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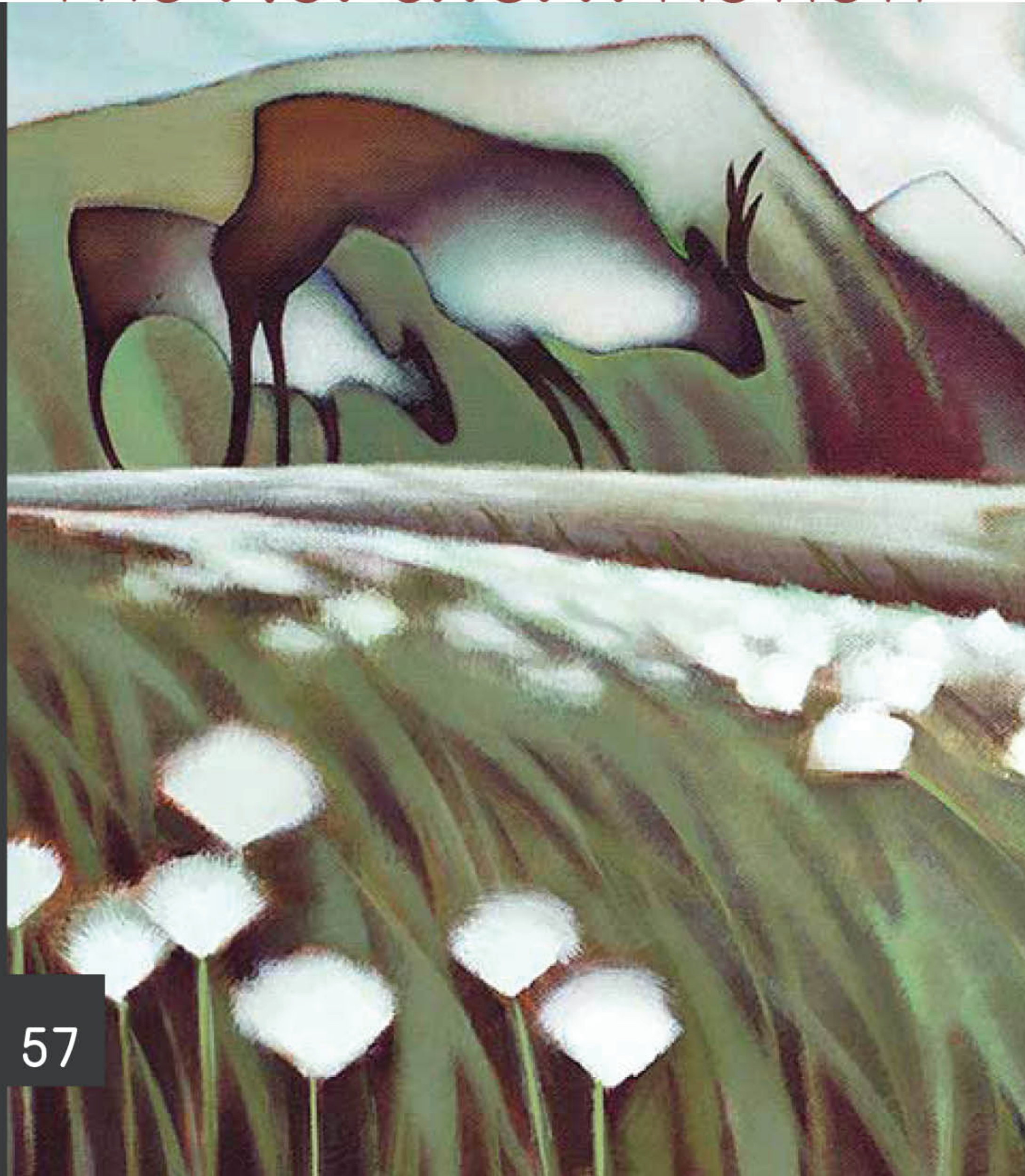
The Northern Review



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The **Northern** Review
Exploring human experience in the North

57 | 2025

Special Issue: Exploring Northern Economic Development

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Explorer le développement économique dans le Nord

Ce numéro spécial est financé en partie par l'Agence canadienne de développement économique du Nord (CanNor). Les opinions qui y sont exprimées proviennent des auteurs et ne reflètent pas nécessairement celles du gouvernement du Canada.

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Introduction to Special Issue: Northern Economic Development

Canadian Northern Economic Development Agency

The Canadian Northern Economic Development Agency (CanNor) is one of seven federal regional development agencies. Celebrating its fifteenth anniversary, the Agency has fostered diversified and dynamic economies that promote long-term sustainable growth and prosperity across Nunavut, the Northwest Territories, and the Yukon, with offices in Iqaluit, Yellowknife, Whitehorse, and Ottawa.

CanNor collaborates closely with communities, businesses, Indigenous organizations, and various levels of government to help unlock the economic potential of the North. The Agency's initiatives support building a skilled workforce, enabling firms to seize opportunities, and creating high-quality jobs. CanNor's work helps close the North's infrastructure gap, advance sustainable resource development, and promote diversification and innovation.

CanNor is pleased to partner with Yukon University to support this special issue exploring northern economic development, including the contributions of First Nations, Inuit, and Métis businesses. Grounded in the North, for the North, advancing economic opportunities is at the heart of CanNor's work.

- In Nunavut, CanNor houses Pilimmaksaivik, the Federal Centre of Excellence for Inuit Employment, which leads a number of initiatives to support the education, recruitment, retention, and talent management of Inuit in the federal public service.
- In the Northwest Territories, CanNor is investing in five local food initiatives to support communities, organizations, and businesses in improving infrastructure to produce, harvest, process, and distribute local and country foods, as well as in promoting a competitive agricultural sector in the territory.

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- In the Yukon, CanNor, along with the territorial government, is providing funding for the Champagne and Aishihik First Nations to build and launch T'su Ghay (Spruce Roots), an industrial sewing makerspace, benefiting First Nations women entrepreneurs and supporting cultural revitalization.
- CanNor's Northern Projects Management Office oversees the Crown's consultation record for major infrastructure and resource development projects across the territories to ensure that potentially impacted Indigenous peoples and communities are consulted and accommodated, and that their views are considered in decisions on major projects.

Starting with this volume, CanNor's partnership with Yukon University will support three consecutive annual special issues of the *Northern Review* focused on research related to economic development in the Canadian North and Arctic. CanNor actively seeks new partnerships to expand opportunities for meaningful, locally engaged, and globally relevant research on northern economic development. We welcome inquiries from interested academics, institutions, and research networks.

The views and opinions expressed in this volume are those of the authors and do not necessarily reflect those of the Government of Canada.

Exploring Northern Economic Development

Article du numéro spécial de la Revue du Nord

L'Agence canadienne de développement économique du Nord

L'Agence canadienne de développement économique du Nord (CanNor) est l'une des sept agences fédérales de développement régional. Pendant qu'elle célèbre son 15e anniversaire, CanNor favorise des économies diversifiées et dynamiques qui soutiennent une croissance et une prospérité durables à long terme au Nunavut, dans les Territoires du Nord-Ouest et au Yukon, à travers ses bureaux à Iqaluit, Yellowknife, Whitehorse, et Ottawa.

CanNor collabore étroitement avec les communautés, les entreprises, les organisations autochtones, et les différents niveaux de gouvernement afin de libérer le potentiel économique du Nord. L'Agence soutient le développement d'une main-d'œuvre qualifiée, permettant ainsi aux entreprises de saisir les opportunités et de créer des emplois de haute qualité. Elle contribue aussi à combler le déficit d'infrastructures dans la région, à favoriser le développement durable des ressources et à promouvoir la diversification et l'innovation.

CanNor se fait un plaisir de s'associer à l'Université du Yukon pour soutenir ce numéro spécial qui explore le développement économique du Nord, incluant les contributions des entreprises inuites, métisses et des Premières Nations dans les territoires. Ancrée dans le Nord, pour le Nord, CanNor place les opportunités économiques au cœur de son travail.

- Au Nunavut, CanNor héberge Pilimmaksaivik, le Centre d'excellence fédéral pour l'emploi des Inuits, qui dirige plusieurs programmes visant à soutenir l'éducation, le recrutement, le maintien en poste, et la gestion des talents des Inuits au sein de la fonction publique fédérale.
- Dans les Territoires du Nord-Ouest, CanNor investit dans cinq projets agroalimentaires locaux afin d'aider les communautés, les organisations et les entreprises à améliorer les infrastructures de production, de récolte, de transformation et de distribution des aliments locaux et régionaux, et de promouvoir un secteur agricole compétitif dans le territoire.

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- Au Yukon, en collaboration avec le gouvernement territorial, CanNor fournit des fonds aux Premières Nations de Champagne et d'Aishihik pour la construction et le lancement de T'su Ghay (Spruce Roots), un atelier de couture industrielle, destiné aux femmes entrepreneures autochtones dans le but de soutenir la revitalisation culturelle.
- Le Bureau de gestion des projets nordiques de CanNor s'occupe du dossier de consultation de la Couronne pour les grands projets d'infrastructure et de développement des ressources dans les territoires. Il veille à ce que les populations autochtones soient consultées et que leurs points de vue soient intégrés dans les décisions concernant ces projets.

À partir de ce volume, le partenariat entre CanNor et l'Université du Yukon permettra la publication de trois numéros spéciaux annuels consécutifs de la *Northern Review*, axés sur la recherche liée au développement économique dans le Nord du Canada et l'Arctique. CanNor cherche activement de nouveaux partenariats afin d'élargir les possibilités de recherches significatives, engagées au niveau local et pertinentes au niveau mondial sur le développement économique du Nord. Les universitaires, les institutions et les réseaux de recherche intéressés sont invités à contacter l'agence.

Les opinions qui y sont exprimées proviennent des auteurs et ne reflètent pas nécessairement celles du gouvernement du Canada.

The Northern Review
Exploring human experience in the North

Editorial: Exploring Northern Economic Development

Ken Coates
Founding Editor, The Northern Review

Business, and economic development more generally, face specific challenges—and a few unique opportunities—in the Canadian North. The barriers to commercial success are obvious: high costs, isolation, small populations and the attending diseconomies of scale, acute shortages of highly qualified personnel, transportation difficulties, complex government regulations, limited access to investment capital, among others. However, land claims settlements, Indigenous and treaty rights, and the devolution of authority to territorial governments produce a surprising number of commercial possibilities.

As entrepreneurs, local businesses, and outside firms seek commercial opportunities, they can draw on a small number of government loan and support programs. No Government of Canada initiative has a broader reach and more impact than CanNor, the Canadian Northern Economic Development Agency. This agency, with offices across the North, does a remarkable job of supporting the personal development of entrepreneurs, building communities of interest among northern businesses, and providing seed capital for commercial startups, specific equipment, or other targeted investments.

CanNor is also committed to raising the profile of northern business and economic development. The *Northern Review* is delighted to partner with CanNor on three special issues (one per year) on this vital theme. The editors were surprised by the invitation to collaborate—and a little worried about our capacity to recruit enough writers and a wide range of topics. We were wrong to be concerned. Within a few months of getting started, we discovered that we had tapped into a deep vein of talent and subject matter on northern commercial activity.

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This set of essays demonstrates, from a variety of perspectives, the importance of business and economic development, and it will inform—and we hope provoke —further debate about the North's economic future and whet readers' appetites for future special issues. One essay examines the processes involved in developing, for commercial purposes, the Yukon First Nations land allocations arising from modern treaties, detailing the complicated legal and political processes involved in converting the promise of modern treaties into local economic opportunity. An insightful article on the impact of mine closures on engaged Indigenous communities in the Northwest Territories reminds us of the transitory nature of extraction economies. The lessons from the diamond mines are important to keep in mind as the North attempts to ramp up the next wave of Arctic mineral development. While a great deal of attention focuses on efforts to create "new economy" businesses in the North, a perceptive essay looks at the role of cooperatives in expanding commercial activity. A key aspect of northern economic differentiation is the impressive size of the "social economy," a complex and invaluable network of not-for-profit organizations that are the sinews that bind together many northern communities. This sector is rarely seen as integral to regional prosperity, but another paper argues that the social economy is vital to social cohesion and prosperity building.

