



# NWT Transportation Corridors

NWT Geoscience Forum - November 2019

Government of  
Northwest Territories







# Why Invest in Infrastructure?

- Important for growth of NWT economy
- Provide access to mineral and petroleum resources
- Support development of strong northern workforce and business opportunities
- Increase resiliency to impacts of climate change
- Reduce the cost of living
- Improve social opportunities
- Promote tourism opportunities





# Strategic Transportation Corridors



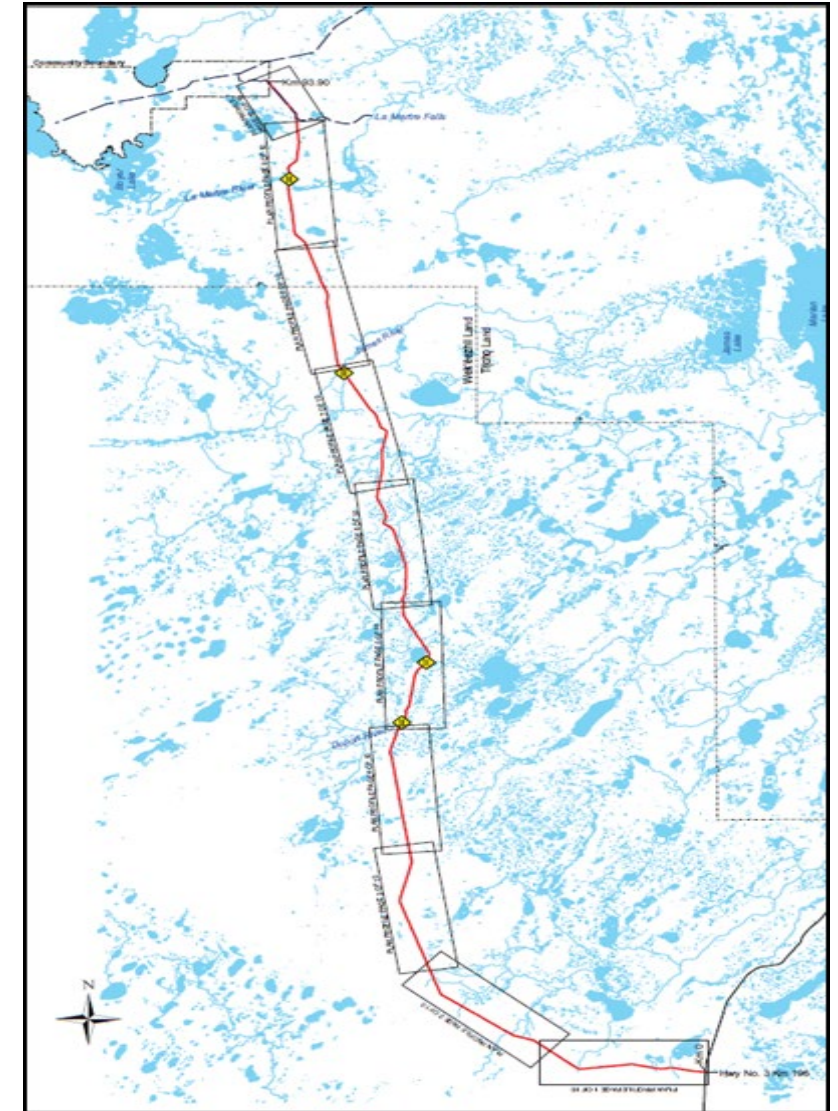
- GNWT is pursuing three strategic transportation corridors:
  - **Tłıchǫ All-season Road**
  - **Mackenzie Valley Highway**
  - **Slave Geological Province Corridor**
- Identified as priorities in GNWT's 25 Year Transportation Strategy
- Strategic infrastructure investments included in priorities of the 19<sup>th</sup> Legislative Assembly

*Make strategic infrastructure investments that connect communities, expand the economy or reduce the cost of living, including the Mackenzie Valley Highway, the Slave Geological Corridor and the Taltson Hydro Project.*



