

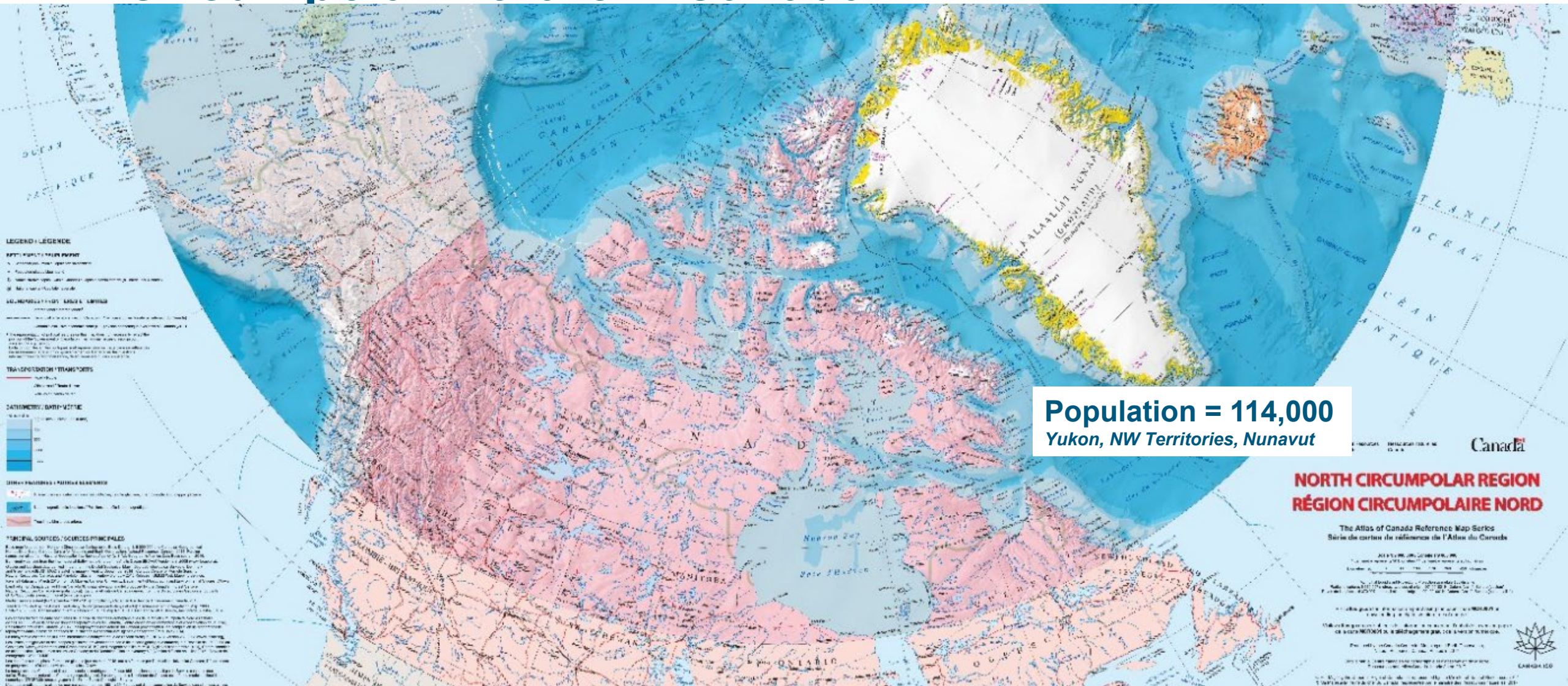
Northern and Arctic Air Connectivity in Canada

Prepared For: The Roundtable on Connectivity for Small Populations
in Remote Communities

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InterVISTAS Consulting Inc.

