curves and grades drain energy used to move train
 - Too much force pulling or pushing train can cause pull aparts or derailments

Proposed Alignment

Railroad Profile Considerations



Maximum Grade 1.5%: 15m vertical/km
Or 79-feet rise/mile traveled

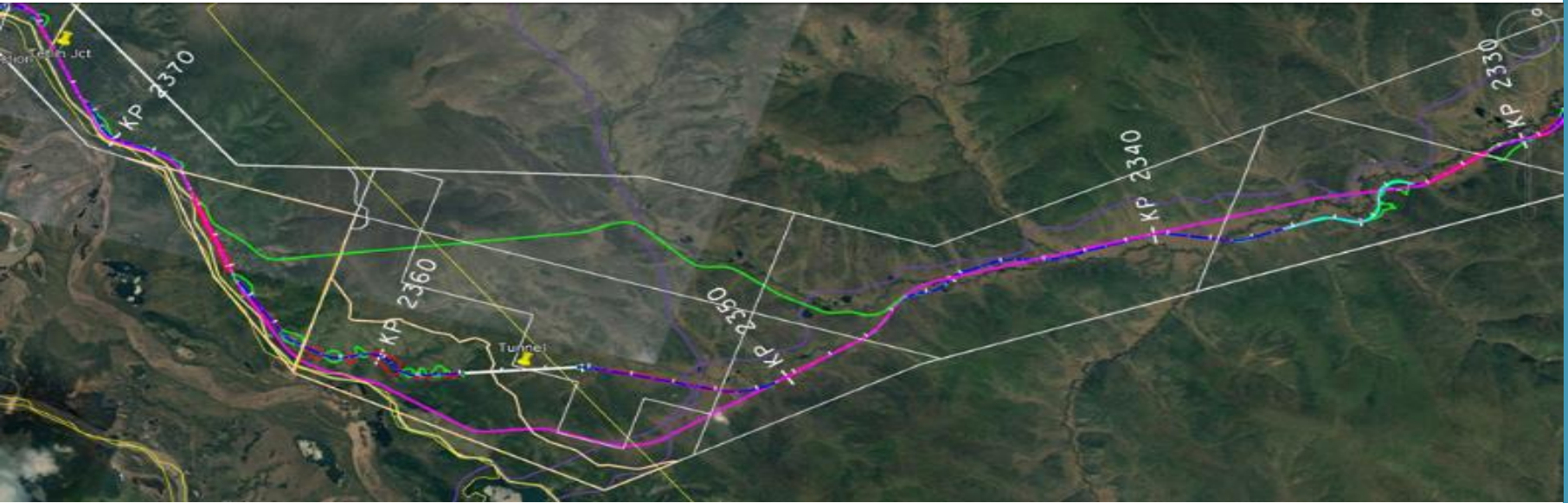
Rail Terminal – Grade is Flat

Proposed Alignment

Terrain and Alignment

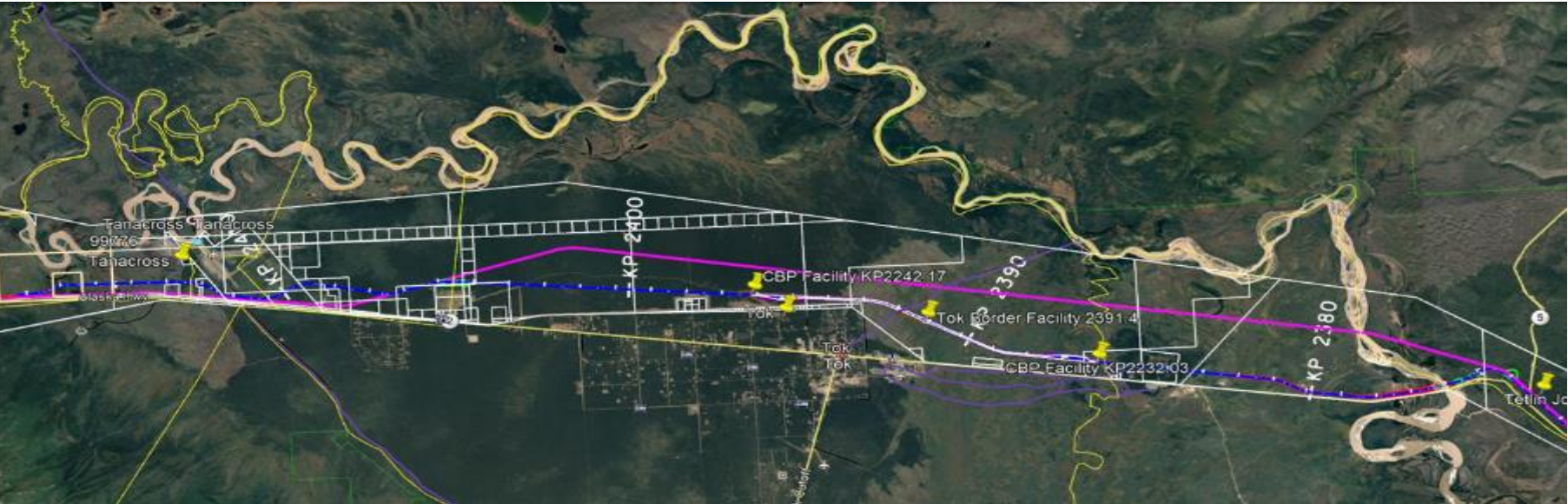


Proposed Alignment



- Alignment Refinement Process
 - Purple – original 2016 VHI Study Alignment
 - Green – alternative
 - Blue (& Tunnel)