# Tłıchǫ All-Season Road

- 97 km highway from south of Behchokò to Whatì
- Infrastructure Canada providing 25% of capital costs
- P3 Project Agreement with North Star Infrastructure to design, build, finance, operate and maintain the road
- Tłıchǫ Investment Corporation is equity partner in North Star Infrastructure to construct and operate road
- Project Agreement specifies Indigenous and northern involvement for training, employment and business opportunities
- Construction started September 2019
- Opening expected 2022







# Mackenzie Valley Highway

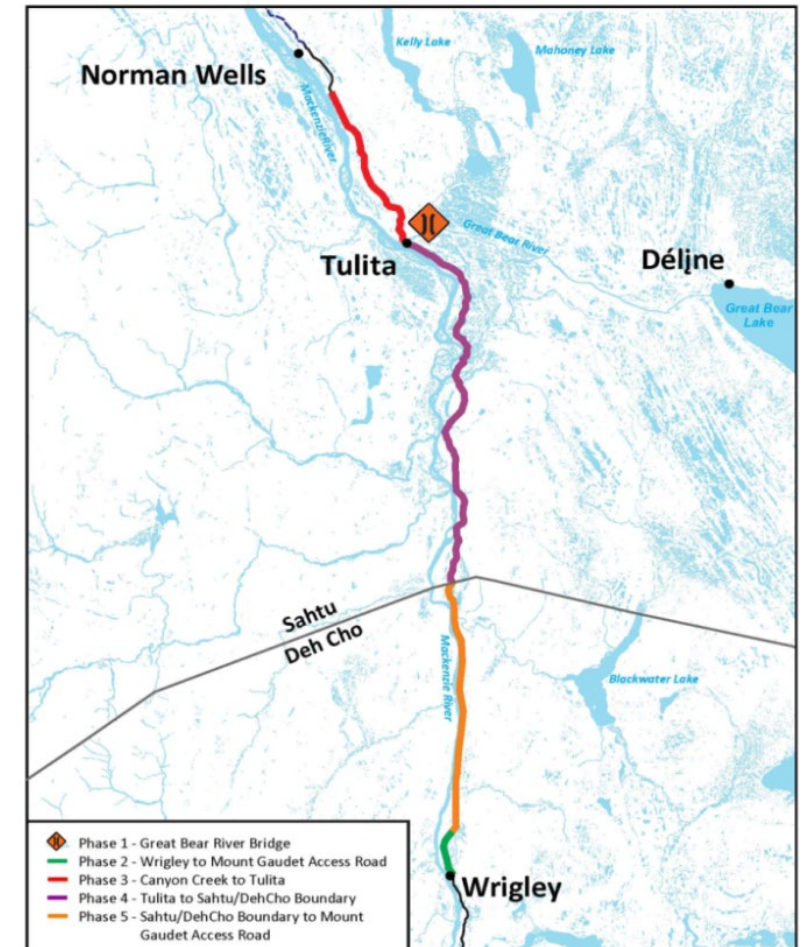
- Governments have invested over \$145 million in MVH since 2000 (not including the ITH)
- Inuvik Tuktoyaktuk Highway open November 2017
  - 15,000 travelers in first year
  - Increased tourism
  - Permafrost research
- Canyon Creek Access Road opened November 2018
  - 14 kilometre access road south from Norman Wells along MVH alignment
  - Increased capacity for residents to take advantage of future construction of Mackenzie Valley Highway





# Mackenzie Valley Highway

- Additional \$140 million announced June 2018
  - Great Bear River Bridge
  - Mount Gaudet Access Road
  - Planning and Environmental Assessment (Wrigley to Norman Wells)
- Focus of EA now on 307 kms between Wrigley and Norman Wells
- Partnership approach with Indigenous organizations
- Key milestones:
  - Prepare and submit Developer's Assessment Report—September 2021
  - Complete Environmental Assessment—September 2022
  - Regulatory approvals—September 2023
  - Potential construction date—September 2023
  - Construction timeline subject to funding and contracting