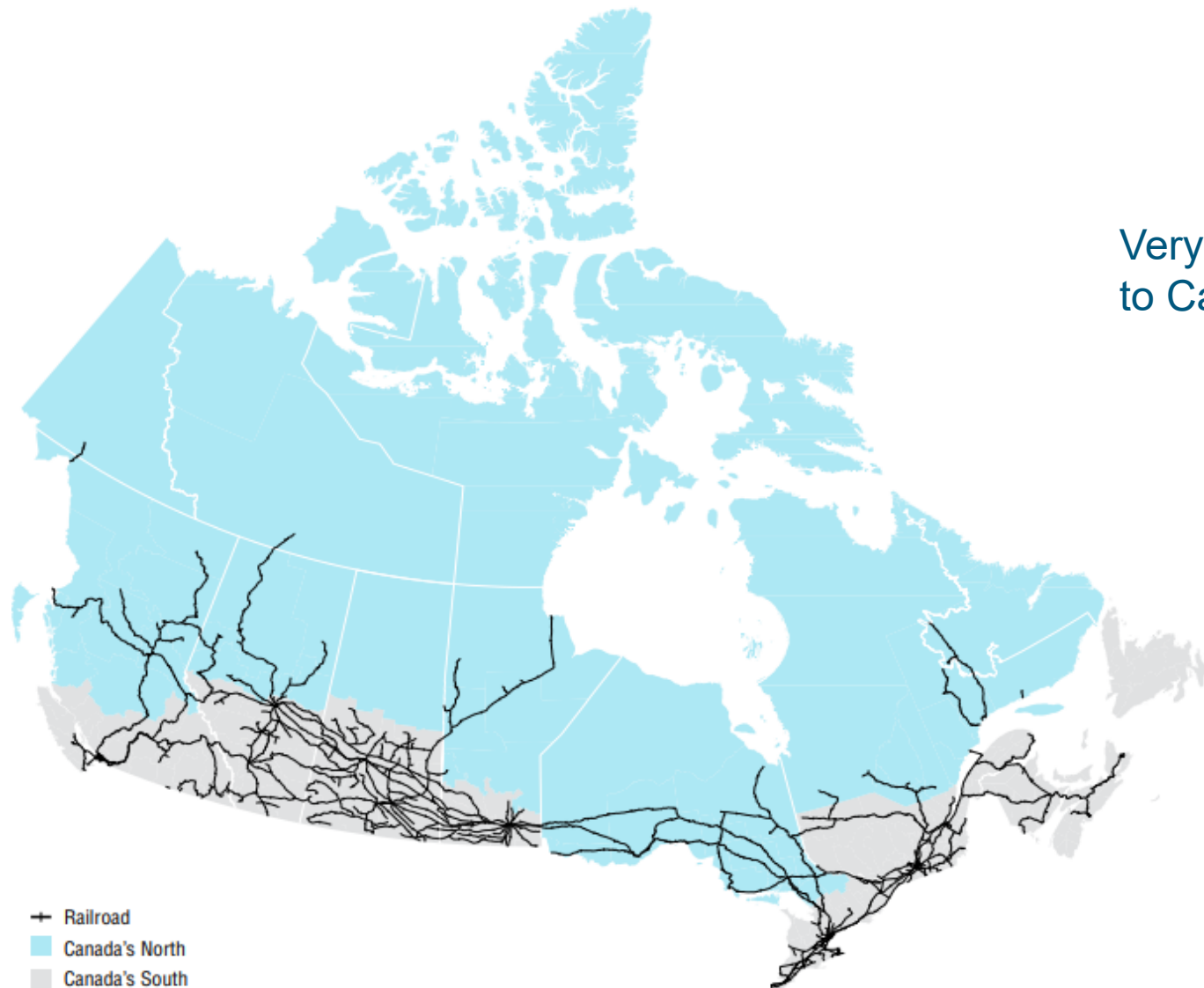
23 September 2019

Circumpolar Northern Canada