A particularly timely essay, published as the government of Prime Minister Mark Carney leads a nation-wide effort to fast-track resource and infrastructure projects deemed to be in the national interest, warns against jumping on the development accelerator. The potential collision between large-scale initiatives and Indigenous rights and harvesting, could cause serious downstream dislocations for Inuit, Métis, and First Nations Peoples and communities. In an excellent illustration of how integrated northern policy can be, the essay on the Canadian Rangers is a timely analysis of how Canada's civil defence force is a formidable presence in the Canadian North—and its role will expand substantially as part of the Government of Canada's $9 billion expansion of the armed forces, announced June 2025. The effort to build Arctic economies also involves engagement with the new economy. The Gordon Foundation, a superb think tank with a decades-long commitment to Arctic affairs, hosted a policy hackathon involving youth from across the Circumpolar World, focusing on the promotion of northern tourism. The report highlights the value and excitement associated with mobilizing new technologies, young people, and circumpolar connections to the betterment of the Arctic economy. The last contribution in this issue reminds northerners that they should look widely for examples of successful Arctic business and economic development. Finland, a country rarely discussed in Canada, has experienced substantial and creative commercial activity in the northern regions, much of it demonstrating that the standard assumptions about the limits on Subarctic and Arctic economic growth may be seriously wrong, and that local creativity, collaboration, and determination can overcome the North's geographic disadvantages.

CanNor's sponsored series seeks to spark discussion and innovative thinking about the possibilities for business and economic growth in the Canadian North. The papers in this first issue do just that, challenging us to better understand current realities, structures, and barriers, to look closely at historical developments in the North, and to open our collective eyes to the manner in which other northern regions have responded to economic barriers and opportunities. The North needs ideas—just as it needs insights, courage, effective policy, and entrepreneurial energy if it is to achieve its potential and build sustainable prosperity across the region.

Ken Coates is a founding and senior editor of the *Northern Review*, and professor emeritus Johnson Shoyama Graduate School of Public Policy, University of Saskatchewan. He is a Fellow of the Royal Society of Canada.

The Northern Review
Exploring human experience in the North

Éditorial : Explorer le développement économique nordique

Ken Coates

Les affaires, et le développement économique en général, font face à des défis bien particuliers — et à quelques occasions uniques — dans le Nord canadien. Les obstacles au succès commercial sont évidents : coûts élevés, isolement, petites populations et les déséconomies d'échelle qui en découlent, pénuries aiguës de personnel hautement qualifié, difficultés de transport, réglementations gouvernementales complexes, accès limité au capital d'investissement, entre autres. Cependant, les règlements des revendications territoriales, les droits autochtones et issus de traités, ainsi que le transfert des responsabilités aux gouvernements territoriaux, ouvrent un nombre surprenant de possibilités commerciales.

À mesure que les entrepreneurs, entreprises locales et externes cherchent des opportunités commerciales, ils peuvent compter sur un nombre limité de programmes gouvernementaux de prêts et de soutien. Aucune initiative du gouvernement canadien n'a eu une portée aussi étendue ni un impact aussi important que CanNor, l'Agence canadienne de développement économique du Nord. Cette agence, qui possède des bureaux partout dans le Nord, joue un rôle remarquable en soutenant le développement personnel des entrepreneurs, en bâtissant des communautés d'intérêts parmi les entreprises nordiques, et en fournissant du capital de démarrage pour les jeunes entreprises, des équipements spécialisés ou d'autres investissements ciblés.

CanNor s'engage également à accroître la visibilité des entreprises et du développement économique nordiques. La Northern Review est ravie de collaborer avec CanNor sur trois numéros spéciaux (un par an) autour de ce thème essentiel. Les éditeurs ont été surpris par l'invitation à collaborer, mais aussi un peu inquiets quant à notre capacité à recruter suffisamment d'auteurs et à couvrir un large éventail de sujets. Mais nous n'avions pas à nous inquiéter. En quelques mois à peine, nous avons découvert un vivier de talents et de sujets inépuisable concernant l'activité commerciale nordique.

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Cet ensemble d'essais démontre, à partir de diverses perspectives, l'importance du développement commercial et économique, et il informera, nous l'espérons, tout en suscitant davantage de débats sur l'avenir économique du Nord et en ouvrant l'appétit des lecteurs pour de futurs numéros spéciaux. Un essai examine les processus entourant le développement, à des fins commerciales, des allocations de terres des Premières Nations du Yukon issues des traités modernes, détaillant les processus juridiques et politiques complexes nécessaires pour transformer la promesse des traités modernes en occasions économiques locales. Un article, éclairant sur l'impact de la fermeture des mines sur les communautés autochtones engagées des Territoires du Nord-Ouest, nous rappelle la nature transitoire des économies basées sur l'extraction. Les leçons tirées des mines de diamants sont importantes à retenir alors que le Nord s'apprête à lancer une nouvelle vague de développement minier arctique. Tandis que les efforts visant à créer des entreprises de la « nouvelle économie » dans le Nord retiennent toute l'attention, un essai perspicace s'intéresse au rôle des coopératives dans l'expansion de l'activité commerciale. Un aspect clé de la différenciation économique nordique est l'importance de « l'économie sociale », un réseau complexe et inestimable d'organismes sans but lucratif qui tissent des liens entre de nombreuses communautés nordiques. Ce secteur est rarement perçu comme faisant partie intégrante de la prospérité régionale, mais un autre article soutient que l'économie sociale est vitale pour la cohésion sociale et la construction de la prospérité.

Un essai, particulièrement opportun, publié alors que le gouvernement du premier ministre Mark Carney dirige un effort national pour accélérer les projets de ressources et d'infrastructures jugés d'intérêt national, met en garde contre la tentation de précipiter le développement. La collision potentielle entre les droits autochtones, notamment les droits de récolte, et les initiatives à grande échelle pourrait causer d'importantes perturbations pour les communautés et peuples inuits, métis et des Premières Nations. À titre d'exemple de l'intégration des politiques nordiques, l'essai sur les Rangers canadiens propose une analyse opportune du rôle de la force de défense civile du Canada, qui occupe une place considérable dans le Nord canadien ; son rôle, d'ailleurs, s'accroîtra de façon importante dans le cadre de l'expansion de 9 milliards de dollars des Forces armées canadiennes annoncée en juin 2025. Les efforts pour rebâtir l'économie arctique impliquent aussi un engagement envers la nouvelle économie. La Gordon Foundation, un groupe de réflexion remarquable engagé depuis des décennies dans les affaires arctiques, a organisé un hackathon politique réunissant des jeunes du monde circumpolaire, axé sur la promotion du tourisme nordique. Ce rapport met en valeur l'enthousiasme et l'utilité de mobiliser les nouvelles technologies, les jeunes et les réseaux circumpolaires pour améliorer l'économie arctique. La dernière contribution de ce numéro rappelle aux Nordiques qu'ils devraient s'inspirer d'exemples variés de

réussite en affaires et en développement économique arctique. La Finlande, un pays dont nous parlons rarement au Canada, a connu une activité commerciale importante et créative dans ses régions nordiques, démontrant que les idées reçues sur les limites de la croissance économique subarctique et arctique ne sont pas tout à fait correctes, la collaboration et la détermination locales peuvent surmonter les désavantages géographiques du Nord.

La série, bénéficiant du soutien de CanNor, vise à stimuler la discussion et l'innovation sur les possibilités de croissance économique et d'entrepreneuriat dans le Nord canadien. Les articles de ce premier numéro remplissent cet objectif, nous incitant à mieux comprendre les réalités, structures et obstacles présents, à examiner de près les développements historiques dans le Nord, et à ouvrir notre regard collectif sur la façon dont d'autres régions nordiques ont répondu aux défis et aux occasions économiques. Le Nord a besoin d'idées — tout comme il a besoin de perspectives, de courage, de politiques efficaces et d'énergie entrepreneuriale — s'il souhaite réaliser son potentiel et bâtir une prospérité durable dans l'ensemble de la région.

Ken Coates is a founding and senior editor of the *Northern Review*, and professor emeritus Johnson Shoyama Graduate School of Public Policy, University of Saskatchewan. He is a Fellow of the Royal Society of Canada.

The Northern Review
Exploring human experience in the North

Northern Economic Futures: Challenges and Opportunities

Commentary

Measuring the Effects of Diamond Mine Closures on Indigenous Communities in the Northwest Territories

Paul Gruner
Tłı̨chǫ Investment Corporation (Tlicho Nation)

Mark Lewis
Det'on Cho Group of Companies (Yellowknives Dene First Nation)

Marc Whitford
Metcor Inc. (North Slave Metis Alliance)

Leigh-Anne Palter
Denesoline Corporation (Łutsël K'é Dene First Nation)

Graeme Clinton
Impact Economics, Yellowknife

Abstract: The Northwest Territories has experienced an economic boom in the past thirty years, with world class diamond mines starting operations betweeen 1998 and 2016. The diamond mines have been a significant contributor to the territory's local economy through contracting opportunities, employment, training and development, and the financial health of local Indigenous communities. However, over the past thirty months rough diamond prices have collapsed. Of the four mines in the territory, one has already ceased operation and the other three are slated to close between 2026 and 2030. In fall 2023, the NWT and Nunavut Chamber of Mines released a report on the economic effects of a diminished resource sector. To inform discussions on the territory's economic future and the important role of Indigenous communities in that future, the Indigenous Development Corporations (IDCs) of the Yellowknives Dene First Nation, Tłı̨chǫ Nation, the North Slave Métis Alliance, and the Łutsël K'é Dene First Nation have worked collaboratively to revisit that 2023 report. The aim was to assess their collective contributions to the NWT diamond mining industry and the impacts of mine closures on their communities. Diamond mining has been a catalyst in the growth and development of Indigenous labour and business throughout the North Slave region. The IDCs want to bring attention to the plight of the NWT economy, but also to shine light on the opportunities for future growth and development that can leverage three decades of investment.

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L'avenir économique du Nord: les défis et les opportunités

Commentaire

Mesurer les effets de la fermeture des mines de diamants sur les communautés Autochtones des Territoires du Nord-Ouest

Paul Gruner
Tłı̨chǫ Investment Corporation (Tlicho Nation)
Mark Lewis
Det'on Cho Group of Companies (Yellowknives Dene First Nation)
Marc Whitford
Metcor Inc. (North Slave Metis Alliance)
Leigh-Anne Palter
Denesoline Corporation (Lutsel K'e Dene First Nation)
Graeme Clinton
Impact Economics, Yellowknife

Résumé: Les Territoires du Nord-Ouest ont connu un essor économique au cours des trente dernières années, avec l'ouverture de mines de diamants de renommée internationale à partir de 1998, la plus récente en 2016. Ces mines ont largement contribué à l'économie locale en générant des opportunités, des emplois, de la formation, du développement et un bien-être financier pour les communautés autochtones. Cependant, au cours des trente derniers mois, les prix des diamants bruts ont chuté. Sur les quatre mines du territoire, une a déjà cessé toute activité et les trois autres fermeront entre 2026 et 2030. À l'automne 2023, la Chambre des mines du Nunavut et des Territoires du Nord-Ouest a publié un rapport sur les conséquences économiques d'une diminution de cette ressource. Pour éclairer les discussions sur l'avenir économique du territoire et le rôle essentiel des communautés autochtones dans cet avenir, les sociétés de développement autochtones de la Première Nation Dene de Yellowknives, le gouvernement Tłı̨chǫ Nation, la North Slave Métis Alliance et la Première Nation de Łutsël K'é Dene ont collaboré pour réexaminer ce rapport de 2023. L'objectif est d'évaluer leurs contributions collectives à l'industrie du diamant dans les TNO et les retombées de la fermeture des mines sur leurs communautés. Le secteur de l'extraction des diamants a dynamisé la croissance et le développement des activités et entreprises autochtones dans l'ensemble de la région du Slave Nord. Les sociétés de développement autochtones souhaitent attirer l'attention sur la situation économique difficile des TNO, mais aussi mettre en valeur les opportunités de croissance et de développement futurs qui pourraient s'appuyer sur les investissements réalisés au cours des trois dernières décennies.

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The Northwest Territories has experienced an economic boom in the past thirty years, with world class diamond mines starting in 1998 with BHP's Ekati mine, and the most recent, De Beers Group's Gahcho Kué mine, starting operations in 2016. During this time, the diamond mines have been a significant contributor to the territory's local economy through contracting opportunities, employment, training and development, and the financial health of local Indigenous communities.