 - improved grades, reduced 2 tunnels to 1 and reduced tunnel length, reduced earthwork impacts and better fit Ladue River Drainage

Proposed Alignment



- Alignment Refinement Process
 - Purple – original 2016 VHI Study Alignment
 - Blue - refined
 - Avoids construction in flood plain
 - Tightened corridor to existing roads and better Tanana crossing location near new highway bridge (avoids the parks, cemetery)

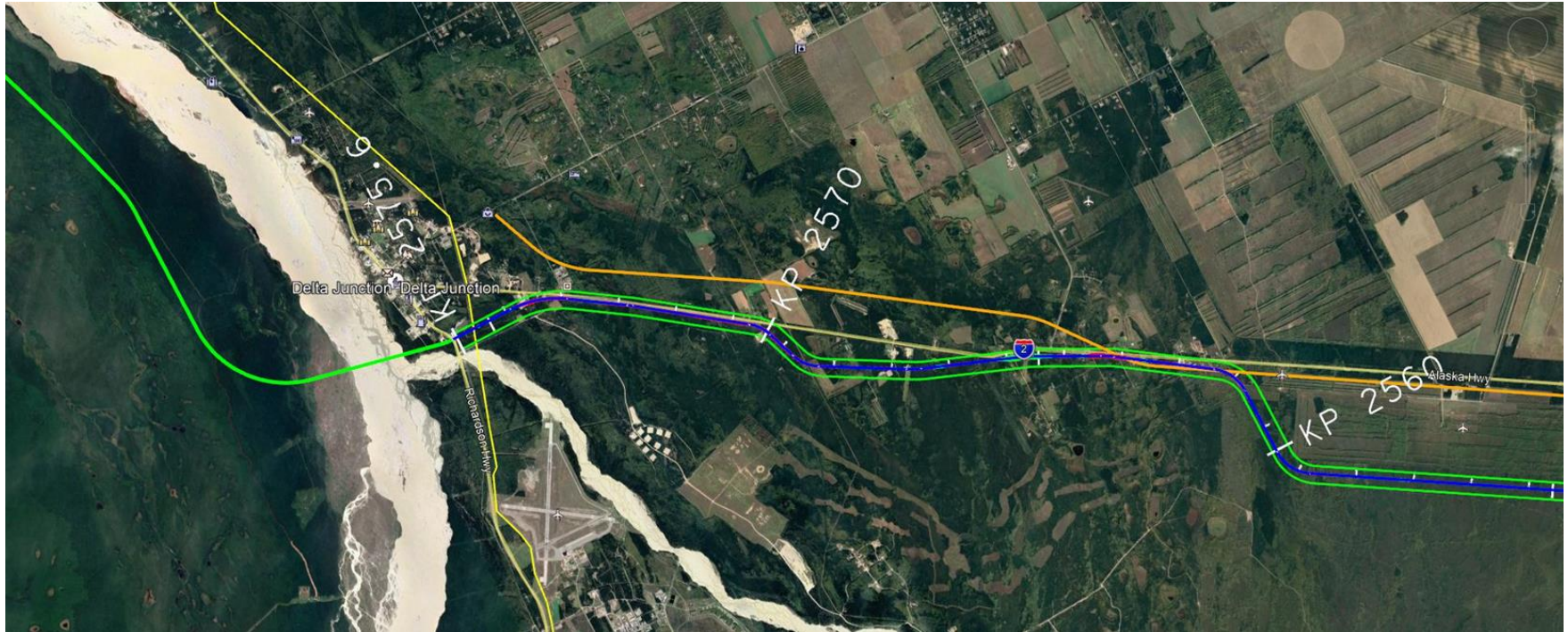
Proposed Alignment



- Alignment Refinement Process
 - Purple – original 2016 VHI Study Alignment
 - Blue - refined
 - Avoids Dot Lake Village
 - Follows terrain to avoid footprint impacts,
 - Avoids other development