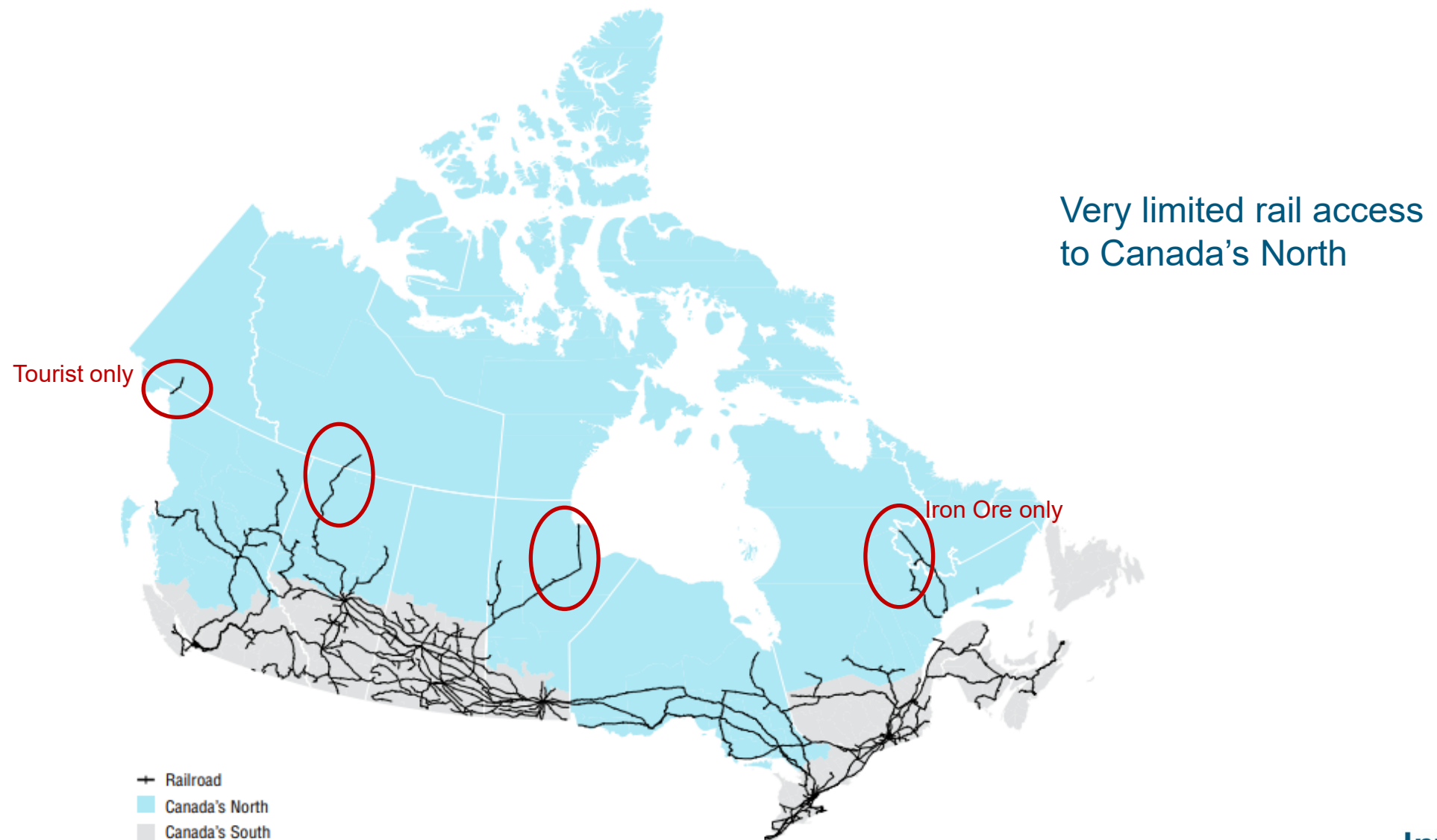


Canada's Railroads

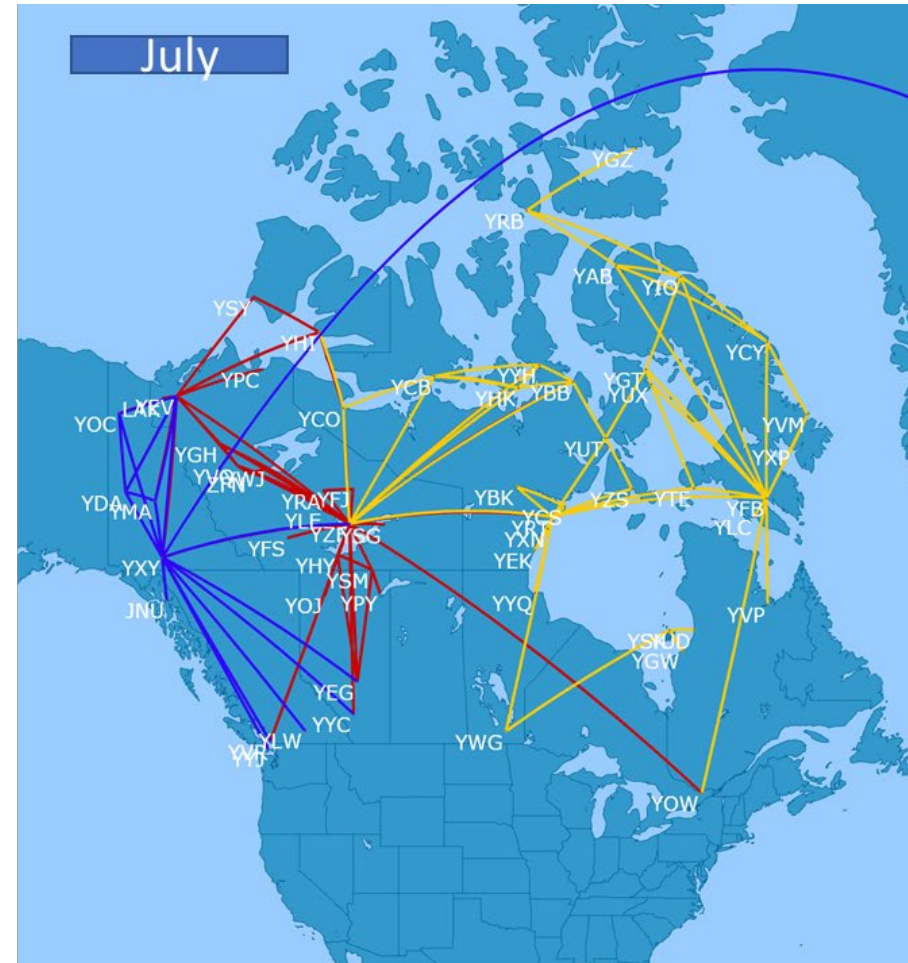