However, over the past thirty months rough diamond prices have significantly collapsed and they are at their lowest point in this century. This has put significant pressure on the mines that remain.[1] Of the four mines that have been operating in the territory, one has already ceased operation—the De Beers Snap Lake mine closed in December 2015. The next mine slated to close is Rio Tinto's Diavik mine, in March 2026. Based on current plans, the two remaining mines expected to close are the Ekati mine, now owned by Burgundy, in 2028, and the De Beers Gahcho Kué mine, in 2030. There is also a very real possibility of earlier mine closure due to market conditions.

In fall 2023, the Northwest Territories and Nunavut Chamber of Mines released a report on the economic effects of a diminished resource sector.[2] The report demonstrated the sector's sizeable influence on the Northwest Territories (NWT) economy. While that study focused on the plight of the territorial economy as a whole, with some focus on the City of Yellowknife, the Yellowknives Dene, Tłı̨chǫ, North Slave Métis Alliance, and Łutsël K'é Dene communities will not be spared from significant losses when the diamond mines close. All four Nations have invested heavily in their labour and capital to become important contributors to the industry's success story. As such, diamond mining has been a catalyst in the growth and development of Indigenous labour and business throughout the North Slave region.

Of greatest concern for business leaders within these impacted communities is that economic activity beyond diamond mining looks sparse. There are growing signs that support for private sector development of the territory's assets is fading, and that the territory will soon be overly reliant on transfers from the federal government.[3]

Table 1. Contribution of diamond mines to the Northwest Territories economy in 2023. Source: Impact Economics. 2025. [4]

$2.1 billion	Value of production
$450 million	Labour income
$106 million	Consumer spending in NWT
3,790	Direct, indrect, and induced jobs

In an effort to inform discussions on the territory's economic future and the important role of Indigenous communities in that future, the Indigenous Development Corporations (IDCs) of the Yellowknives Dene First Nation, Tłı̨chǫ Nation, North Slave Métis Alliance, and Łutsël K'é Dene have worked collaboratively to revisit the original work of the Chamber of Mines report.[5] The aim was to assess the collective contributions of Indigenous communities to the NWT diamond mining industry, and the impacts of mine closures. The message is that in just five years this labour and capital will be out of work.

The Contributions of Indigenous Communities and Development Corporations to NWT Diamond Mining

The Yellowknives Dene, Tłı̨chǫ, North Slave Métis Alliance, and Łutsël K'é Dene communities and their development corporations play an important role in the success of the NWT diamond mining industry through the contribution of labour and capital.

Labour

We found that in 2023, about 353 jobs related to the mining industry were filled by resident members of the Yellowknives Dene First Nation, the Tłı̨chǫ Nation, the North Slave Métis Alliance, and the Łutsël K'é Dene First Nation. These included both direct jobs (employed by the owner of a mine or working for NWT business owners who have contracts with a mine), and indirect jobs (working for a business providing goods and/or services to a mine contractor). The majority of these jobs were created in Yellowknife (74%), followed by South Slave communities (15%), and Tłı̨chǫ communities (6%). The wages and salaries earned by these employees amounted to $39.6 million in 2023.

Business

To appreciate the extent to which the Indigenous development corporations are connected to the diamond mining industry, consider that the mine owners spent $1.1 billion on intermediate goods and services in 2023. Of that amount, $810 million was spent on imports such as fuel and machine parts, meaning $286 million was spent within the NWT business community. Between wholly-owned businesses and their respective ownership percentages of joint ventures, the IDC's share of this business demand was 36%, equal to $104 million.

Some Useful Comparisons

For context, the gross output from diamond mines and exploration represents about 25% of the territory's total output, and 16% of its Gross Domestic Product (GDP). The 3,790 jobs created represent 14% of all jobs in the NWT (in 2023), while the 1,550 jobs filled by residents are 6% of NWT employment. The $39.6 million in employment income earned by Indigenous labour from the three local Indigenous communities represents 3.6% of the total personal income found in all of Dettah, Ndilǫ, Yellowknife, and the Tłı̨chǫ communities.

What will Closure Mean?

Similar to the conclusion from the 2023 study on the potential effects of a diminished resource sector on the NWT economy as a whole, the Yellowknives Dene First Nation, the Tłı̨chǫ Nation, the North Slave Métis Alliance, and the Łutsël K'é Dene First Nation can expect job losses and declining business demand as a result of mine closures, which will include the end of some business lines.

The effects on families and communities must not be understated, nor should it be assumed that members of these communities would not be among the population leaving the territory in search of better economic prospects elsewhere. It is important to note that mining is "the largest private sector employer of Indigenous people in Canada,"[6] and incomes earned through mining are about double the average income earned by Indigenous Canadian workers.[7] Mine closures will mean:

- the economy will be smaller,
- there will be fewer jobs,
- there will be less disposable income,
- government will have less revenue, and
- there will be fewer people.

The lost business will be devastating for the Indigenous Development Corporations. Contracts with the diamond mines represent 54% of their total gross output. Several wholly-owned businesses do not have other markets to transition to in the absence of regional mining. With revenues falling by more than half, corporate productivity will fall, requiring an adjustment through staff reductions.

Should the mines close earlier than the current estimates, there are additional challenges created for the territory, which include the following:

- Critical minerals strategy: The current diamond mine operations enable access, via the annual winter road, to critical minerals deposits along the corridor, which are actively being explored for further development.
- Loss of key talent and services: An impressive local workforce and service sector has developed over the last several decades, which needs to be preserved to support the next generation of critical minerals development.
- Social issues: The loss of the mining sector will significantly contribute to the growing social issues of the territory, and may contribute to population declines. This potentially leads to an impact on culture and language.

Community Support and Government Revenues

Mine closure results in lost revenue and financial support for Indigenous communities. Not including Impact and Benefit Agreement (IBA) payments, it was estimated that the three mine operators contributed $4.2 million to communities in 2023 in support of a variety of projects, activities, programs, and education.[8] The aggregated revenue from diamond mining for the Yellowknives Dene First Nation, the Tłı̨chǫ Nation, and the North Slave Métis Alliance, including revenue from income taxes, resource royalties, IBA payments, and GST transfers, represents about $19.3 million in 2024, revenue that will be lost when the mines close.

The Local Market's Response

The local market and various stakeholders have been proactive in countering the negative market conditions. For example, the diamond mine industry has been reducing overhead costs where possible, debottlenecking operations and increasing production and, where possible, maximizing local employment reducing the need for high-cost southern labour.

Indigenous Nations and Indigenous Development Corporations (IDCs) have been working directly with industry to reduce costs, increase local hiring, lobby and support on their behalf, and assist with permitting needs.

The Government of the Northwest Territories (GNWT), in response to requests from the diamond mine proponents and with the support of local IDCs, has provided a relief package for the mining industry which has included:

- Doubling the number of local diamond valuations in 2025 and 2026 and covering the associated costs.
- Temporarily lowering the 2025 property tax rate for mines, giving a little more than $11 million in tax relief to the Diavik, Ekati, and Gahcho Kue diamond mines.
- Returning money remaining from the NWT's Large Emitter Greenhouse Gas (GHG) - Reducing Investment Grant Program to the Ekati and Gahcho Kue mines to offset their carbon tax payments. Diavik mine already used some of this fund for solar panels in 2024.
- Continuing to work with Indigenous governments and development groups to secure more federal support for infrastructure and transition projects.

Next Steps?

NWT and its various stakeholders have done everything in their power to preserve the diamond mine sector, but they seek additional help.

- Winter road cost coverage: Currently a winter resupply road is built every year at an estimated cost of $25 million (both direct and indirect costs). This entire expense is currently covered by the operating mines. The federal government has been asked to cover the winter road through an initial three-year program, for a total estimated cost of $75 million.
- Training and development: A training and development budget would assist employees transitioning from the mining sector, starting with displaced Diavik employees, and focused on operations at Ekati, Gahcho Kué, and the Giant Mine reclamation project.
- Strategic infrastructure: Further funding and support for the development of strategic infrastructure is needed, including the development of all-season corridors (Slave Geologic Province Corridor and Mackenzie Valley Highway), and clean reliable energy sources (Taltson hydro expansion project).

- Working Group: A working group to address concerns and requests should be created immediately, with key stakeholders representing the federal government, the territorial government, Indigenous Nations and groups, Indigenous development corporations, and industry.

Yellowknives Dene First Nation, Tłı̨chǫ Nation, North Slave Métis Alliance, and the Łutsël K'é Dene First Nation and their development corporations will suffer significant losses when the diamond mines close over the next five years. The IDCs want to bring attention to the plight of the NWT economy and the extent to which they will be affected, but also to shine light on the opportunities for future growth and development that can leverage three decades of investment in the labour and capital in these communities. Mines do close and projects do come to an end, and this is understood. The question is how we collaborate, plan and prepare, and collectively continue to provide prosperity at the local levels. The next step has to be meaningful conversations on these opportunities and how they can be advanced.

Notes

1. "Natural Diamond Price Chart," PriceScope.Com, https://www.pricescope.com/diamond-prices/diamond-prices-chart.
2. Impact Economics, *Eyes Wide Open: Understanding the Effects of a Diminished Resource Economy in the NWT* (Northwest Territories and Nunavut Chamber of Mines Working Paper, February 2024). https://www.miningnorth.com/chamber-news/103676.
3. Impact Economics, *Effects of Mine Closure on Indigenous Communities and their Ecoinomic Development Corporations* (Det'on Cho Corporation, Tlicho Investment Corporation & Metcor Incorporated, March 2025).
4. Impact Economics, *Effects of Mine Closure.*
5. Impact Economics, "Starting a Conversation on the Implications of an Increased Dependence on the Federal Government and the Canadian Taxpayer," Addendum to *Eyes Wide Open: Understanding the Effects of a Diminished Resource Economy in the NWT* (Northwest Territories and Nunavut Chamber of Mines Working Paper, February 2024). https://www.miningnorth.com/chamber-news/103676.
6. "Indigenous Employment, Training and Procurement," The Mining Association of Canada, 2025, https://mining.ca/our-focus/indigenous-affairs/indigenous-employment-training-and-procurement.
7. "More Indigenous Representation in Resource Sector than in Ottawa," Indigenous Resource Network, 2023, https://www.indigenousresourcenetwork.ca/more_indigenous_representation_in_resource_sector_than_in_ottawa#:~:text=In%20pulling%20data%20from%20the,working%20in%20mining%20(%2493%2C600.
8. This estimate includes support to non-Indigenous communities.

The Northern Review
Exploring human experience in the North

Northern Economic Futures: Challenges and Opportunities

Research Article

Against Fast-Tracking: Critical Minerals and Indigenous Rights in Nunavut

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University of Manitoba

Abstract: Across Canada and internationally, there is growing pressure to expand the extraction of so-called "critical" minerals. While some northerners see this expansion as an opportunity to advance regional or national development, others have raised concerns with the social justice implications of critical minerals extraction on Indigenous territories. This article contributes to literature about critical minerals extraction in the North with case studies from Nunavut, Canada. Drawing on regulatory and media documents, it examines the three most advanced such projects in the territory: a proposed expansion to the Mary River iron mine; the proposed Kiggavik uranium project; and the proposed Grays Bay road and port project. The analysis focuses on understanding the potential implications of each project for the rights of Inuit and Dene. Because all three projects have the potential to negatively affect Inuit and Dene harvesting rights—and because the construction and/or expansion of each project faces significant local and/or regional opposition—it would be inappropriate to fast-track or streamline regulatory processes.

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The Northern Review
Exploring human experience in the North

L'avenir économique du Nord: les défis et les opportunités

Article de recherche originale

Contre l'accélération des procédures : les minéraux critiques et les droits des Autochtones au Nunavut

Warren Bernauer
University of Manitoba

Résumé: Au Canada, comme ailleurs au monde, des pressions se font de plus en plus sentir pour élargir l'extraction des minéraux dits « critiques ». Tandis que certaines personnes nordiques perçoivent cette expansion comme une occasion de faire avancer le développement régional et national, d'autres s'inquiètent des implications sociales et de justice liées à l'extraction de ces minéraux sur les territoires autochtones. Cet article enrichit les travaux de recherche portant sur l'extraction des minéraux critiques dans le Nord, en présentant des études de cas du Nunavut, Canada. S'appuyant sur des documents réglementaires et médiatiques, il analyse les trois projets les plus avancés sur ce territoire : la proposition d'expansion de la mine Mary River, le projet d'uranium Kiggavik, et la proposition de la route et du port de Grays Bay. L'analyse porte sur les implications potentielles de chaque projet pour les droits des Inuit et des Dénés. Comme ces trois projets risquent d'affecter négativement les droits de récolte des communautés Inuit et Dénés, et que la construction et/ou l'expansion de chacun fait face à une opposition locale et régionale importante, il serait inapproprié d'accélérer ou de simplifier les processus réglementaires.