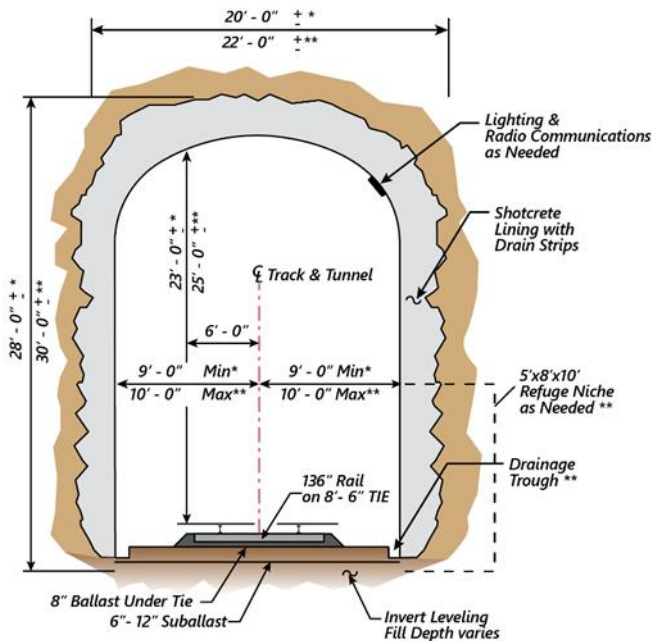
Proposed Alignment

Delta Junction Area Considerations



Proposed Alignment

Tunnels & Impacts



Typical Tunnel Section

* Short Tunnels Less Than 5,000 Feet Long

** Long Tunnels, Greater than 5,000 Feet Long





Proposed Alignment

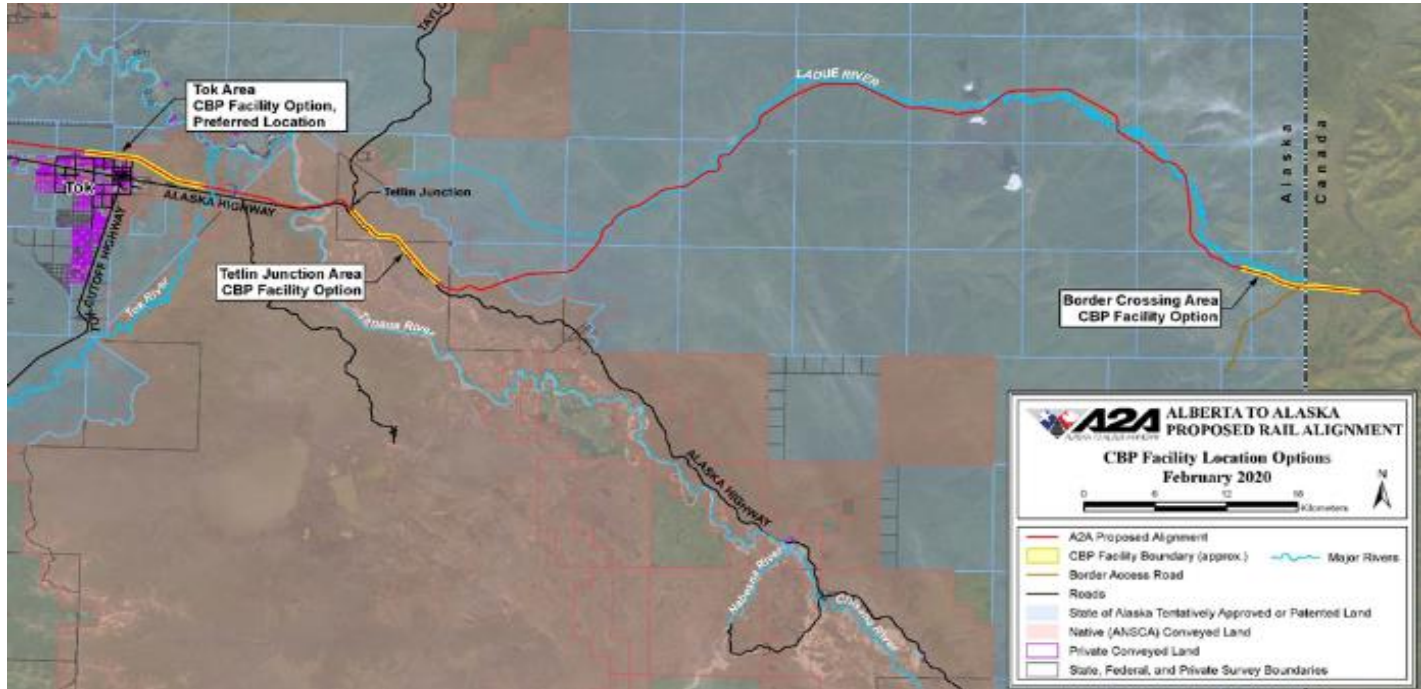
Valdez Option Route Features:

- Length 434.3 kilometres (269.9 miles)
- Crosses TAPS 7 times – all proposed grade separated structures
- 11 grade separated road crossings
- 62 bridges
- 5 tunnels with various lengths, longest is 4696 m (2.9 miles), shortest is 705 m (2,300 ft), total length 9571 metres (31,400 ft)
- Terminal – Valdez, AK