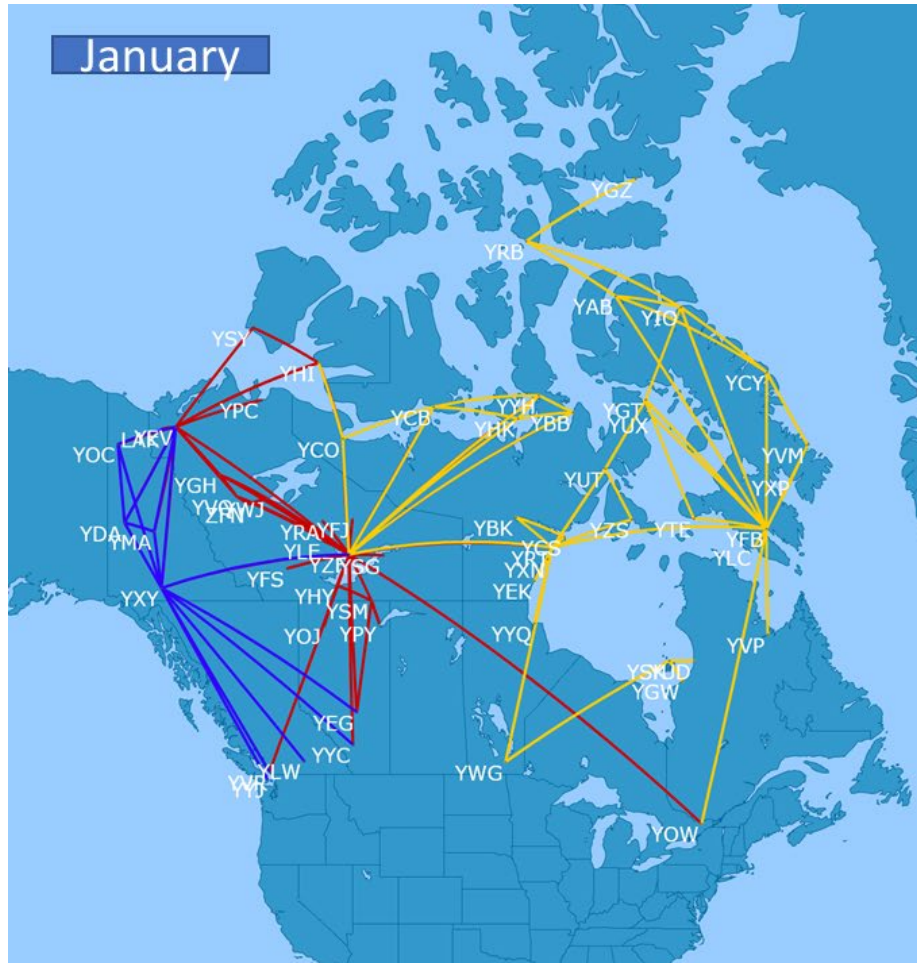
Very limited rail access
to Canada's North