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Globally, there is growing political pressure to rapidly expand the extraction of certain minerals that are considered "critical" to energy transitions. This has led to concerns with the ecological, social, economic, and political implications of rapidly expanding critical minerals extraction (Sonter et al., 2020), especially in the Global South (Hernandez & Newell, 2022; Escosteguy et al., 2022; Sovacool, 2021; Andreucci et al., 2023). In response to shifting geopolitical tensions—most notably with China and Russia—Western states are currently seeking to "onshore" critical minerals extraction (Riofrancos, 2022). Such onshoring is part of a broader attempt to exert control over supply chains for electronics and low-carbon technologies. Moreover, several Canadian politicians have responded to growing economic uncertainty—fuelled by the actions of the second Trump presidency in the United States—by reiterating support for critical minerals extraction in Canada, presenting it as a potential solution to an impending economic crisis. These new imperatives for extraction have led to concerns that critical minerals extraction could negatively affect Indigenous rights and interests in Canada (Scott, 2025; Rodon et al., 2024; Rodon & Bouchard, 2024; Pasternak & Dempsey, 2022; Scott, 2021).

The Government of Canada and most provinces and territories have issued policies and directed funding to support expanding the domestic production of certain critical minerals. The federal strategy includes a list of thirty-four critical minerals, but places priority on six: lithium, graphite, nickel, cobalt, copper, and rare earth elements (Government of Canada, 2022).

There is a fundamental tension underlying the federal critical minerals strategy. On the one hand, the strategy seeks to rapidly expand mineral extraction in Canada, including by streamlining regulatory requirements and fast-tracking permitting processes. On the other hand, the strategy commits to upholding Indigenous rights and consulting with Indigenous communities "with the aim of securing the free, prior, and informed consent of Indigenous peoples" (Government of Canada, 2022, p. 29). Whether the imperative for expanded extraction can be effectively balanced with the right of Indigenous Peoples to provide or withhold their consent remains to be seen.

Despite being home to economically significant deposits of several minerals included on the federal list—including nickel, copper, zinc, high-quality iron ore, uranium, and platinum group metals—Nunavut is one of the few jurisdictions in Canada without a critical minerals strategy of its own. However, politicians representing Nunavut have issued statements supporting the expansion of critical minerals extraction in the territory. In 2023, then-Senator Dennis Patterson wrote

an op-ed in the *Nunavut News*, hailing critical minerals as "the key to progress in this country." According to Patterson, critical minerals extraction can help drive regional economic development in the Arctic, as well as energy transitions nationally and internationally. He identified three projects in Nunavut with the potential to "play a vital role in achieving our national ambitions with regard to critical minerals and a greener economy": the Mary River iron mine, the Kiggavik uranium project, and the Grays Bay road and port project.

This article examines the three cases of prospective critical minerals extraction referred to in Patterson's op-ed. These cases were selected because they are the most advanced critical minerals projects in Nunavut. The analysis focuses on ascertaining the potential implications of expanded critical minerals extraction for the rights of Inuit and other northern Indigenous Peoples. Drawing on an examination of regulatory and media documents, it demonstrates that the expansion of critical minerals extraction in Nunavut has the potential to negatively affect the harvesting rights of Inuit, Dene, and Métis communities in Nunavut, the Northwest Territories, Saskatchewan, and Manitoba. Moreover, all three projects face opposition from Inuit and/or Dene communities, raising serious concerns about the right to provide or withhold consent to extraction. As a result, it would be inappropriate to streamline or fast-track the assessment or permitting of these projects. Given the contentious history of the projects examined, a rapid expansion of critical minerals extraction in Nunavut is likely to intensify resource conflicts.

1. Critical Minerals Extraction and Resource Governance in Nunavut

Historically, Nunavut was home to several mining projects that produced minerals the Government of Canada now considers "critical," including the North Rankin nickel mine (1957–1962), the Nanisivik zinc-lead mine (1976–2002), and the Polaris zinc-lead mine (1981–2002). At present, the Mary River iron mine is the only mining project producing critical minerals in Nunavut. However, several advanced exploration projects in the territory have identified economically significant deposits of uranium, zinc, nickel, copper, and platinum group metals. Some of these projects have led to failed proposals for mining, including the Kiggavik uranium mine and the Izok and High Lake zinc mines. In the case of Kiggavik, the project was rejected by the federal government after an environmental review. With regards to Izok and High Lake, the projects have stalled because the cost of necessary infrastructure currently makes them unviable.

Mineral exploration and mining in Nunavut are governed according to the terms of the 1993 Nunavut Land Claims Agreement (Nunavut Agreement), a modern treaty between Nunavut Inuit and Canada. The agreement extinguished Inuit title to their traditional territory. In return, Inuit received money ($1.14 billion), rights to smaller tracts of land (roughly 20% of the territory), and specified rights (most notably for wildlife harvesting). The Nunavut Agreement also contained provisions for political development. Famously, it committed the federal government to establish the new territory of Nunavut, in which Inuit form a demographic majority. It also established several co-management boards that allow Inuit to participate in decisions about resources (Hicks & White, 2015).

1.1 Representation, Harvesting Rights, and Land Rights

Several organizations were established to represent Inuit rights and interests under the treaty. Nunavut Tunngavik Incorporated (NTI) is the organization that represents all Inuit in Nunavut. NTI and three Regional Inuit Associations (RIA)—the Kitikmeot Inuit Association (KitIA), Kivalliq Inuit Association (KivIA), and Qikiqtani Inuit Association (QIA)—represent the collective rights of Inuit under the Nunavut Agreement.

The Nunavut Agreement enshrines the right of Inuit to harvest wildlife throughout the territory, subject to limitations established by the Nunavut Wildlife Management Board. The treaty establishes Hunters and Trappers Organizations (HTOs, sometimes known as Hunters and Trappers Associations) in each community in Nunavut. HTOs manage Inuit hunting rights at the community level. They also frequently participate in decisions about extraction, including as intervenors in impact assessment processes for proposed mining projects.

The Nunavut Agreement establishes two categories of Inuit Owned Lands (IOL): lands where Inuit own subsurface (mineral) rights (2% of the territory), and lands where Inuit own surface rights only (18% of the territory). Subsurface rights are managed by Nunavut Tunngavik Incorporated, while surface rights are administered by the Regional Inuit Associations. In order to explore for or extract minerals from lands where Inuit own subsurface rights, mining proponents are required to negotiate exploration or production agreements with NTI. If a proponent wishes to extract minerals on lands where Inuit own surface rights only, it must first negotiate an Inuit Impact and Benefit Agreement (IIBA) with the Regional Inuit Association (McPherson, 2003).

1.2 Co-Management, Land Use Planning, and Impact Assessment

The Nunavut Agreement also establishes a co-management regime responsible for assessing and regulating mining and mineral exploration in the territory. The Nunavut Planning Commission (NPC) is responsible for developing and implementing land use plans in the territory, while the Nunavut Impact Review Board (NIRB) screens and reviews proposals for exploration activity and mineral

development. Both NPC and NIRB are "institutions of public governance" that make recommendations in the public interest. However, they are mandated to give special consideration to Inuit knowledge and oral traditions. The board members of NIRB and NPC are appointed by government, with half of these appointments based on nominations by Inuit organizations (White, 2020).

According to the Nunavut Agreement, a company wishing to explore for minerals or open a mine in Nunavut must first submit a proposal to the NPC, which determines whether or not the project conforms to existing land use plans. If the conformity determination is positive, the proposal is then forwarded to NIRB for screening, which recommends to government whether a full environmental review is required. If a proposal proceeds to environmental review, the project proponent must submit an environmental impact statement, which is then publicly scrutinized by various intervenors, usually including federal and territorial government agencies, Inuit organizations, municipal governments, and environmental NGOs. Following a public hearing, NIRB recommends to government whether or not the project should proceed. Throughout the NIRB screening and review process there are numerous opportunities for Indigenous organizations and members of the public to submit written and oral comments. The review board considers these in its recommendation to government (White, 2020).

At present, the federal Minister of Northern and Arctic Affairs has jurisdiction over resource extraction in Nunavut and is the final decision-making authority for NIRB screenings and reviews. However, the recently negotiated devolution agreement between the Government of Nunavut and Government of Canada will result in the Government of Nunavut assuming jurisdiction over extraction—and the NIRB process—in the future (Government of Nunavut et al., 2024).

1.3 Consultation and Consent

Independent of the provisions of the Nunavut Agreement, Inuit have a constitutional right to be consulted before government approves extraction that could affect their rights (Bankes, 2020). Based in Canadian common law, this duty to consult before extraction approvals in Nunavut also extends to some Dene and Métis groups in the Northwest Territories, Saskatchewan, and Manitoba. In addition to the potential for transboundary effects, there are Dene land claims that overlap with Nunavut.

Recent federal legislation has also enshrined a requirement to seek the consent of Inuit before approving extraction in Canada. The *United Nations Declaration on the Rights of Indigenous Peoples Act* (2021) established a framework for the Government of Canada to implement the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP). Article 32 of UNDRIP requires states to "consult and cooperate in good faith" with Indigenous Peoples "in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources" (United Nations, 2007).

2. Methods

The three cases examined in this article were selected because they represent the most advanced critical minerals projects in Nunavut. The Mary River project is a currently operating iron ore mine that was originally approved in 2012. The proponent (Baffinland Iron Mines) is currently applying for permits to expand operations. The Kiggavik project is a proposed uranium mine that was assessed from 2008 to 2015 by the Nunavut Impact Review Board. Although the Kiggavik proposal was rejected at the conclusion of the NIRB process, the current proponent (Orano Canada) could revive the project and resubmit its proposal if the price of uranium continues to rise. The Grays Bay project is a proposed infrastructure project intended to "unlock" several prospective mining projects in western Nunavut, including (currently shelved) proposals for copper-zinc mines. The copper-zinc mines associated with Grays Bay were assessed by NIRB from 2012 to 2013 as part of MMG Resources' proposed Izok Corridor mining project. However, MMG failed to submit an environmental impact statement and as a result the review of the Izok project has been stalled.

Written and oral submissions to NIRB form a key data set for this article. For each case, I examined written submissions from Inuit, First Nations, and Métis organizations, as well as transcripts of public hearings. I also reviewed regional media coverage of public debates over each project, focusing on *CBC News North*, *Nunatsiaq News*, and *Nunavut News*. My review of these public record documents is supplemented by secondary academic sources related to the three projects considered in this article.

When reviewing the regulatory and media documents, I focused on identifying the potential implications of each project for the harvesting rights of northern Indigenous communities, based on concerns brought forward by Inuit and Dene. As I explain in section 6, whether or not these potential effects can be adequately mitigated to the satisfaction of Inuit is a complex and difficult question. I also considered the extent to which these projects face Indigenous opposition, raising questions about free, prior, and informed consent to critical minerals extraction in Nunavut.

3. The Mary River Iron Mine

The Mary River Mine is an iron mining operation on northern Baffin Island, owned and operated by Baffinland Iron Mines Limited ("Baffinland"). A Canadian-based company with corporate offices in Oakville, Ontario, Baffinland is jointly owned by the Energy & Metals Group (a Houston-based private equity firm) and ArcelorMittal (a global steel manufacturer and mining company with head offices in Luxembourg). Since 2015, the Mary River Mine has produced iron ore for European markets.

In recent years, Baffinland has promoted the Mary River mine's potential contributions to manufacturing low-carbon "green steel." Green steel refers to steel produced using emerging technologies and production methods—relying on hydrogen rather than coal as an energy source—that minimize carbon emissions (Vogl et al., 2021). In 2023, Baffinland signed an agreement with Salzgitter Group (a German steel manufacturer) to explore the potential use of iron ore mined at Mary River in the production of green steel. In a joint media release, the companies indicated that ore mined at Mary River was of sufficient purity to be a candidate for green steel manufacturing (Baffinland & Salzgitter, 2023). One year later, the Government of Canada announced that it had added "high-purity iron ore" to its critical minerals list (*Nunatsiaq News*, 2024a).

The Mary River project includes open-pit mining operations, as well as a tote road to a port at Milne Inlet on the north shore of Baffin Island near the community of Pond Inlet. Between 4.5 and 6 million tonnes of ore are shipped through the Milne Inlet port during summer months each year. However, the company intends to construct a major expansion to the Mary River project, involving a railway and port on the southern shore of Baffin Island, at Steensby Inlet. Igloolik and Sanirajaq are the closest communities to the proposed Steensby port and railway.