Proposed Rail Port of Entry

Inspection Station Location

- 3 sites reviewed
 1. Border area
 2. Tetlin Jct. area
 3. Tok area



Preferred Site – Tok Area

Feasibility Studies

- Van Horne Institute – Alberta to Alaska Railway: Pre-Feasibility Report (2015)
- McKinsey & Company – Alaska to Alberta Railway: Economic Analysis (2020)
- University of Alaska Fairbanks –
 - Alaska-Canada Rail Link: Phase 1 Feasibility Study (2007)
 - Alaska-Canada Rail Link: Incremental Expansion Project Breakout (2012)
 - Alaska-Canada Rail Link: Economic Benefits Study (2019)
- HDR Engineering –
 - Analysis of VHI Pre-Feasibility Report Cost Findings (2017)
 - Analysis of VHI Preliminary Route & Alignment (2017)
 - Alaska Railroad Existing Infrastructure: Feasibility Study (2019)
 - Valdez Route: Feasibility Study (2020)

Future Studies

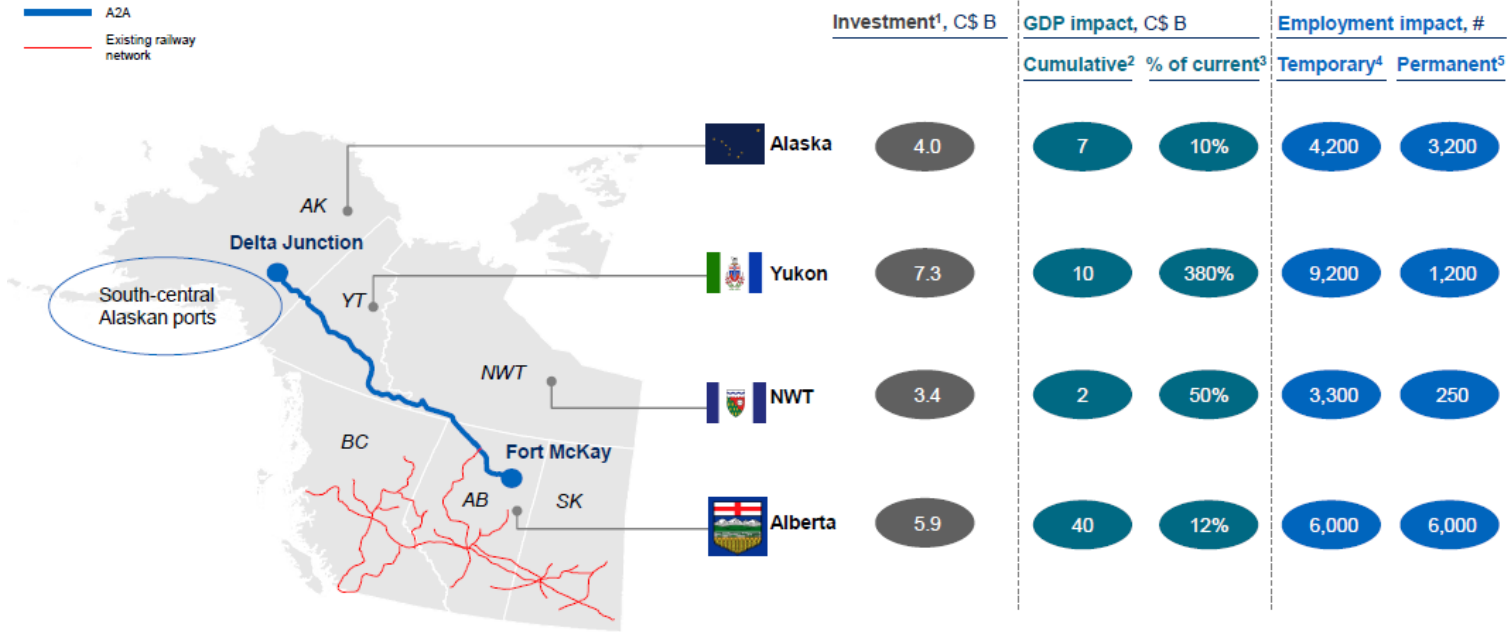
- Engineering – Route Survey & Alignment Refinement
- Operations – Refinement of Train Performance and fit with overall operations plan and business case
- Valdez Port Study – Terminal and Port Facilities concept/feasibility study



Economics

ESTIMATES

A2A can provide significant additional benefits to economies of Northwest Canada and Alaska, USA