Canada's Railroads

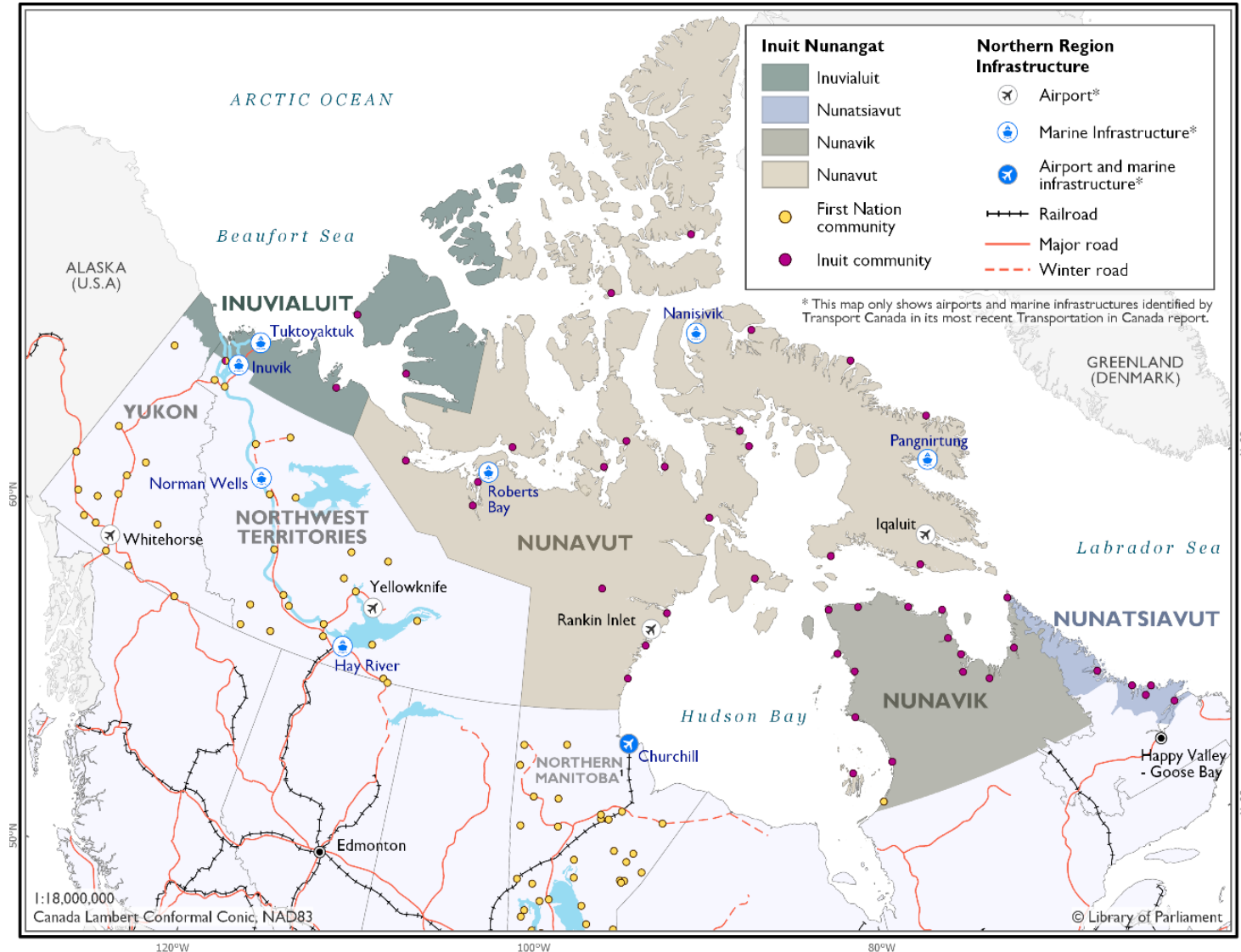


Air Connectivity



Source: Innovata Schedule Data via Diio.

Key transportation infrastructure



Source: House of Commons Canada,
INAN Committee Report

¹Crown-Indigenous Relations and Northern Affairs Canada does not use a standardized definition to determine the boundaries of "Northern Manitoba". As such, on this map, there are no clear boundaries for this region, but the location of First Nations communities was nonetheless included.