Baffinland's plans to expand the Mary River project are controversial. The Igloolik and Sanirajak hunters and trappers organizations have called for a reassessment of the planned port and railway, which overlap with areas Inuit hunters use to harvest caribou, marine mammals, and fish. Disturbance associated with operating the railway and marine shipping could disrupt harvesting efforts.

The Mary River mine has a complicated and convoluted regulatory history. Our examination of this history revealed significant and ongoing conflict over the existing operations of the Mary River mine, as well as Baffinland's plans to construct the port and railway.

The original Mary River proposal, submitted to regulators in 2008, involved producing and shipping 18 million tonnes of ore per year through a railroad and southern marine shipping route that ran close to the communities of Igloolik and Sanirajak. The proposal generated significant public concern, especially in the most affected communities. Prominent concerns included the implications of a railroad for caribou migration and the effects of marine shipping on marine mammals (Scobie & Rodgers, 2013). However, the project won the support of the Qikiqtani Inuit Association and was approved in 2012 (Gladstone & Kennedy Dalseg, 2022; Kennedy Dalseg & Abele, 2015).

Shortly after approvals were issued for the original Mary River proposal, Baffinland indicated that it lacked the capital to construct a railway and operate the southern shipping route. It submitted a revised proposal for Mary River—the so-called "early revenue phase"—that would ship much smaller amounts of ore (4.5 million tonnes per year) by truck to the Milne Inlet port, near the Inuit community of Pond Inlet. The early-revenue phase project was approved in 2014. The company subsequently applied for a production variance—allowing it to temporarily ship 6 million tonnes of ore each year through the northern shipping route—which was approved in 2018, with renewals issued in 2020, 2022, and 2023.

From 2016 until 2022, Baffinland also attempted to advance the so-called "Phase 2" expansion of the Mary River project, which would have involved constructing a railway to Milne Inlet and doubling the amount of ore transported through the northern shipping route to 12 million tonnes a year. However, the Phase 2 proposal was opposed by several municipalities and hunters and trappers organizations in the North Baffin region, most notably the Mittimatalik Hunters and Trappers Organization (MHTO) in Pond Inlet. The Qikiqtani Inuit Association signed an agreement with Baffinland in support of the Phase 2 expansion in 2020. However, it later withdrew from the agreement in response to pushback from North Baffin communities (including a blockade of the mine's airstrip), and opposed the Phase 2 expansion at final hearings. NIRB ultimately recommended the expansion not be approved and the Government of Canada responded by rejecting Baffinland's proposed mine expansion (Rodon & Bouchard, 2024; Bernauer et al., 2023).

The regulatory documents associated with the Phase 2 expansion reveal significant contention and disagreement regarding the effects of the existing mine on Inuit harvesting. While Baffinland's (2018) submissions suggested that the existing operations were having no significant negative environmental impacts, hunters from Pond Inlet expressed frustration with the effects of existing operations and concern that the Phase 2 expansion would exacerbate negative effects on the environment and the Inuit hunting way of life (MHTO, 2022). According to the MHTO's Final Closing Statement, the Phase 2 project would affect an area of significant importance to Inuit harvesting rights:

> The proposed Project is located in an area that has been used by Inuit for generations and that is highly valued. The area contains numerous important sites that support harvesting of country foods, including marine mammals (including ringed seal and narwhal), terrestrial mammals (including caribou), and fish (including Arctic char), and Inuit cultural continuity. (MHTO, 2022, p. 14)

A critical concern—and point of contention—was the extent to which existing operations have affected narwhal. According to observations by Inuit hunters (*Nunatsiaq News*, 2021), as well as Baffinland's own monitoring data[1] (Baffinland, 2024), narwhal numbers significantly declined in the Eclipse Sound area after Baffinland began operations. While Pond Inlet hunters identified marine shipping associated with the Mary River project as a likely cause of the decline, Baffinland asserted that killer whales and cruise ships were at fault (NAMMCO, 2022).

Following the rejection of the Phase 2 proposal, Baffinland announced that it was abandoning plans for further expansion through the Milne Inlet port. Instead, it would focus its efforts on securing financing to construct the port and railway to Steensby Inlet that was originally approved in 2012 (*CBC News North*, 2023). This decision takes some pressure off hunters from Pond Inlet but poses significant challenges for communities that use Steensby Inlet to exercise their harvesting rights, including Igloolik and Sanirajak. Baffinland intends to ship 18 million tonnes of ore through Steensby Inlet each year—roughly four times the amount it currently ships through Milne Inlet.

Although the port and rail were previously approved, Baffinland's plans to expand its operations through Steensby Inlet are proving controversial. The Igloolik and Sanirajak hunters and trappers organizations wrote a joint letter to the Nunavut Impact Review Board, calling for a reassessment of Baffinland's planned railway and port through Steensby Inlet. The letter argued that the assessment informing the 2012 approval was badly outdated because "baseline conditions have changed and mitigation measures need to be updated" (Igloolik HTO and Sanirajak HTA, 2024, p. 2). The letter expressed serious concerns with the implications of the proposed railway and marine shipping operations for Inuit harvesting practices:

> The Igloolik and Hall Beach HTAs are deeply concerned with Baffinland's intentions to begin construction on the port and rail at Steensby Inlet in the near future. Sanirajak and Igloolik are both located near the potential southern shipping corridor for the Mary River mine, including the Steensby port/rail components.

> Inuit from both Sanirajak and Igloolik use Steensby Inlet and the surrounding area for many harvesting practices, including hunting (caribou, seals, walrus, whales, birds), fishing (char) and egg gathering. There is also a substantial commercial quota for Arctic char in the surrounding area. While this quota is not currently being used, our communities hope to benefit from this development opportunity someday in the future. The Sanirajak and Igloolik HTAs share many of the same concerns with Baffinland's plans to build a port and railway in Steensby Inlet, especially the potential impacts on caribou, whale, seal, bird, and walrus hunting, as well as char fishing. (Igloolik HTO and Sanirajak HTA, 2024, pp. 1–2)

In a follow-up letter to the Government of Canada, the Igloolik Hunters and Trappers Organization argued that considerable new research exists regarding the effects of mining and marine shipping on Arctic environments that must be considered before the port and rail are built and operated (*Nunatsiaq News*, 2024b).

At the time of writing, Baffinland was in the process of applying for permits and licences for its Steensby operations. Given the degree of concern with the proposed port and railway, as well as the significant uncertainty surrounding the environmental effects of existing operations, it would be unreasonable to fast-track the permitting and licensing processes. If the Government of Canada is serious about seeking the consent of Indigenous Peoples before permitting extraction on their territories, it would order the reassessment requested by Igloolik and Sanirajak.

4. The Kiggavik Uranium Project

The Kiggavik uranium project is an advanced uranium exploration project located 80 km west of the community of Baker Lake. Two proposals for a uranium mine have been submitted to regulators and undergone environmental reviews, once in the late 1980s and again from 2008 to 2015. The first proposal was withdrawn before the review concluded, while the second proposal was rejected by federal decision makers.

A key concern with the Kiggavik mine is its potential to induce additional uranium development in the hunting grounds of Baker Lake Inuit. While Kiggavik is the most advanced uranium exploration project in the area, it is surrounded by other uranium exploration activities. Depending on the pace and scale of additional extraction, such induced development could disrupt harvesting practices and therefore infringe on Inuit harvesting rights.

There is a long history of political contestation over uranium mining in Nunavut, much of it hinging on the Kiggavik project (Scottie et al., 2022; McPherson, 2003). In the 1970s, the municipality of Baker Lake, the Baker Lake Hunters and Trappers Organization, and Inuit Tapirisat of Canada (now Inuit Tapiriit Kanatami) attempted to use petitions and litigation to halt the expansion of uranium exploration in their hunting grounds. While the litigation was unsuccessful in halting the expansion of uranium exploration, the court did recognize that Inuit had unextinguished Aboriginal title to their territory. However, the judge determined that the rights flowing from such title were limited to wildlife harvesting, based on a mistaken (and arguably racist) assumption that, historically, Inuit ways of life were limited to bare survival (*Baker Lake v. Canada*, 1979). Moreover, Inuit legal and political activism related to uranium exploration helped persuade the federal government to implement stricter habitat protection measures for caribou (Scottie et al., 2022; McPherson, 2003).

In the late 1980s a West German mining company called Urangesellschaft submitted a proposal for the Kiggavik uranium mine. Political opposition to the project quickly coalesced. The Keewatin Inuit Association—the political organization that represented all Inuit in the Kivalliq (then called Keewatin) region of Nunavut—passed several resolutions and issued numerous statements opposing uranium mining. The Tunngavik Federation of Nunavut—the political organization negotiating a land claims agreement on behalf of all Inuit in what is now Nunavut (now Nunavut Tunngavik Incorporated)—also publicly opposed the Kiggavik mine. After a municipal plebiscite demonstrated widespread opposition to the Kiggavik mine in Baker Lake, Urangesellschaft withdrew its proposal and placed the project into care and maintenance (Scottie et al., 2022; McPherson, 2003).

In the early twenty-first century, the Kiggavik project was re-activated by new owner AREVA Resources Canada Inc. (a Canadian subsidiary of a French multinational nuclear firm), which submitted a renewed proposal for the Kiggavik uranium mine in 2008. The completion of negotiations for the Nunavut Agreement in 1993 changed the balance of forces surrounding uranium in Nunavut. Territorial and regional Inuit organizations (Nunavut Tunngavik Incorporated and the Kivalliq Inuit Association, respectively) changed their historical positions and issued policies and statements supporting uranium mining in Nunavut (Bowman, 2011; Gocke, 2013). However, opposition continued to be expressed through the Baker Lake Hunters and Trappers Organization and a new Nunavut-based anti-uranium group called Nunavummiut Makitagunarningit ("the people of Nunavut can stand up") (Gladstone & Kennedy Dalseg, 2022; Scottie et al., 2022; Metuzals & Hird, 2018; Scobie & Rodgers, 2013).

From 2008 to 2014, AREVA's proposal was screened and reviewed by the Nunavut Impact Review Board. Throughout the NIRB process, Indigenous organizations and activists expressed serious concerns with the proposed uranium mine. In the final stages of the review, AREVA removed project timelines from its proposal, indicating that the project was no longer financially viable due to high costs of production in the North and low prices for uranium in global markets.

A central concern for Inuit hunters was the potential for induced development. As the Baker Lake Hunters and Trappers Organization explained at the final public hearings, the community of Baker Lake is surrounded by uranium mineralization.

> If AREVA is permitted to build a road, mill, or airstrip, the other companies will be able to use them. This will make it much cheaper for other uranium mines to open near Baker Lake. If Kiggavik is approved, there will be increased exploration for uranium near Baker Lake and more uranium mines will inevitably follow. (NIRB, 2015b, p. 1246)

As Nunavummiut Makitagunarningit (Makita) explained in written comments, at the time of public hearings there was no planning/policy framework in place to adequately control induced development in the territory.

> Makita believes that the current planning/policy framework is insufficient to protect critical wildlife habitat and important Inuit cultural areas from induced development. There is currently no adequate protection for critical caribou habitat and areas of high cultural value in the Kivalliq region. (Makita, 2015)

Sprawling mining activity and road networks could have serious implications for the ability of Baker Lake Inuit to access caribou.

The Baker Lake Hunters and Trappers Organization argued that AREVA's proposed Kiggavik uranium mine should not be approved. According to the hunters and trappers, there were unacceptable levels of uncertainty in the proponent's impact predictions. Because the proponent had not committed to a start date for the project—and acknowledged that it could be more than a decade before construction commences—the hunters and trappers argued that the impact assessment would be outdated before construction and operations commence (NIRB, 2015b). The position of the Baker Lake hunters and trappers was supported by other hunters and trappers organizations in the region (Arviq Hunters and Trappers Organization, 2015; Aqigiq Hunters and Trappers Organization, 2015), as well as the Kivalliq Wildlife Board (2015).

Dene governments from Saskatchewan and the Northwest Territories also expressed serious concern with the potential for impacts to their members' harvesting rights. The Łutsel K'e Dene First Nation (2015) opposed the Kiggavik project. Its position was part of a broader attempt to prohibit uranium mining on or near its traditional territories, as well as concerns that the proposed mine could disrupt caribou migrations. The Athabasca Denesųłiné (2015) argued that the project could negatively affect the caribou herds that Denesųłiné communities rely upon to exercise their Aboriginal and Treaty rights to harvest wildlife. Notably, the Denesųłiné were concerned with the potential implications of the company flying uranium concentrate over Denesųłiné traditional territory.