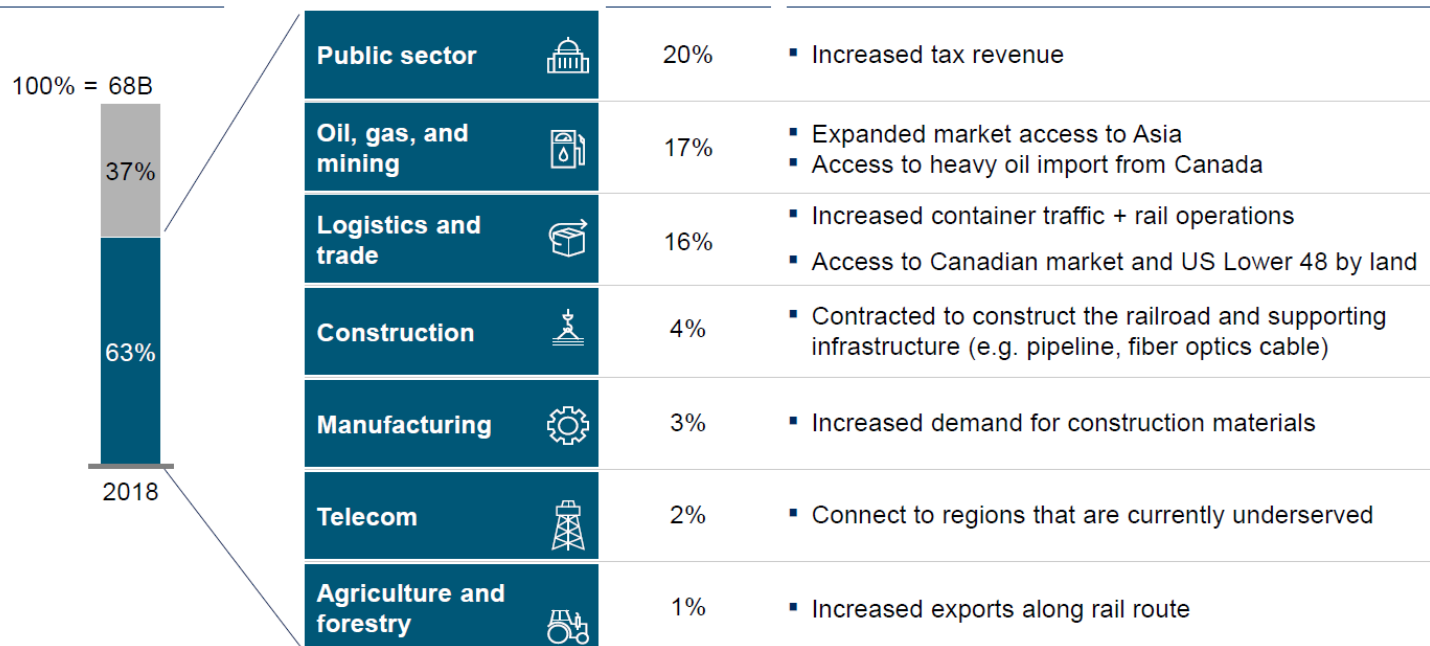


1 Total upfront capital investment; 2 Cumulative total GDP impact 2022 – 2040; 3 Cumulative total GDP impact 2022 – 2040 as a % of current GDP; 4 Number of temporary construction employees; 5 Direct jobs from operations and indirect and induced jobs in the greater economy
SOURCE: Provincial and state government budget reports; StatsCanada Dashboard economic and employment multiplier; HDR analysis

Economics

A2A can benefit sectors representing >60% of Alaska's economy

Alaska 2018 GDP
C\$ B



SOURCE: Alaska government budget reports; U.S. economic and employment multipliers; HDR analysis

Alaska - Alberta Railway Development Corporation 32

Opportunities

- Environmental and Engineering
 - Species surveys
 - Cultural, historical and paleontological surveys
 - Land and property survey
 - Geotechnical
 - Design support
- Construction Opportunities
 - Contractor Personnel
 - Personnel Camps/housing
 - Materials – concrete, aggregate, ballast
 - Consumables - fuel, lubricants, Misc.
 - Hauling supplies/wastes
- Post Construction
 - Environmental compliance monitoring
- Operations & Maintenance
 - Train crew – engineer & trainman
 - Yard train personnel (switch cars)
 - Mechanical – RR cars & Locomotive maintenance & fueling
 - Track, signal, communications and bridge maintenance personnel
 - Drivers, equipment operators, laborers, electronics maintenance
 - Railroad management
 - Facilities maintenance/upkeep
 - Crew housing/food, hauling

Support for A2A

Governor Dunleavy:

