ADDRESSING THE IMPACT OF CLIMATE CHANGE ON INDIGENOUS COMMUNITIES' TRANSPORTATION INFRASTRUCTURE
Adopted by the Canadian Chamber of Commerce – Sept. 2016

Issue
Climate change is threatening the seasonal transportation infrastructure relied upon by many remote Indigenous communities, leading to socioeconomic challenges that will only worsen as warmer temperatures further reduce winter road access.

Background
For remote northern Indigenous communities across Canada who are otherwise inaccessible by permanent conventional roads or railways, networks of seasonal "winter roads" made of ice or snow provide temporary access to a permanent provincial highway or railway system. These seasonal roads are used by individuals and businesses from freeze-up until spring thaw. They are of significant socioeconomic importance, allowing for goods to be moved at a cost two to three times lower than air transport, which is frequently the sole alternative. As well, the winter roads are often the only option for the transportation of heavier items such as vehicles, equipment, and building materials into these remote communities. For instance, in Northern Ontario, 30 First Nations communities depend on thousands of kilometers of winter roads as a lifeline for transportation and shipment of goods[1]; these are also a key avenue for resource development projects, such as De Beers' diamond mining and exploration efforts, which depend on the use of the winter roads for the majority of its annual re-supply.[2] This is similarly seen throughout Canada: in northern Manitoba, 30,000 people live in 28 remote communities otherwise inaccessible by conventional roads.[3]

There has long been a push to develop a permanent road system in many of these regions, in light of the obvious economic and social benefits. This call has become more pressing as climate change continuously shortens the duration of the winter roads, which in turn threatens the economic viability of nearby resource projects as well as the communities themselves; access to goods and services is reduced, and the window for specific project activities is shortened considerably. For many such communities, winter roads have traditionally been functional for upwards of 80 days per year, a figure that has in some cases shrunk to as low as 20 days in recent years.[4] In northern Saskatchewan, warmer temperatures through early 2016 rendered winter road access unsafe for three northern communities, preventing the transportation of crucial supplies.[5] This problem is only expected to worsen in the coming years: various climate studies, such as one undertaken by the province of Manitoba, the Prairie Adaptation Research Collaborative, and the University of Winnipeg, which projected the winter road season would further shrink by another five days in the 2020s, 10 days in the 2050s, and 14 days in the 2080s.[6]

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[1] http://www.republicofmining.com/2016/03/08/invest-north-ontario-and-canada-needs-full-inclusion-of-first-nations-to-kick-start-the-economy-by-ontario-regional-chief-isadore-day-metro-toronto-convention-centre-march-7-2016/

[2] http://aptn.ca/news/2013/02/15/attawapiskat-councillor-accuses-de-beers-of-trickery-as-showdown-looms-on-diamond-mine-ice-road/

[3] *Enhancing the Resilience of Manitoba's Winter Roads System*: International Institute for Sustainable Development, 2014.

[4] https://news.vice.com/article/canadas-ice-roads-are-melting-and-that-is-terrible-news-for-aboriginal-communities

[5] http://www.cbc.ca/news/canada/saskatoon/fsin-climate-change-first-minsters-meeting-1.3472278

[6] *Enhancing the Resilience of Manitoba's Winter Roads System*: International Institute for Sustainable Development, 2014.

As indicated by Ontario Regional Chief Isadore Day at the 2016 Prospectors and Developers Association of Canada conference, "shorter seasons have resulted in drastic downturns in local economies"[7] – a sentiment of concern also expressed by countless other Aboriginal leaders across the country. This has been echoed by Indigenous Affairs Minister Hon. Carolyn Bennett, who has highlighted the increasingly pressing need to address this issue with "long-term solutions."[8]

Recommendations

That the federal government:

1. Work with Indigenous communities to determine the full impact of climate change on their transportation infrastructure, and work with local, provincial and territorial governments to subsequently develop a strategy to implement all-season road networks where appropriate.

[7] http://www.republicofmining.com/2016/03/08/invest-north-ontario-and-canada-needs-full-inclusion-of-first-nations-to-kick-start-the-economy-by-ontario-regional-chief-isadore-day-metro-toronto-convention-centre-march-7-2016/

[8] http://www.cbc.ca/news/canada/saskatoon/ice-roads-access-for-first-nations-debated-in-house-of-commons-1.3463233