> AD is concerned over the risk of transporting yellowcake by aircraft over AD territory. If an incident was to occur, and the contents of the plane were to spill, there would be radio-active material on the caribou range and into their food and/or water. There is no confidence among the AD that AREVA would be able to successfully clean-up such a spill where there would be no exposure and impact to caribou and surrounding environment. (Athabasca Denesųłiné, p. 5)

According to the Denesųłiné, an accident involving air transport could be catastrophic for their way of life.

The NIRB (2015a) recommended AREVA's proposed project not be approved. According to NIRB, the lack of a start date for the Kiggavik project created unacceptable levels of uncertainty in the proponent's impact assessment. The proposal was subsequently rejected by the federal government.

The Kiggavik project is now owned by Orano Canada—a Canadian subsidiary of a French nuclear company that succeeded AREVA following the latter's insolvency in 2016—and remains in care and maintenance. However, Forum Energy Metals Corp (a Canadian exploration firm with head offices in Vancouver) is conducting active exploratory work adjacent to the Kiggavik site, in anticipation of the project being reactivated in the future (Forum, 2024). Another company called Atha Energy Corporation recently applied to do additional exploration work in the area (NIRB, 2025).

If the current drive to expand critical minerals expansion results in the revival of the Kiggavik project, historic conflicts and concerns are likely to reappear. Most notably, the potential for Kiggavik to spur further uranium development—including multiple mines and access roads in the hunting grounds of Baker Lake Inuit—remains high, evidenced by ongoing exploration work in the area. A revived Kiggavik project would also have to confront the fact that Athabasca Denesųłiné do not consent to the transportation of uranium concentrate by airplane from Kiggavik to refineries in northern Saskatchewan. Fast-tracking or otherwise streamlining the assessment and licensing processes for a future Kiggavik proposal could intensify these conflicts.

5. The Grays Bay Road and Port Project

The Grays Bay Road and Port Project is an infrastructure project in the Kitikmeot region (western Nunavut) designed to facilitate mining and attract capital investment in the region. The West Kitikmeot Resources Corp is currently advancing the project. The company's largest shareholder is a wholly owned subsidiary of the Kitikmeot Inuit Association, making the Grays Bay project partially Inuit-led. According to the proponent's website, the road and port would "unlock" several critical minerals deposits, including multiple copper and zinc mining projects that are currently stalled due to a lack of infrastructure in the region.

The Grays Bay road and port project is contentious. The road component intersects the calving and post-calving grounds of the Bathurst caribou herd, a herd that provides food to Inuit, Dene, and Métis communities in Nunavut and the Northwest Territories. The herd has declined significantly over the past several decades, raising questions about the herd's resilience in the face of increasing pressure for extraction. Marine shipping operations associated with the port may also affect caribou sea ice crossings for the Dolphin and Union caribou herd. Calving grounds and sea ice crossings are both considered critical habitat to the health of caribou herds (Government of the Northwest Territories, 2024).

Like the Mary River iron mine, the Grays Bay road and port project has a convoluted regulatory history. The project currently proposed by the West Kitikmeot Resources Corp is the third proposal NIRB has considered for a road and port to service mining projects in the Grays Bay area. The first iteration of the Grays Bay road and port was a component of the proposed Izok Corridor mining project, which was proposed by MMG Resources Inc—a subsidiary of a Chinese state-owned mining company. In addition to a road and port at Gray's Bay, the proposed project involved two zinc-copper mining projects near the core calving grounds of the Beverly herd: the Izok mine and the High Lake mine.

The Nunavut Impact Review Board's screening of the Izok Corridor proposal revealed significant Indigenous and public concern with the proposal. In addition to comments from numerous Indigenous rights holders and non-governmental organizations, NIRB received 410 individual comments from members of the public across Canada and internationally. Owing to its location within the calving grounds of the Bathurst caribou herd, several Dene groups from the Northwest

Territories and Saskatchewan indicated outright opposition to all or part of the project, including the Dene Nation (2012), Lutsel K'e Dene First Nation (2012), the Yellowknives Dene First Nation (2012), and the Athabasca Denesų̨łiné (2012). Other Indigenous Nations from the Northwest Territories indicated serious concern but stopped short of outright opposition to the project, such as the Tlicho Government (2012) and North Slave Métis Alliance (2012).

Following NIRB screening, the Izok Corridor project was referred to NIRB for a full environmental review. However, the process soon stalled when the company indicated the project was not economically viable, and that it was exploring potential opportunities for infrastructure partnerships (MMG Resources Inc., 2016).

The concept of a road and port at Grays Bay to service the mining industry was soon revived by the Kitikmeot Inuit Association and Government of Nunavut. This second iteration of Grays Bay was screened by the Nunavut Impact Review Board, which again revealed significant concern and opposition from Dene and Métis communities in the Northwest Territories and Saskatchewan.

According to the Yellowknives Dene First Nation, the project was likely to have significant negative effects on the harvesting rights of First Nations in the Northwest Territories.

> The YKDFN are very concerned about the proposed development by virtue of its location and potential impact on barren-ground caribou. Not only the direct impacts of the project in question, but also the long-term effects of facilitated access to previously remote portions of caribou habitat.
> (…)
> [T]his is all taking place against the backdrop of the recent decline in barren-ground caribou across the North. This decline has resulted in harvesting restrictions preventing the Yellowknives from accessing the Bathurst herd on which they rely so heavily. Further development in barren-ground calving areas can only serve to worsen the situation and prolong this restriction. (Yellowknives Dene First Nation, 2017, p. 3)

A submission from the North Slave Métis Alliance explained the potential implications of the Grays Bay project for Métis harvesting rights:

> The Bathurst Caribou Herd has declined to less than 5% of its historic peak in the 1980s, and are severely threatened by the cumulative effects, including of development and habitat loss/fragmentation. The Northwest Territories has imposed a total harvesting restriction on Bathurst caribou for three years, and Aboriginal rights holders have effectively stopped harvesting this herd as an emergency conservation measure. The proposed route for the GBRP Project goes directly through the Bathurst herd core calving areas, which are highly sensitive to disturbance and fragmentation. We are concerned with direct effects on caribou from road disturbance, and with potential cumulative effects of future mineral development and other land uses in the Slave Geologic Province. These effects on caribou will delay the herd's recovery and impact the Aboriginal rights of North Slave Métis Alliance members to harvest caribou. (North Slave Métis Alliance, 2017, p. 1)

Submissions from the Inuvialuit Game Council (2018) indicated that the shipping activities associated with the Grays Bay port have the potential to affect caribou sea-ice crossings, which are critical habitat to the Dolphin and Union caribou herd. The game council also raised concerns with the potential effects of increased shipping activities on marine mammal harvesting.

Following NIRB screening, the proposal was referred to a full environmental review. However, during the initial stages of the review the future of the proposal became uncertain. After an application for federal funding was rejected, the Government of Nunavut announced that it was withdrawing from the project, leaving the Kitikmeot Inuit Association as the sole proponent (Bell, 2018). On May 2, 2018, the Kitikmeot Inuit Association (2018) wrote to NIRB, requesting the review be suspended. One year later, the Kitikmeot Inuit Association announced its own withdrawal from the project (*Nunatsiaq News*, 2023a).

The Grays Bay project was then acquired by West Kitikmeot Resources Corp (*Nunatsiaq News*, 2023b). In the fall of 2024, NIRB screened the revived Grays Bay proposal. Comments submitted to a NIRB screening process indicated that the latest iteration of Grays Bay is just as contentious as the previous two proposals. Several submissions to the review board—from the Kugluktuk Angoniatit Association (Hunters and Trappers Organization) (2024), Caribou Guardians Coalition (2024), Athabasca Denesų̨łiné (2024), and Inuvialuit Game Council (2024)—indicated that they did not support the proposed road and port project. Others, including the Tlicho Government (2024) and the Government of the Northwest Territories (2024), expressed serious concern with the potential effects on caribou, marine mammals, and Indigenous harvesting rights.

Notably, two Inuit HTOs have voiced explicit opposition to the proposed road and port. The Kugluktuk Angoniatit Association (Hunters and Trappers Organization) (2024)—representing hunters from the closest community to the proposed port and road—wrote to NIRB and specified that it did not support

the proposal. The submission from the hunters and trappers cited concerns with caribou, noting that several caribou herds in the vicinity were at critically low levels, and that the proposed road and port would affect "key habitat areas" including caribou calving grounds. It argued that the proposed road was a "road to nowhere" that "won't directly benefit communities." The submission suggested that the mining activity that the Grays Bay proposal sought to facilitate would not bring significant employment benefits to the region: "There are many mines and exploration sites in our region and there's no capacity to fill jobs." In an email to NIRB, the Burnside Hunters and Trappers Organization (representing hunters from Bathurst Inlet) indicated its "disapproval" of the proposed road and port and stated that it would "not be attending any meetings regarding this project" (Burnside HTO, 2025).

In December 2024 NIRB recommended to the federal government that the Grays Bay project should undergo a full environmental review. Given the potential for serious harm to Inuit, Dene, and Métis harvesting rights, as well as the significant political opposition to the proposal, the review should be fulsome and thorough. To do otherwise (for example, by fast-tracking the project) could put harvesting rights in jeopardy, risk violating the rights of Indigenous Peoples to provide or withhold their consent to extraction, and further intensify existing conflicts within and between Indigenous communities.

6. Discussion and Conclusions: Critical Minerals and Indigenous Rights

The projects examined in this article all relate to the extraction of certain minerals—including uranium, copper, zinc, and high-purity iron ore—that are considered "critical" to Canada's transition away from fossil fuels and/or to Canadian economic security. There is growing political pressure to streamline the assessment and permitting processes for these and other similar projects. However, given the political contestation surrounding each project, as well as the potential implications for inherent Aboriginal and Treaty rights to harvest wildlife, fast-tracking or streamlining the assessment of critical minerals extraction in Nunavut is not recommended.

Some of Nunavut's advanced critical minerals projects are situated in habitat that biologists consider "critical" for wildlife populations. For example, the Grays Bay road and port project is intended to facilitate extraction in or near caribou calving and post-calving grounds. Extraction in Nunavut's caribou calving grounds is notably controversial. On the one hand, Inuit hunters and trappers organizations in Nunavut—along with First Nations and Métis communities in the Northwest Territories, Saskatchewan, and Manitoba—have sought to protect these critical habitat areas from extraction (thus far unsuccessfully) through land use planning. On the other hand, regional Inuit associations like the Kivalliq Inuit Association and Kitikmeot Inuit Association have promoted mining in these sensitive areas (Scottie et al., 2022; White, 2020; Dyck, 2019). The caribou herds that would interact with the Grays Bay project have experienced steep declines in population levels in recent years, making them especially sensitive to disturbance (Boulanger et al., 2011). Baffinland's proposed port and railway to Steensby Inlet would similarly disrupt critical habitat for a caribou population at a critically low population level (Davin, 2024).

These wildlife species affected are, in turn, critical to the exercise of Aboriginal and Treaty rights. Wildlife harvesting is protected under the historic and modern treaties northern Indigenous peoples have signed with the Crown. The constitution also protects Indigenous practices that are "integral" to their distinctive cultures (*R. v. Van Der Peet*, 1996). Caribou hunting is integral to the distinctive cultures of Inuit, Dene, and Métis. Marine mammal harvesting is similarly integral to the Inuit way of life.

In two of the cases surveyed, Inuit organizations argued that the projects could negatively affect areas that are critical to Inuit harvesting practices. The Phase 2 expansion of the Mary River project would have doubled shipping volumes through Milne Inlet, an area of extreme cultural and economic importance to hunters from the community of Pond Inlet. While Phase 2 was rejected by government, Baffinland is still seeking to increase production at the Mary River project, including the construction of a new railway and port at Steensby Inlet, an important harvesting area for Inuit from Igloolik and Sanirajak. The Kiggavik project has the potential to induce additional uranium mining development in the hunting grounds of Inuit from Baker Lake, which could affect local access to caribou.