Yukon



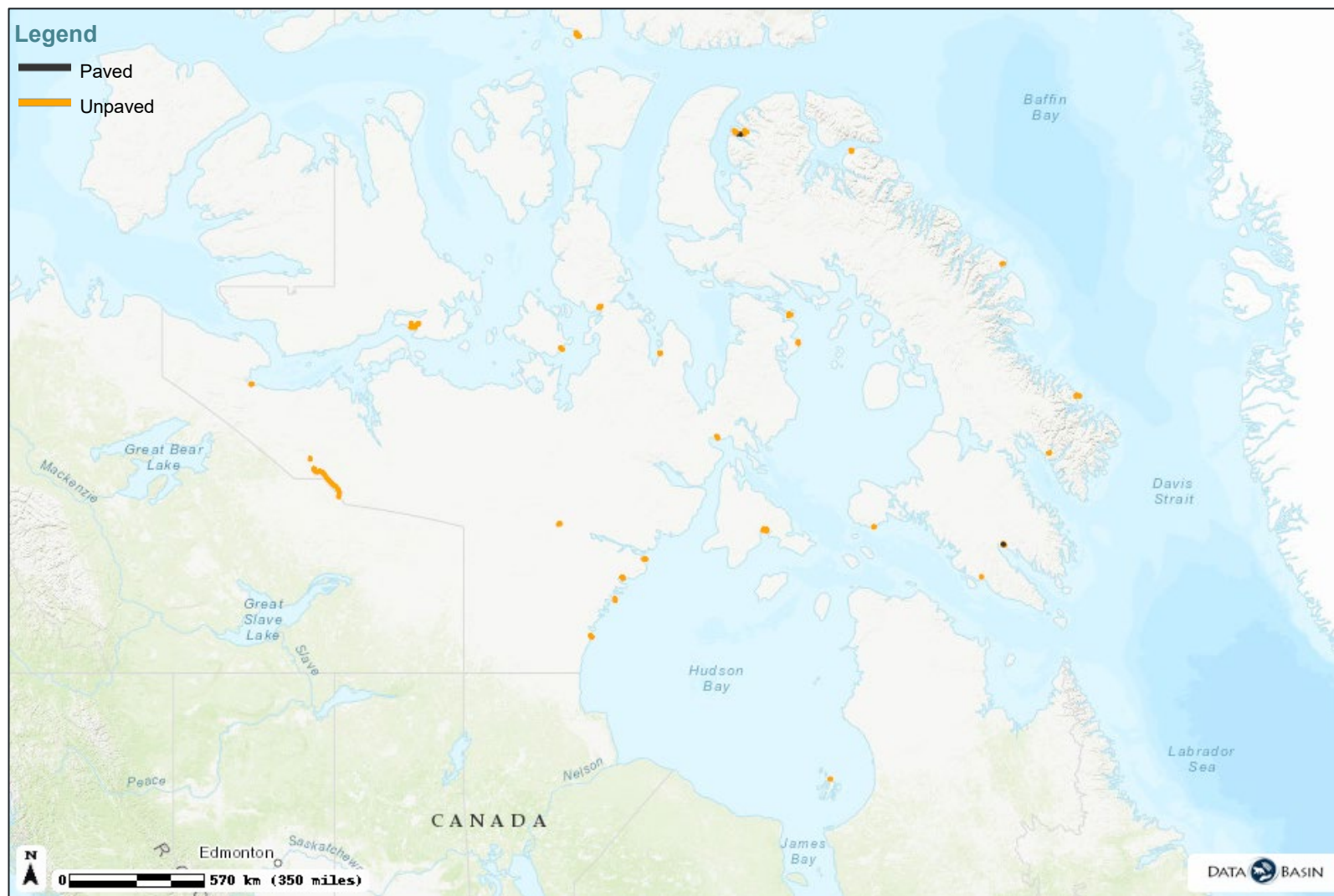
Source: Travel Yukon

Northwest Territories



Source: Government of the Northwest Territories

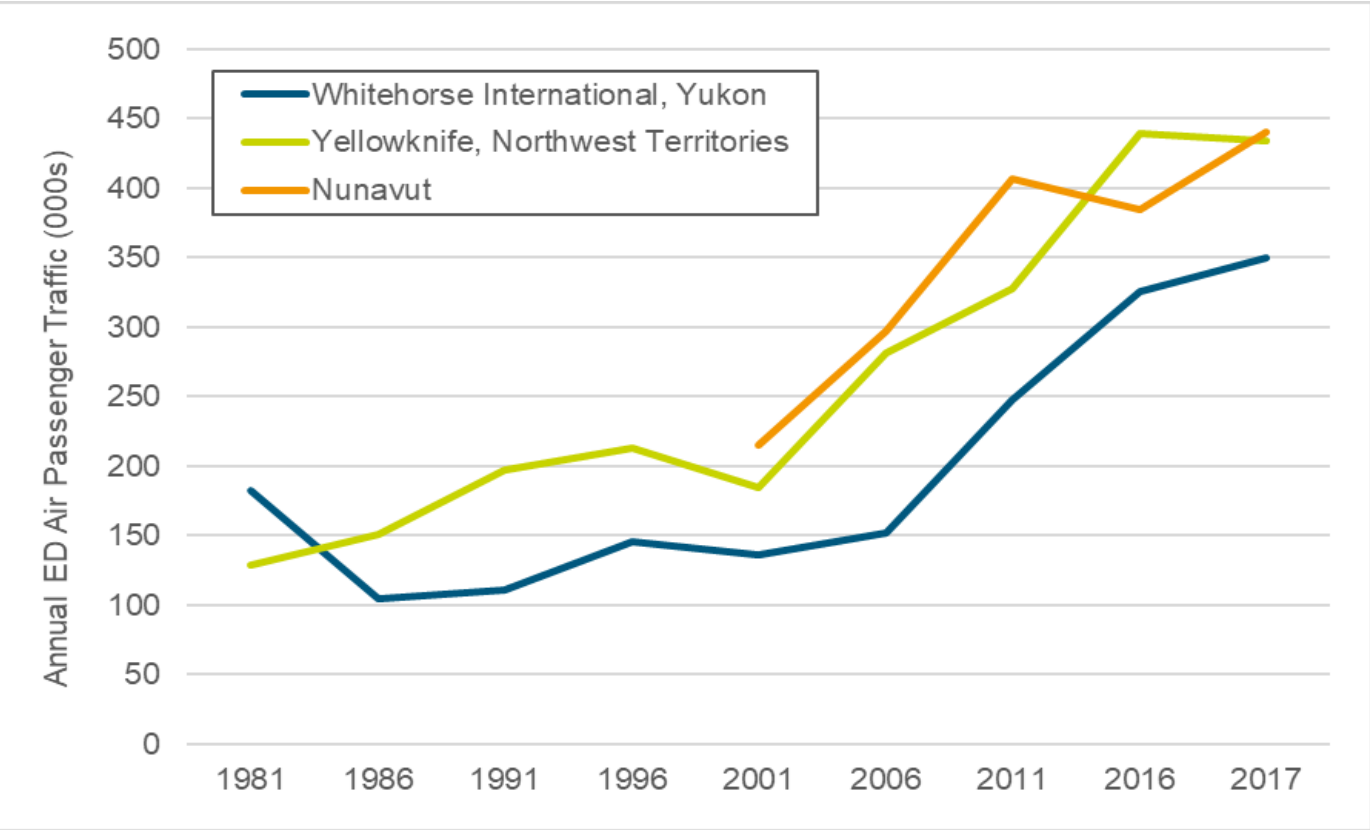
Nunavut



Source: Data Basin,
Natural Resources Canada

InterVISTAS
a company of Royal HaskoningDHV

Air Transport is Vital



No meaningful
Air Cargo Data
for Northern Services

Source: Statistics Canada, Table 23-10-0253-01.

