

Dempster Fibre Project

Completing The North's Fibre Loop

The 777-kilometre fibre optic line will follow the Dempster Highway from Dawson City, Yukon to Inuvik, Northwest Territories.

About the Dempster Highway route

The route will connect with the Government of the Northwest Territories' existing Mackenzie Valley fibre line, creating a continuous 4,000-kilometre long fibre loop. The design will be finalized once the procurement process is complete and a construction company has been selected.

Route benefits

1. Stable Internet for a larger percentage of Yukon's population and for neighbouring communities in Northwest Territories, Nunavut and northern British Columbia which removes a barrier to northerners fully participating in the digital economy.
2. Construction activity will have a significantly higher capital investment in the Yukon economy than the South Klondike.
3. More employment opportunities for Yukon contractors and residents.
4. Most affordable route for Yukon based on capital and operating expenditures.
5. Avoids routing sensitive data through a foreign country.

Key facts

Dempster Highway route

- 777 km from Dawson to Inuvik
- 3 years to complete
- Construction cost of \$79 million
- Operating cost of \$60 million over 20 years
- Government of Yukon to own the line
- Northwestel to operate the line

The North's Fibre Loop

- 4,000 km across two territories and two provinces
- More than 70 northern communities to benefit

Fibre benefits

1. Provides reliable payment systems so Yukon's business community will no longer lose revenue due to out-of-service debit and credit card terminals.
2. Allows businesses to fully participate in the digital economy.
3. Gives the information technology sector the capacity to provide improved service to clients inside and outside Yukon.
4. Improves the investment environment for businesses and individuals looking to relocate or invest in Yukon.
5. Improves the reliability of access to government eServices and online programs for Yukon communities.

Timeline

2018 - 2019

Planning, engagement, permitting and procurement.

2019 - 2021

Construction of the line. The timeline will be finalized once the procurement process is complete and a construction company has been selected.

Operation Expressions of Interest

Dempster Highway route

Two Expressions of Interest were received. Northwestel's response indicated that it could operate the line at no cost to the Government of Yukon, and was also in a position to contribute up to \$15 million towards the capital build.

South Klondike route

Six Expressions of Interest were received. None provided evidence to suggest that the line could be financially sustainable to operate.

Construction Planning

The Government of Yukon will begin an extensive permitting and engagement process before any construction starts. This process will involve Species at Risk, Yukon Environmental and Socio-economic Assessment Board (YESAB), Mackenzie Valley Land and Water Board, and affected Indigenous groups along the fibre route (Tr'ondëk Hwëch'in, Na-Cho Nyäk Dun, Vuntut Gwitchin and Indigenous groups based in the Northwest Territories).

Route costs

	Dempster Highway	South Klondike
Total estimated budget	\$79 million (Government of Canada is providing 75% of the funding)	\$34 million (Incl. bandwidth lease costs)
Funding sources		
Connect to Innovate Fund (Innovation, Science and Economic Development Canada)	\$30 million	
Small Communities Fund (Infrastructure Canada)	\$29 million	\$13 million*
Government of Yukon	\$5 million	\$21 million
Northwestel	\$15 million	

*SCF Eligible project

Connected Communities

More than 70 northern communities to benefit

Yukon communities (21)	N.W.T. communities (18)	Nunavut communities (25)	B.C. communities (6)
Beaver Creek	Aklavik	Arctic Bay	Atlin
Burwash Landing	Colville Lake	Arviat	Bob Quinn
Carcross	Deline	Baker Lake	Dease Lake
Carmacks	Fort Good Hope	Cambridge Bay	Fort Ware
Dawson	Fort McPherson	Cape Dorset	Iskut
Destruction Bay	Fort Simpson	Chesterfield Inlet	Telegraph Creek
Faro	Gamèti	Clyde River	
Haines Junction	Inuvik	Coral Harbour	
Ibex Valley	Lutselk'e	Gjoa Haven	
Marsh Lake	Norman Wells	Grise Fiord	
Mayo	Paulatuk	Hall Beach	
Old Crow	Sachs Harbour	Igloolik	
Pelly Crossing	Tsiigehtchic	Iqaluit	
Ross River	Tuktoyaktuk	Kimmirut	
Stewart Crossing	Tulita	Kugaaruk	
Swift River	Ulukhaktok	Kugluktuk	
Tagish	Wekweèti	Naujaat	
Teslin	Wrigley	Pangnirtung	
Upper Liard		Pond Inlet	
Watson Lake		Qikiqtarjuaq	
Whitehorse		Rankin Inlet	
		Resolute Bay	
		Sanikiluaq	
		Taloyoak	
		Whale Cove	

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Distance = 777 Kilometres
More than 70 communities
will benefit across the North

- Existing Northwest Fibre
- Mackenzie Valley Fibre
- Proposed Dempster Fibre
- Whitehorse Transfer Station
- Earth Stations
- Satellite