All of the projects surveyed therefore have the potential for significant negative effects on the Aboriginal and Treaty rights of Inuit, Dene, and/or Métis communities in Nunavut, Manitoba, Saskatchewan, and/or the Northwest Territories. Whether or not these effects can be adequately mitigated is a complex and difficult question. The question of mitigation could arguably be partially addressed through in-depth and thorough impact assessment processes.

Yet it is unclear whether Nunavut's existing co-management process for impact assessment is capable of protecting Inuit and Dene harvesting rights in the context of unprecedented political pressure to expand extraction in the North. On the one hand, Nunavut's co-management process has been identified as a positive example of Indigenous involvement in impact assessments from which other jurisdictions can learn (Peletz et al., 2020). On the other hand, impact assessment in Nunavut unfolds in the context of unequal relationships of power that tend to favour extractive industries over harvesting economies (Gladstone & Kennedy Dalseg, 2022; Scobie & Rodgers, 2019). Inuit and Dene have succeeded in using

the NIRB process to stop several unwanted projects, including the Kiggavik and Mary River Phase 2 projects examined in this article. There are, however, also examples of projects that were approved despite Inuit opposition and/or potential for adverse effects on wildlife (Cameron & Kennedy Dalseg, 2022; Medalye & Foster, 2012).

In some cases, it is not clear that NIRB assessment processes are the most appropriate mechanisms for making decisions about extraction. Dokis (2015) shows that co-managed impact assessment in the North can legitimize and facilitate the expansion of extractive economies. During debates about the Kiggavik uranium project, Nunavummiut Makitagunarningit (Makita) argued that a public inquiry, rather than a NIRB assessment, was the most appropriate way to decide whether or not uranium mining should be allowed in Nunavut (Scottie, 2022).

The limitations of impact assessment notwithstanding, fast-tracking specific projects and/or streamlining the NIRB impact assessment process would not positively affect Indigenous rights to harvest wildlife or participate in decisions about extraction. With regards to harvesting rights, streamlining and fast-tracking would likely result in less time to assess and debate the potential implications for wildlife harvesting. Opportunities for Indigenous and public participation could also be curtailed. This would provide fewer opportunities to ensure negative effects on harvesting rights are mitigated to the satisfaction of Inuit. Reduced scope and timelines could also make it more difficult for Inuit to use the NIRB process to stop proposals they do not support.

All three projects examined in this article also faced significant political opposition, raising serious questions about the extent to which Indigenous Peoples consent to the expansion of critical minerals extraction in Nunavut. Inuit HTOs from adjacent communities opposed each of the projects examined in this article. Dene communities from the Northwest Territories and Saskatchewan opposed the Kiggavik uranium mine and Grays Bay Road and Port. Inuit HTOs from multiple communities are resisting the expansion of the Mary River iron mine.

All three cases have also featured significant tensions between Regional Inuit Associations and community-level HTOs. As others have noted, such conflicts are rooted in the structures created by land claims agreements (Rodon, 2018). They raise important questions about which organization is the legitimate representative of Inuit rights and interests vis-à-vis extractive industries. While regional associations bear the collective rights of Inuit and negotiate impact and benefit agreements on their behalf, HTOs have asserted their right to be included in consultation processes (Scottie, 2022).

Infrastructure is a fundamental issue for the expansion of extraction in northern Canada, regardless of whether the materials being extracted are considered "critical" (Spice, 2022; Stanley, 2019). Writing in the context of debates over the "Ring of Fire" development in northern Ontario, Dayna Nadine Scott (2025) demonstrates that conflicts over critical minerals can take the form of conflicts over supporting infrastructure. Moreover, such conflicts can involve Indigenous communities or organizations serving as "shadow proponents" by advancing proposals for infrastructure that would facilitate expanded extraction. In the case of the Ring of Fire, Indigenous-led proposals for road projects have intensified conflicts between First Nations.

A similar dynamic has evolved in the case of the Grays Bay Road and Port Project. Originally brought forward by a mining company, the proposed infrastructure project was later revived by the Kitikmeot Inuit Association and the Government of Nunavut. After this second proposal for Grays Bay was withdrawn, an Inuit-owned company became the proponent. Throughout its regulatory history, the Grays Bay Road and Port Project has faced opposition from Dene and Métis communities in the Northwest Territories. In its most recent iteration, Grays Bay is also opposed by Inuit HTOs from Nunavut.

Some critical minerals strategies call for increased Indigenous leadership in critical minerals extraction. For example, the federal strategy commits to "move beyond legal obligations by strengthening Indigenous participation and leadership in the sector" (Government of Canada, 2022, p. 29). However, the debate over the Grays Bay road and port suggests that even Indigenous-led projects can threaten harvesting rights and fail to secure the consent of some Indigenous rights holders.

Fast-tracking any of these projects or streamlining the assessment, permitting, or licensing processes they undergo would run contrary to the Government of Canada's commitment to ensure that Indigenous rights are protected in the context of expanding critical minerals extraction. Fast-tracking and streamlining would also run contrary to Canada's commitments to adhere to the United Nations Declaration on the Rights of Indigenous Peoples (United Nations, 2007), especially its provisions related to free, prior, and informed consent. Moreover, it would run the risk of intensifying political conflict between Indigenous Peoples, extractive industries, and the state.

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Notes

1. There is ongoing disagreement over the interpretation of Baffinland's monitoring data for narwhal. While Baffinland (2024) claims that narwhal numbers have recovered, the Department of Fisheries and Oceans Canada (2024) and the Qikiqtani Inuit Association (2024) argue that Baffinland is using incorrect baseline data and that narwhal numbers have yet to recover.

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The Northern Review
Exploring human experience in the North

Northern Economic Futures: Challenges and Opportunities

Research Report

Yukon First Nations Settlement Land Development

Paul Kishchuk
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Abstract: As part of modern treaties in the Yukon, self-governing Yukon First Nations each hold title to significant amounts of "Settlement Land." Modernization of the Yukon Government's Land Titles Act in 2016 made it possible for subsidiary title, including leasehold interests on Settlement Land, to be entered on the Yukon Government's land titles registry without extinguishing Indigenous rights and title. The Land Titles Act changes also means that development on Settlement Land is now "bankable," as lending institutions have gained the authority to seize a leasehold land title in case a mortgage defaults. Modernization of the Yukon's land titles statute was a first step in unlocking the potential of Settlement Lands for the benefit of Yukon First Nations citizens and beneficiaries, and encouraging economic development throughout the Yukon. In addition to describing how the Yukon's land titles statute was modernized, this article identifies next steps in realizing the economic development potential, including a discussion of potential benefits and remaining challenges for projects related to leasehold developments on Settlement Land. The article concludes by highlighting examples of early leasehold development successes.

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The Northern Review
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L’avenir économique du Nord: les défis et les opportunités

Rapport de recherche

Développement des terres de règlement des Premières Nations du Yukon

Paul Kishchuk
Vector Research, Whitehorse

Résumé: Dans le cadre des traités modernes au Yukon, chacune des Premières Nations autonomes détient des titres de « terres de règlement ». La modernisation de la Loi sur les titres de biens-fonds du gouvernement du Yukon en 2016 a permis que les titres subsidiaires, y compris les intérêts à bail sur les terres de règlement, soient inscrits au registre des titres fonciers du Yukon sans porter atteinte aux droits et titres autochtones. Ces changements ont aussi rendu le développement immobilier sur ces terres « bancable », puisque les institutions prêteuses peuvent désormais saisir le titre des terres à bail en cas de défaut de paiement hypothécaire. La modernisation des lois sur les titres fonciers au Yukon a constitué une première étape pour libérer le potentiel des terres de règlement, au bénéfice des citoyens des Premières Nations du Yukon et des bénéficiaires, et pour encourager le développement économique dans tout le territoire. En plus de décrire cette modernisation, cet article identifie les prochaines étapes pour concrétiser ce potentiel économique, en discutant des bénéfices possibles et des défis restants pour les projets de développement sur les terres à bail. L’article conclut en mettant en lumière des exemples de succès issus des premiers projets de développement sur ces terres.

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Introduction

Between 1995 and 2006, eleven Yukon First Nations signed modern treaties with the governments of Canada and the Yukon. Each of the eleven treaties is comprised of a self-government agreement and a constitutionally-protected final agreement.[1] Following from the treaties, self-governing First Nations each hold title to significant amounts of Settlement Lands[2] within and outside of the Yukon’s eight incorporated municipalities.[3] As defined in the treaties, there are three types of Settlement Land: “Category A” Settlement Land, on which the First Nation holds title to both surface and sub-surface rights; “Category B” Settlement Land, where the First Nation holds title to only the surface rights; and fee simple Settlement Land. In aggregate, the eleven self-governing Yukon First Nations own a total of 31,468 square kilometres of Settlement Lands.

Prior to 2016, it was not possible to register any form of subsidiary title (such as a leasehold interest) on the Yukon Government’s land titles registry; only fee simple land could be registered. Since Settlement Lands may not be sold, and the conversion of a parcel of Settlement Land to fee simple title would extinguish Aboriginal rights and title[4] with respect to that parcel, economic development activity that would require the leasing of Settlement Land was effectively stalled.

With the passage of a new Land Titles Act in July 2016,[5] the Yukon entered a new era of land development. The modernized land titles statute has updated Yukon’s land titles system, and has allowed First Nations to issue long-term leases to third-parties while also retaining Aboriginal rights and title on Settlement Land.

Modernization of the Yukon’s land titles statute was a first step in unlocking the potential of Settlement Lands for the benefit of Yukon First Nations citizens and beneficiaries, and encouraging economic development throughout the Yukon. This article presents the results of a scoping analysis that outlines some of the next steps in realizing that land and economic development potential.

The scoping analysis sets out parameters and options for Settlement Land development and is intended to serve as a reference point for continued collaborative discussions among the federal and Yukon governments, Yukon First Nations, and municipalities. The analysis was informed by a review of available documents and legislation and a series of semi-structured interviews. Interviews were conducted with key stakeholders representing the Yukon Government, self-governing First Nations, incorporated municipalities, and the private sector.

The Importance of Land Titles Registration in Settlement Land Development

Self-governing First Nations throughout the Yukon have signalled an interest in realizing the economic potential of their Settlement Lands through a variety of land development initiatives. Such economic potential has existed since ownership of Settlement Lands was recognized, which was on the implementation dates of the Final Agreements for each self-governing First Nation (between 1995 and 2006).[6] The modernization of the Yukon's original Land Titles Act (enacted in 1898) and reissued as the Land Titles Act, 2015 (hereinafter Land Titles Act) has removed a long-standing barrier to the development of Settlement Land: the inability of lending institutions (i.e., banks) to register a mortgage against a parcel of Settlement Land with sufficient certainty of their "exclusive possession" in the case of a mortgage default.

Understanding why such a situation has constituted a barrier to the development of Settlement Land requires a bit of unpacking, specifically the terms lending institutions, mortgage, sufficient certainty, exclusive possession, and default.

The types of lending institutions that can issue mortgages in Canada include chartered banks, trust companies, credit unions, and mortgage brokers. In the Yukon, the "big five" chartered banks—Bank of Montreal, Scotiabank, Canadian Imperial Bank of Commerce, TD Canada Trust, and Royal Bank of Canada—are the most familiar lending institutions that issue mortgages. (For the sake of simplicity, the term "bank" is used in the remainder of this article to refer to all types of all lending institutions that issue mortgages.)

A mortgage is a contract that lending institutions use to loan a lump sum of money to a borrower. The full amount of money is to be paid back over a fixed period of time through a scheduled set of payments at an agreed-upon rate of interest. Individuals and businesses negotiate mortgages to be able to make large--value purchases such as houses and commercial shops without having the cash on hand to pay the full amount of the purchase price up front. For example, a family wishing to purchase a house priced at $500,000, with a down payment of $50,000, would require a mortgage for $450,000.

Through the mortgage contract, banks position themselves so they can recover the money loaned in case a borrower cannot make loan repayments as scheduled. The mortgage contract requires the borrower to agree that ownership (or, title) of the borrower's property automatically transfers to the lending institution when payments are missed. Missed payments bring the mortgage into default, at which point in time the banks may foreclose on the mortgage and transfer title to themselves. The transfer of title gives the banks exclusive possession of the parcel of land, allowing them to sell it or somehow make use of it to recover the outstanding amount of the loan.

In Canada, only the federal and provincial governments enjoy absolute ownership of land.[7] For individuals (as well as for corporations and trusts), the closest thing to absolute ownership of land is ownership in fee simple. When land is owned in fee simple, the individual's rights to the land are subject only to restrictions imposed by a government for the greater good of all citizens (such as expropriation of land for a new highway).