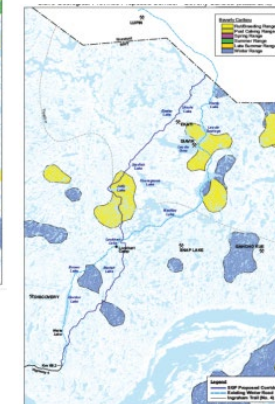
# Slave Geological Province Corridor

- New 413 km infrastructure corridor into Slave Geological Province north from Yellowknife
- Corridor would include road, energy and communications
- Long-term vision to connect Canada's highway system to a deep-water port on the Arctic Ocean in Nunavut
- Future connection to Grays Bay Road and Port project being pursued by Kitikmeot Inuit Association
- Additional consultation and engagement, engineering and environmental studies required to assist in final route alignment – need to balance maximizing access to mineral potential with minimizing negative impact on environment/wildlife/traditional use areas

Bathurst Caribou



Beverly Caribou



Bluenose East and Ahiak Caribou





# SGP Corridor – Access to Resources

- Mineral development is a significant contributor to the NWT economy (approximately one-third of the NWT economy)
- Existing mines are maturing and need to be replaced to maintain NWT economy
- Lack of infrastructure is consistently identified as a significant challenge to the exploration and mining industry
- Improved access into the Slave Geological Province would facilitate both mineral exploration and development activities
- Important for the future of the NWT

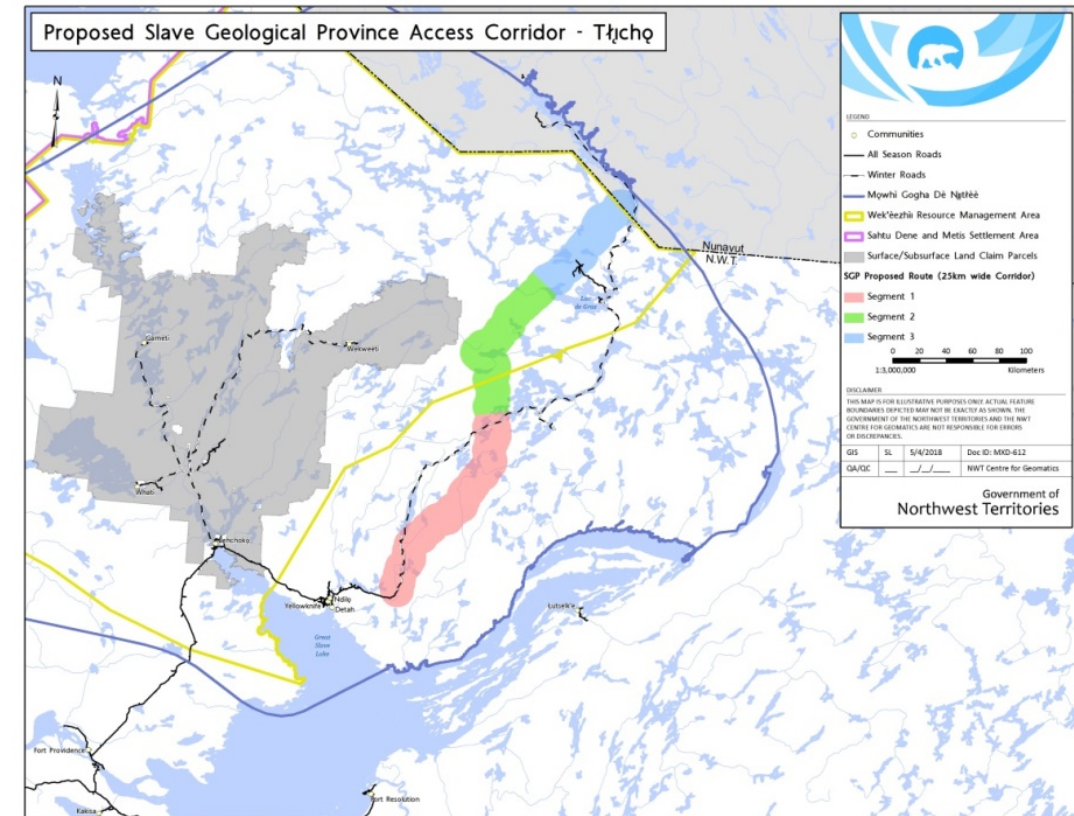






# Slave Geological Province Corridor

- GNWT is early in process for developing project but there are significant opportunities to advance it
  - Indigenous partnerships being developed
  - \$40 million funding announced in August 2019 under National Trade Corridors Fund to support planning and environmental and regulatory reviews leading to permits for road construction
- Three potential construction phases:
  1. Tibbitt Lake to Lockhart Lake (179 km)
  2. Lockhart to Lac de Gras (152 km)
  3. Lac de Gras to NWT/Nunavut border (82 km)