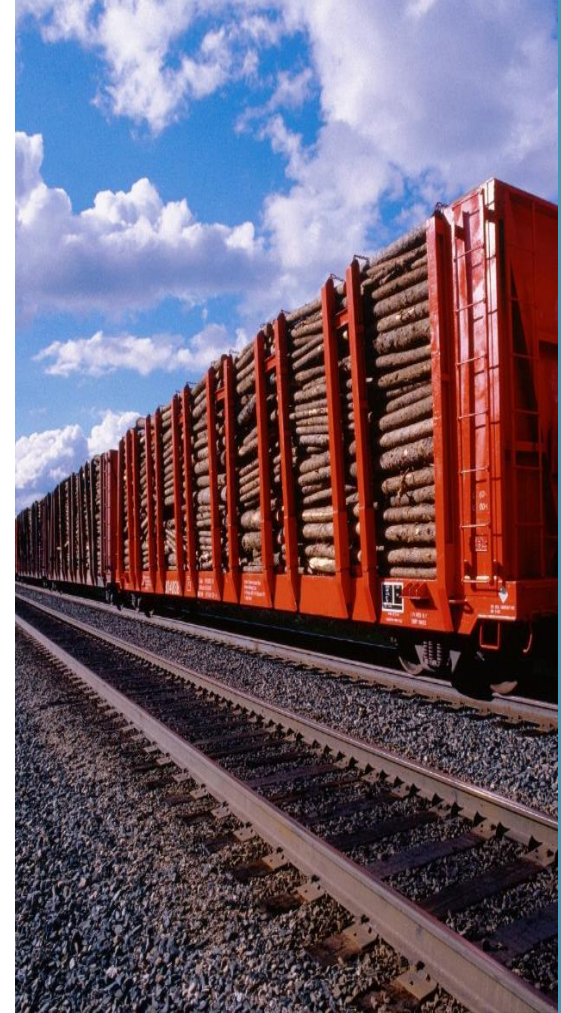
- Letter sent to White House urging the issuance of the Presidential Permit
- Continues to demonstrate his support and commitment to the project by assisting on various fronts here in Alaska and Washington, D.C.

Alaska State Legislature:

- Passed S.J.R. 11, signaling support for the issuance of the Presidential Permit.

Alaska Congressional Delegation:

- Letter sent to White House urging an expeditious issuance of the Presidential Permit.
- Continued engagement with the Trump Administration



Support for A2A

Tetlin Native Corporation:

- Sent letter to White House urging the issuance of the Presidential Permit.

Tanacross Inc.:

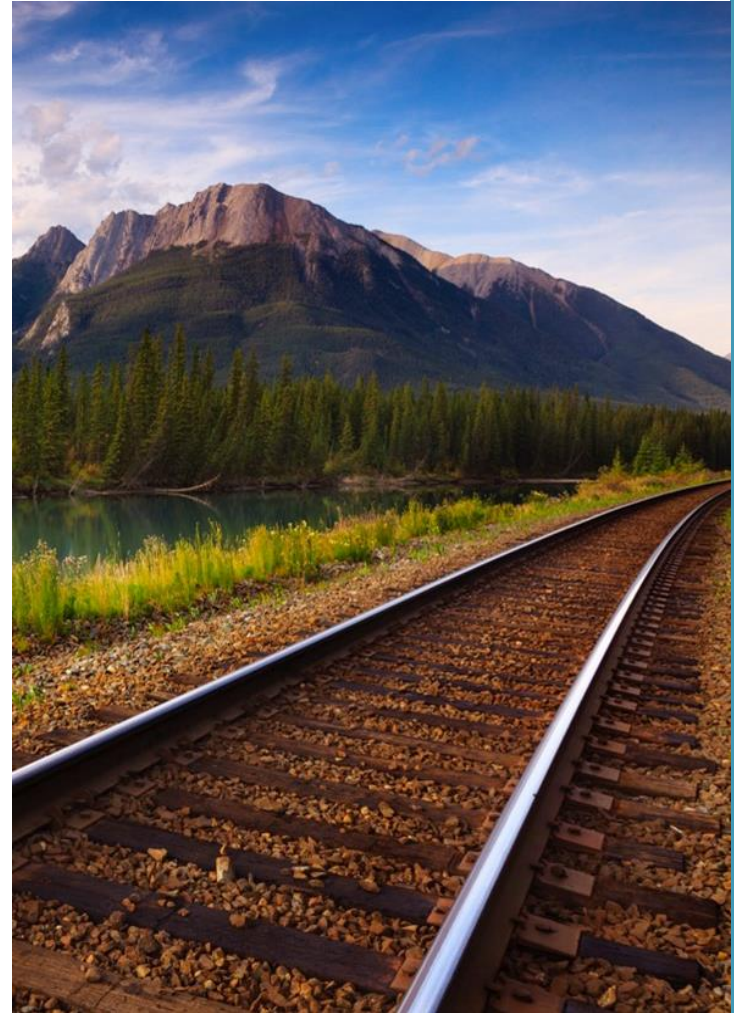
- Sent letter to White House urging the issuance of the Presidential Permit.

Fairbanks Economic Development Council:

- Letter sent to White House expressing support for the project and the issuance of the Presidential Permit.