Note: Statistics Canada (SC) does not provide data on Yukon Territory but does provide data on Whitehorse Airport. For the NWT, SC provides data on both Yellowknife (434,282 passengers in 2017) and the Territory in total (628,038). For Nunavut Territory, SC provides territory level data but not data specifically for Iqaluit Airport.

Note: Aircraft movements, by class of operation, airports with NAV CANADA towers, annual, Table 23-10-0025-01 Aircraft movements, by class of operation, for airports with NAV CANADA flight service stations, annual, and Statistics Canada Table: 17-10-0009-01 Population Estimates

Geography	Total movements (itinerant and local)			Population		
	2000	2010	2018	2000	2010	2018
Yukon	31,728	30,635	38,470	30,431	34,596	40,476
Northwest Territories	98,902	83,282	72,200	40,480	43,285	44,541
Nunavut	27,654	33,299	31,391	27,498	33,352	38,396

Source: Statistics Canada, Table 23-10-0018-01.

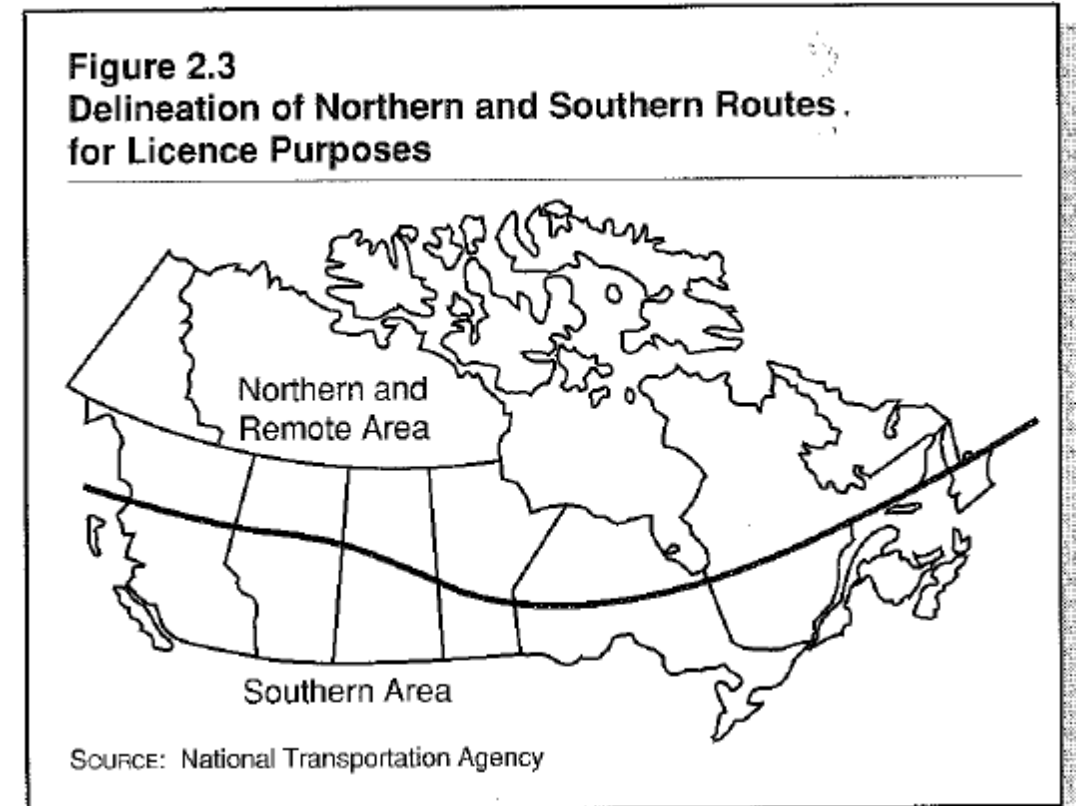
Legislation

Canada Transportation Act (2018)

- No explicit mention of the north
 - Only relating to resupply provisions
- From 1986 there was a distinction
 - For aviation economic regulation (see map)
 - But not since 1996

Civil Air Navigation Services Commercialization Act

- 25 (1) (g) **charges for designated northern or remote services** and for services directed to be provided under subsection 24(1) **must not be higher than charges** for similar services utilized to a similar extent **elsewhere in Canada**;



Source: National Transportation Act Review, 1993, pg. 32

Challenges

Report p. 22-23

Canada Transportation Act Review observed:

“In many northern and remote parts of the country, providing mobility, connectivity, and vital goods and services poses serious challenges.

*Across over half of Canada’s land mass, low and sporadic user volumes, harsh conditions, high costs for operators, and infrastructure gaps **are all barriers to market-based transportation solutions.***

*Input to the Review reflected **support for a strong federal role in ensuring that northern and remote areas are connected to the national transportation system.** International comparisons, **however, indicate that Canada is a laggard in relation to other countries with a large presence in the North.***

Challenges

Report p. 22-23

Canada Transportation Act Review observed:

Established transportation operators are sophisticated, adaptable, and well accustomed to doing business in the North,
but it is a constant challenge to sustain economically viable services.