# Route Selection — Tłıchǫ and SGP Corridors

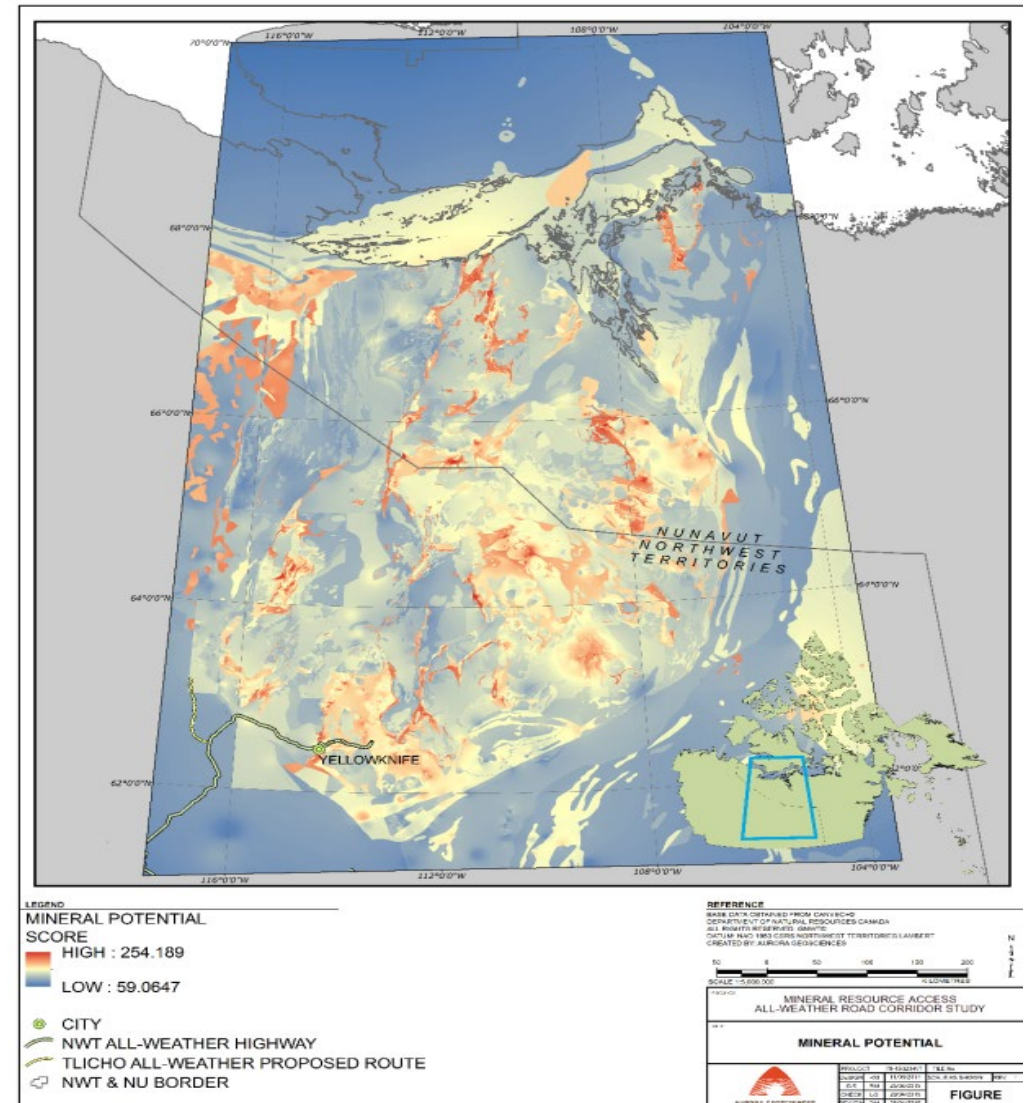
- Tłıchǫ All-Season Road:
  - Route selection for the Tłıchǫ access corridor driven by community location (Whatì) and engineering
  - Route will facilitate access to the NICO project and by-pass the problematic southern end of the Tłıchǫ winter road system
- SGP Corridor:
  - Will assist mineral exploration and development projects in the western SGP and Bear structural provinces which have used this winter road system (e.g. Colomac Mine)
  - Multiple considerations for SGP: Mineral deposit, caribou, technical feasibility, cost