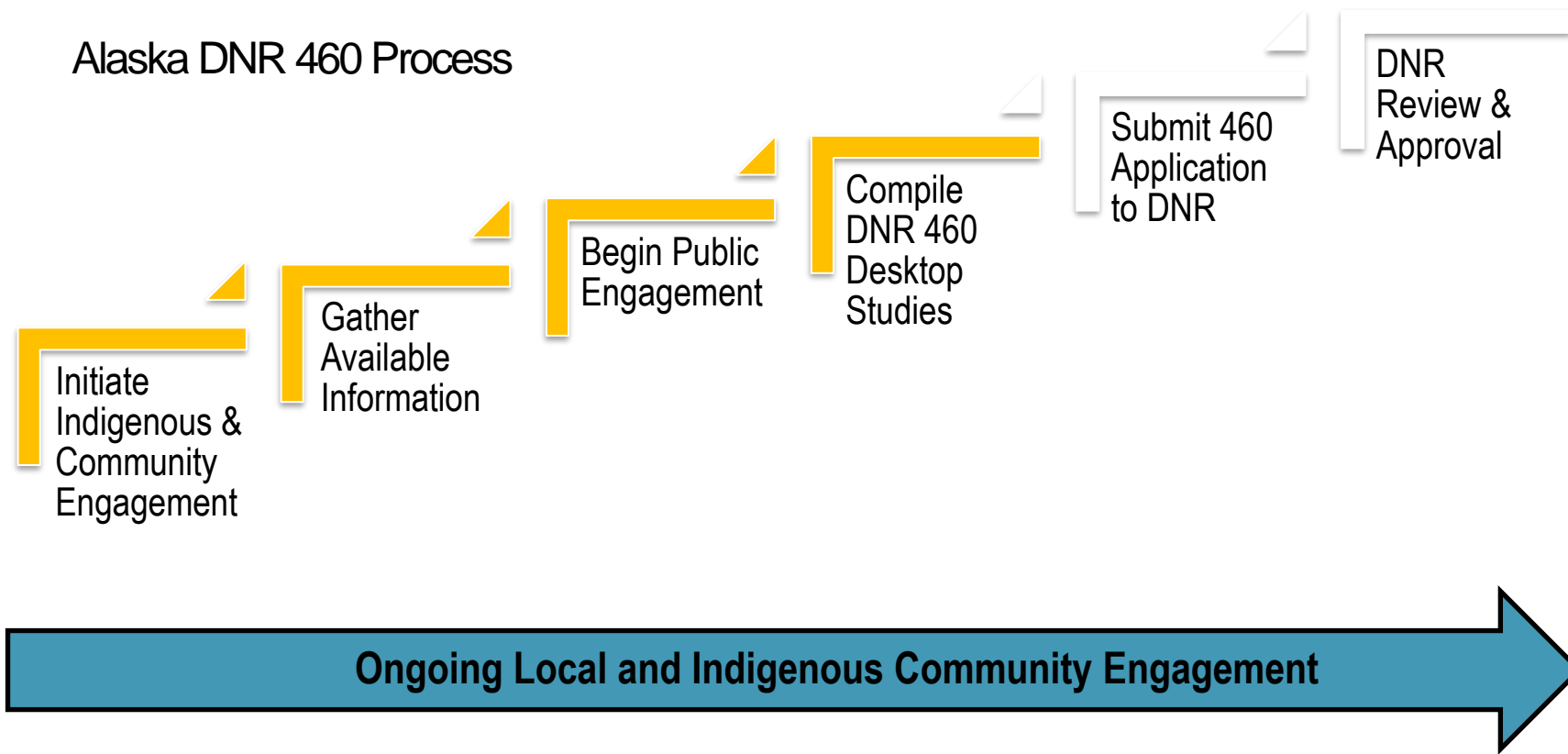
Pacific Northwest Economic Region (PNWER):

- Letter sent to White House expressing support for the project and the issuance of the Presidential Permit.