Year-round ***access to essential goods and services in many communities is only possible by air transport.***

And yet, deficient airport infrastructure, difficulties in navigating challenging weather conditions, and the weather systems themselves continue to constrain operations, threaten safety, and increase costs.

... Notwithstanding the challenges, ***responsibly unlocking northern potential is important: transportation holds the key.***

A core policy

User Pay

- **User pay has been a key element of Canada's transportation policy since the 1980s**
 - *Deregulation*
 - *Privatization (carriers and infrastructure – rail, airline, airports, ports, ...)*
 - Canada's infrastructure privatization has largely been to private, not-for-profit entities
 - carriers to for profit private companies
 - *Elimination of past subsidies*
 - *Fees and charges revised to recover costs*
- **Canada does not subsidize carriers and provides little support to ports/airports**
 - *No equivalent of US Essential Air Service Program for aviation or Airport Improvement Program for airports*
 - *No equivalent of public service obligations in Europe*
there is no obligation to continue air service, beyond a notice period

Programs/Policies

Program/Policy	Comments
Nutrition North Canada Program	<p>Subsidises perishable and nutritious food items</p> <ul style="list-style-type: none"> • Southern supplier must register • Eligibility <ul style="list-style-type: none"> • lack year-round surface transport • have permanent population <p>42 Communities currently eligible</p>
Northern Transportation Adaptation Initiative Program – Climate Change Research	<p>Up to \$50,000 per project</p> <ul style="list-style-type: none"> • 3 project types <ul style="list-style-type: none"> • asset specific research • transferrable tools/technologies • training • Application process now closed
Arctic and Northern Policy Framework	<p>To be released in 2019</p> <p><i>Update: released 10 Sep 2019</i></p>

Programs/Policies

Program/Policy	Comments
<p data-bbox="206 325 1014 372">Arctic and Northern Policy Framework</p> 	<p data-bbox="1401 325 1905 368">To be released in 2019</p> <p data-bbox="1401 382 2074 429"><i>Update: released 10 Sep 2019</i></p> <ul data-bbox="1401 496 2313 1110" style="list-style-type: none"><li data-bbox="1401 496 2313 654">• A broad and comprehensive policy to guide government policy toward the North<li data-bbox="1401 668 2313 1110">• Includes:<ul data-bbox="1498 725 2313 1110" style="list-style-type: none"><li data-bbox="1498 725 2313 939">• Goal 2: Investment in significant infrastructure projects<ul data-bbox="1600 839 2313 1068" style="list-style-type: none"><li data-bbox="1600 839 2313 939">• Recent investments in airport and Churchill rail line<li data-bbox="1600 953 2313 1068">• Expand Multimodal infrastructure and operations<li data-bbox="1498 1068 2313 1110">• Goal 1: Health resiliency

Programs/Policies

Program/Policy	Comments
Airports Capital Assistance Program (ACAP)	Only for safety related investments
National Trade Corridor Funding	\$400 mn for Northern transportation infrastructure
Ad-hoc Funding	E.g., P3 Funding: \$77 mn towards Iqaluit Airport
Territorial Government Funding	Net federal transfers (2016/17) <ul style="list-style-type: none"> • Yukon: \$98 mill • NWT: \$210 mill • Nunavut: \$98 mill

Funding has not always been available

**Current programs have fixed budgets
and can be highly competitive**

- **Nunavut submitted six proposals for NTCF funding**
 - Only one was approved

Lack of certainty with currently available funding models

Challenges

- **Adverse weather conditions**
- **High construction costs**
 - Remoteness and weather
- **High operating costs**
 - Very high cost of living
- **Susceptibility to disasters**
 - Winter road failures or season shortening
 - Weather washout of railway/roads
 - Risk of environmental accidents --- addressing the problem is major challenge
- **Uncertain impacts of climate change**
 - E.g., rail/road beds on muskeg and permafrost

Challenges

- **Limitations on aircraft choices**
 - Most communities have gravel strips
 - Ideal service is combi pax/cargo
- **Pilot/mechanic shortages**
 - Problem shared with south, but recent recruiting to south from Northern training programs
- **Lack of economic diversity**

Potential future policy elements

- **Continue to recognize the vital importance of connectivity to the North**
- **Recognize the Economic Challenges of Northern Transport**
 - Enhance airport/road/rail/marine infrastructure
- **Subsidies for the provision of infrastructure, not air service**
 - Let the market decide which air services are valued and can be economically provided
 - Unlike the essential air service programs in the US or CSO in Europe
 - Where support is needed, focus on infrastructure and its high northern capital and operating costs
- **Continue the user-pay policy**
 - in general
- **Continue air programs for transport to support health resiliency**

Merci
Thank you!