# Mineral Potential Map Tool

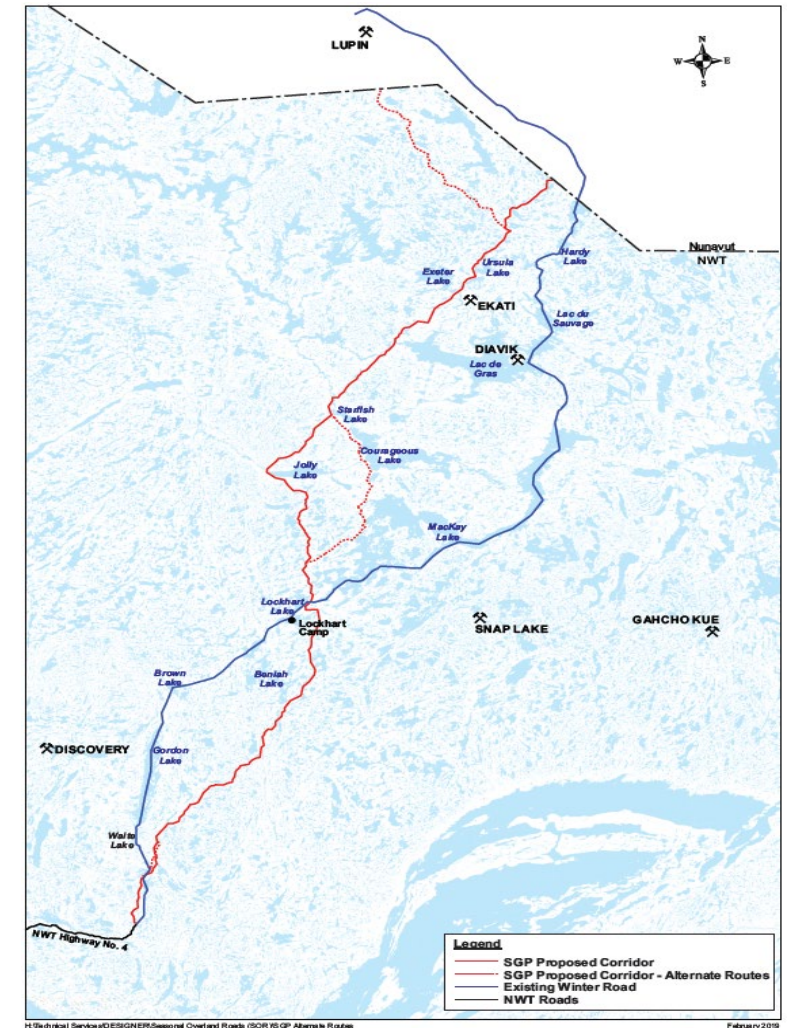
- GIS Mapping Project designed by Aurora Geosciences in conjunction with GNWT
- Four variables of mineral quality: bedrock geology, mineral tenure, mineral occurrences, faults/structures
- Areas in red are high, blue are low potential
- Main influencers are geology and mineral occurrences
- Some areas have very little data available





# SGP — Mineral Potential Route Selection

- New corridor identified follows greenstone belts
- Main point of interest is that this route selection angles through the Cameron/Beaulieu River Greenstone Belts (CBRGB) as opposed to north through the Yellowknife Greenstone belt
- This was driven by a combination of mineral deposit modeling, engineering (avoidance of large lakes etc.), and the existing Tibbitt Lake road terminus being a preferred start point
- Exercise will be done again using sensitive caribou and other wildlife/species at risk habitat