Next Steps

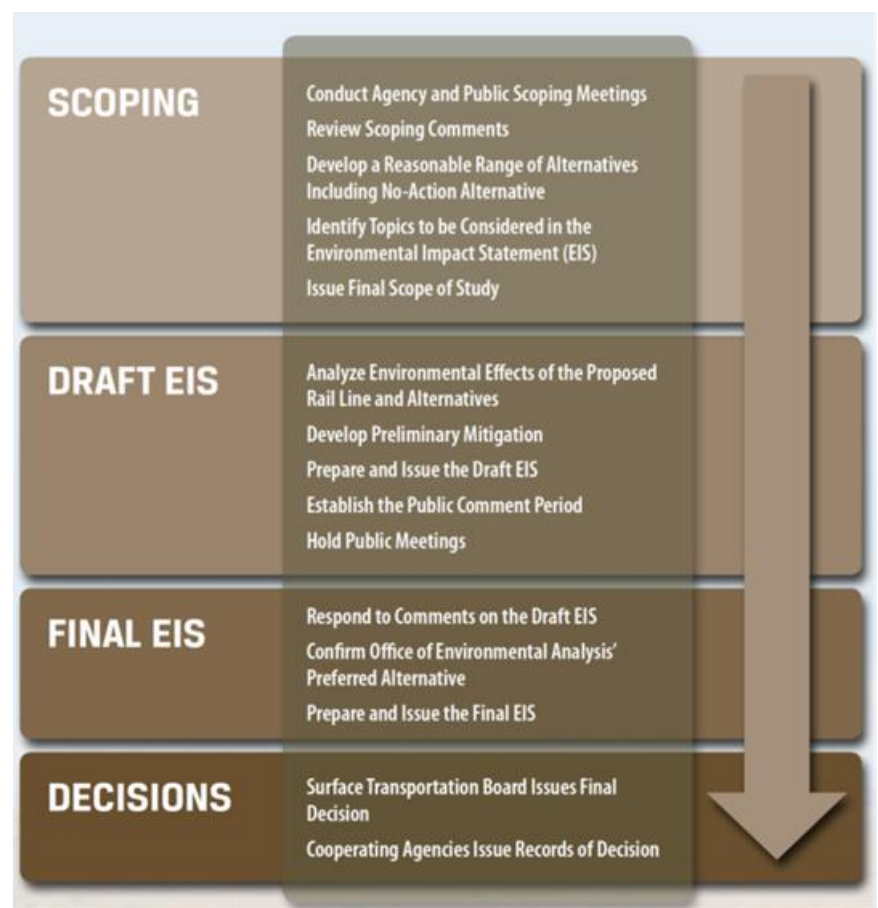
Alaska DNR 460 Process



Next Steps

STB NEPA Process – potential 1st Qtr. 2021 Start

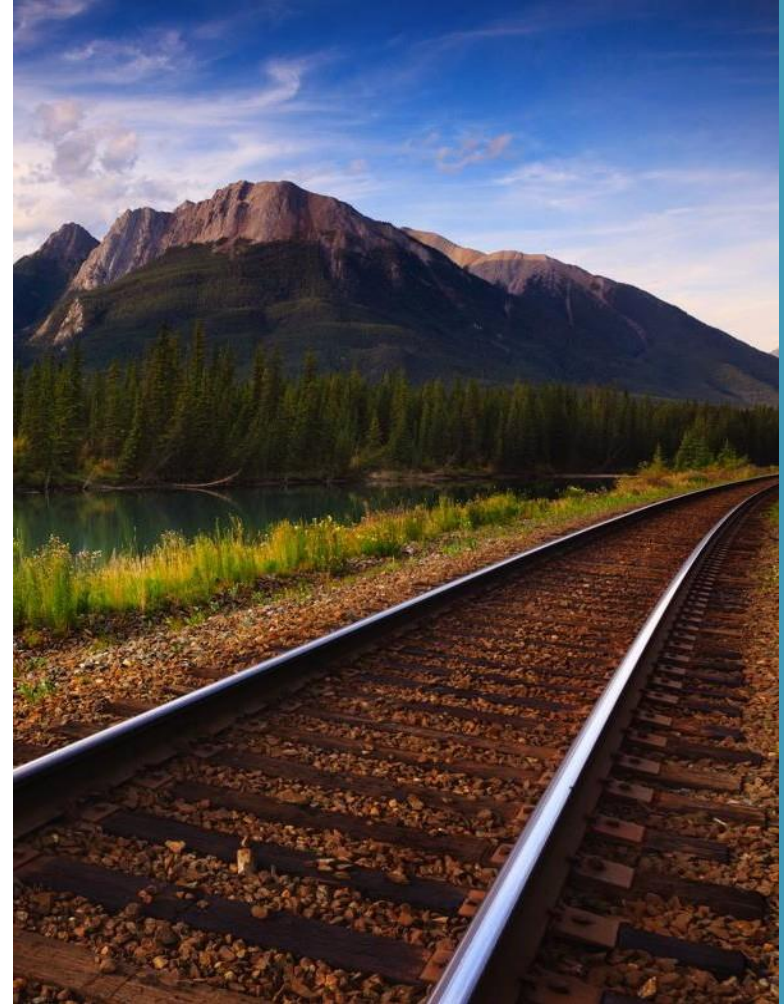
- 4 major steps
- STB utilizes a 3rd Party Consultant to prepare the EIS document
 - Paid for by Project Proponent
- STB may allow Proponent's Engineering and Environmental Consultant to perform some of the Baseline Studies
- STB & 3rd Party Consultant arrange for Scoping and Public meetings



Ongoing Local and Indigenous Community Engagement

Next Steps

- Presidential Border Crossing Permit
- Landowner agreements for ROW purposes
- Develop financial model for Alberta Indigenous Opportunities Corporation and Alaska Native entities.
- 460 Application
 - Submit application to DNR Q3 2020
- Begin preliminary engagements with STB
 - Initiate preliminary steps of NEPA environmental review process Q1 2021
- Continue stakeholder engagements, including work with Alaska's ports.



Discussion & Questions