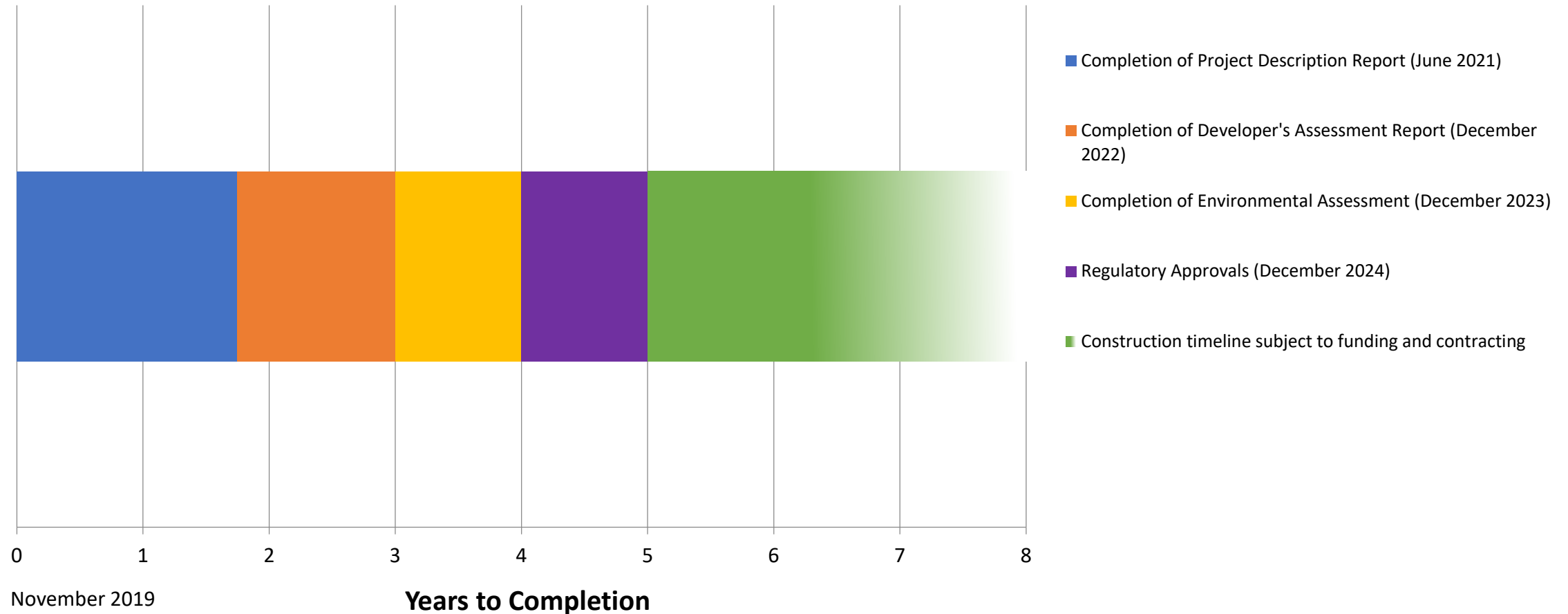


# SGP Corridor - Next Steps

- Environmental impact assessment and regulatory authorizations for the construction of the proposed Lockhart All-Season Road (LASR)
  - Prepare and submit Project Description Report for LASR to initiate environmental impact assessment process (March 2021)
  - Technical studies to investigate engineering, land use, archaeological and environmental issues
  - Confirm routing for alignment
    - Alternate routing options developed based on caribou usage patterns
    - Terrain analysis and initial borrow source analysis to km 179 complete
    - LIDAR to km 320 being completed
    - Traditional Knowledge studies on initial borrow sources
    - Geotech program on preliminary borrow sources in March 2020
    - Partnerships with Indigenous governments
    - Community consultation and engagement
- Planning studies for future development from Lockhart Lake to Nunavut border



# LASR – Anticipated Timeline







*Thank you.*

[www.inf.gov.nt.ca/projects](http://www.inf.gov.nt.ca/projects)