Subsidiary interests in land include leasehold estates and life estates. Under a leasehold estate, an individual is granted ownership for a specified number of years. Under a life estate, an individual is granted ownership for only as long as they are alive.

Whether title to the land is held in fee simple or in the form of a leasehold estate or a life estate, only one individual can be granted exclusive possession of the same parcel of land at a given point in time. Thus, for the purposes of this article, the term exclusive possession is used in recognition of the fact that only the Crown can enjoy absolute ownership (i.e., absolute possession) of land, and that the rights of exclusive possession can be delegated through leasehold or life estate arrangements.

As noted earlier, any bank issuing a mortgage will first establish that it can readily acquire exclusive possession of a parcel of land in the event of mortgage default. Keeping track of who holds title, or the right of exclusive possession, for a parcel of land is the raison d'être for a land titles registry, which is a centralized, government-administered repository for land titles. This allows for quick and efficient verification of the real and true owner of a parcel of land. The land titles registry is also used to record any charges on title, including easements, mortgages, and leases.

The Yukon's Land Titles Registry is enabled through the Land Titles Act. Like land title registries in all other Canadian jurisdictions, the Yukon has a Torrens type of registry. First devised by Robert Torrens in Australia in 1858, Torrens land title registries guarantee the actual state of land ownership.[8]

Thus, not only does the Yukon Land Titles Office have custody of the original copies of land titles documents for all parcels of land located in the Yukon, the Yukon Government guarantees the accuracy of the register through a form of insurance. Should an inaccuracy in the Land Titles Registry be identified, the Yukon Government's Assurance Fund may be accessed to compensate any person who suffers loss as a result. As of March 2024, the Yukon Government's Assurance Fund had a balance of $6.9 million.[9]

In addition to guaranteeing and insuring the accuracy of the land titles register (known as the insurance principle), the Yukon land titles system embodies the two other principles found in all Torrens-type registry systems. Under the mirror principle, titles listed on the Yukon Land Titles Registry are considered to be a perfect reflection of the state of title. Under the curtain principle, a purchaser need not investigate the history of past dealings with the land, or search behind the title as depicted on the register.

Taken together, the three Torrens principles—insurance, mirror, and curtain—form the doctrine of indefeasibility of title. A land titles registry system that features indefeasibility of title provides, without a doubt, sufficient certainty for lending institutions that the title (whether in fee simple or leasehold), can be readily transferred to them if there is a mortgage default.

Note that mortgages are merely one type of contract used to make loans. Banks may make loans secured by personal property (e.g., car loans) or unsecured loans for which no collateral at all is required. The willingness of banks to make unsecured loans and loans secured by personal property diminishes, however, as the dollar value of the loan increases. In addition, the interest rates charged by banks for unsecured loans and loans secured by personal property are higher than for mortgages. As a result, mortgages are the debt instrument of choice for both lenders and borrowers for big-ticket items like houses.

Leases, too, are merely contracts. While a lease can grant exclusive possession of a parcel of land to a tenant, it is not necessary for the lease to be listed on a land titles registry to be legally enforceable. However, banks do require that subsidiary leasehold title be entered on a land titles registry so that they can have sufficient certainty of exclusive possession in the event of mortgage default.

When a parcel of land is owned in fee simple, the transfer of title from the borrower to the bank is straightforward since the mechanics of title transfer are already spelled out in the mortgage contract. In the event of default, the bank (or other lending institution) simply serves notice to the land titles office that the requirements for title transfer have been triggered and title is transferred to the bank.

Title Registration of Settlement Land in the Yukon

Before the passage of the new Yukon's Land Titles Act in 2016, only one type of title for physical parcels of land could be posted on the Yukon's Land Titles Registry: fee simple title.[10] And while the previous Act did allow for certificates of title for both leasehold and life estate interests, no such certificates were ever issued for a parcel of land, where fee simple title had not already been issued.

So, unless the title for a parcel of land located on Settlement Land was first converted to fee simple, the title could not be registered. This left banks without enough certainty that exclusive possession of the land could readily be transferred to them if someone defaulted on their mortgage. As a result, banks were not inclined to issue mortgages for properties located on Settlement Land. The land titles registry situation before the passage of the new Yukon's Land Titles Act in 2016 is illustrated in Figure 1.

The conversion of Settlement Land to fee simple title did not pose a solution for Yukon First Nations looking to encourage economic development activity on Settlement Land. The final agreements for self-governing Yukon First Nations generally state in section 5.10 that:

> Upon registration in the Land Titles Office of the fee simple title in that Parcel of Settlement Land, each Yukon First Nation … shall be deemed to have ceded, released and surrendered to Her Majesty the Queen in Right of Canada all their aboriginal claims, rights, titles and interests, in and to the Parcels described hereunder and waters therein…[11]

In other words, conversion of Settlement Land to fee simple title, and entry on the Land Titles Registry, would result in the irrevocable loss of Aboriginal rights and title with respect to that land.

The conundrum faced by Yukon First Nations in the development of parcels of Settlement Land can be summarized as the following: how to create sufficient certainty for lending institutions such that exclusive possession of a parcel of Settlement Land can readily be transferred in the event of mortgage default, without irrevocably ceding Aboriginal rights and title on that land?

A foundational element for solving the conundrum can be found in the modern treaties negotiated by Yukon First Nations. The Final Agreements each provide that the First Nation may establish a land registration system. As stated in the Umbrella Final Agreement, the template for each of the Yukon First Nations final agreements:

> Subject to its Settlement Agreement, each Yukon First Nation, as owner of Settlement Land, may exercise powers of management in relation to its Settlement Land, including the establishment of a system to record interests in its Settlement Land.[12]

The revised Land Titles Act builds on the foundation provided in the final agreements and introduces an innovative solution to the conundrum. The new Act has expanded the list of certificates of title that can be issued by the Land

Titles Office and posted on the Yukon Land Titles Registry to include certificates for: Category A Settlement Land; Category B Settlement Land; and Fee Simple Settlement Land.

Two types of subsidiary title can also now be issued by the Land Titles Office and posted on the Land Titles Registry:

- Leasehold: subsidiary title issued for a leasehold interest when a primary title in the form of fee simple, Category A Settlement Land, or Category B Settlement Land has been issued by the Yukon Land Titles Office. A lease for a term of more than fifteen years with respect to title issued for fee simple, Category A, or Category B lands may serve as the basis of a leasehold title. The leasehold title may be in the form of a head lease against which subleases for smaller parcels of land may be negotiated; and,
- Life Estate: subsidiary title issued for a life estate interest when a primary title in the form of fee simple, Category A Settlement Land, or Category B Settlement Land has been issued by the Yukon Land Titles Office; a life estate issued with respect to a certificate of title issued for fee simple, Category A, or Category B lands may also serve as the basis of a leasehold title.

The land titles registry situation after the 2016 passage of the new Land Titles Act is illustrated in Figure 2.

Before 2016:

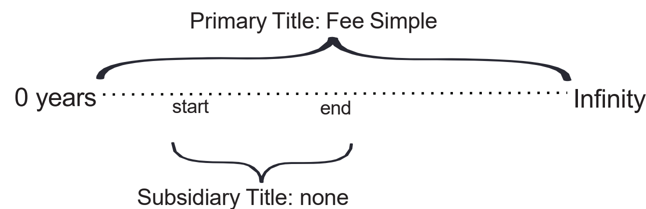


Figure 1. The Yukon land titles registry situation before 2016. Source: Author

After 2016:

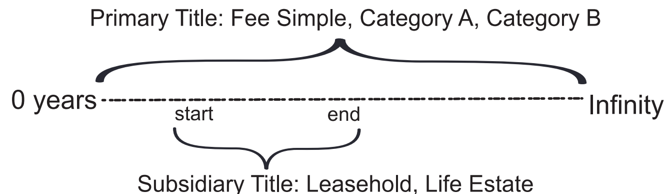


Figure 2. The Yukon land titles registry situation after 2016 and the passage of the new Land Titles Act, 2015. Source: Author.

Encumbrances, including mortgages, can be registered directly upon the leasehold or life estate title. This ability to register the mortgage against the subsidiary leasehold or life estate title is expected to provide banks with sufficient certainty that exclusive possession of the land can readily be transferred in the event of mortgage default.

A Yukon First Nations government may apply to the land titles registrar to have a parcel of fee simple, Category A, or Category B land withdrawn from the registry at the termination of a lease or life estate. Withdrawal from the titles registry requires that all encumbrances have been discharged (other than an encumbrance arising from legislation at the time of titling).

The Yukon Government considers it a risk that a Yukon First Nation might use its self-governance powers to frustrate a bank's ability to seize a leasehold land title in the event of a mortgage default. As a result, the Yukon government requires that before a First Nation can register title for Category A or Category B Settlement Land, the First Nation must amend its self-government agreement to limit the First Nation's ability to exercise its self-government powers with respect to the Land Titles Act.

The intent of the required amendment is illustrated in the 2017 amendment to the Kwanlin Dün First Nation's self-government agreement:

> For greater certainty, a Kwanlin Dün First Nation law shall be inoperative with respect to any Parcel of Settlement Land or interest in a Parcel of Settlement Land that is registered in the Land Titles Office to the extent that it provides for any matter for which provision is made in the Land Titles Act, 2015 (Yukon).[13]

Following the Kwanlin Dün First Nation's lead, three other Yukon First Nations—Carcross/Tagish First Nation, Champagne and Aishihik First Nations, and the Kluane First Nation—enacted amendments to their self-government agreements in 2021 that enable registration of title for parcels of Category A or Category B Settlement Land on the Yukon's Land Title Registry.

In addition to amending its self-government agreement as required by the Yukon Government, the Kwanlin Dün First Nation passed its own Lands Act in 2020, which reflects the Settlement Land provisions contained in the new Yukon Land Titles Act.[14] Regulations to accompany Kwanlin Dün's Lands Act were also enacted in 2020.The regulations set out the details for how leasehold interests in Settlement Land are to be created and registered at the Yukon Government's Land Titles Office.[15]

Other Approaches to Indigenous Land Title Systems

The approach to the registration of title for Yukon First Nations Settlement Lands that is embodied in the Yukon's new Land Titles Act is but one path to solving the development conundrum described above. Indeed, the report titled *Options for Land Registration and Survey Systems on Aboriginal Lands in Canada* prepared for the Legal Surveys Division of Geomatics Canada by Brian Ballantyne and James Dobbin in 2000,[16] identifies thirteen specific models of land tenure, land registration, and survey systems for Indigenous lands in Canada:

- Model 1 - The Indian Act and Related Legislation
- Model 2 - Cree and Naskapi Lands in Quebec
- Model 3 - The Yukon Umbrella Agreement and Specific Agreements
- Model 4 - The Northwest Territories and Yukon Inuvialuit Settlement
- Model 5 - The Sechelt Self Government Agreement
- Model 6 - The Sahtu Dene and Métis and Gwich'in Comprehensive Land Claim Agreements and the Yukon Transboundary Agreement with the Gwich'in
- Model 7 - Section 53/60 First Nations
- Model 8 - The Alberta Metis Settlements Legislation
- Model 9 - The Nunavut Agreement
- Model 10 - The Nisga'a Agreement
- Model 11 - The First Nations Land Management Act
- Model 12 - The Dogrib Land Claim Agreement in Principle
- Model 13- The Labrador Inuit Agreement in Principle

In summary, a variety of alternate approaches could potentially have been applied to allow banks and other lending institutions to register a mortgage against a parcel of land, with sufficient certainty of exclusive possession in the event of mortgage default.

Settlement Land Development Potential

Self-governing Yukon First Nations each hold title to significant amounts of Settlement Land within and outside of the Yukon's eight incorporated municipalities (see Figure 3). In aggregate, the eleven self-governing First Nations own a total of 31,468 square kilometres of Settlement Lands. By way of comparison, Yukon's largest city, Whitehorse, has a land area of 417 square kilometres.

The First Nations land selections were made on the basis of several strategic criteria including the potential for development in urban areas. For example, as noted in the Kwanlin Dün First Nation's *Traditional Territory Land Vision* (2017), "…KDFN lands within the City of Whitehorse were selected primarily for their economic development potential and as such are well placed to generate income to KDFN through a range of potential uses."[17] Kwanlin Dün land selections within the municipal boundaries of Whitehorse (referred to as Community Lands) cover about 24 square kilometres (approximately 6% of the total land area of Whitehorse).

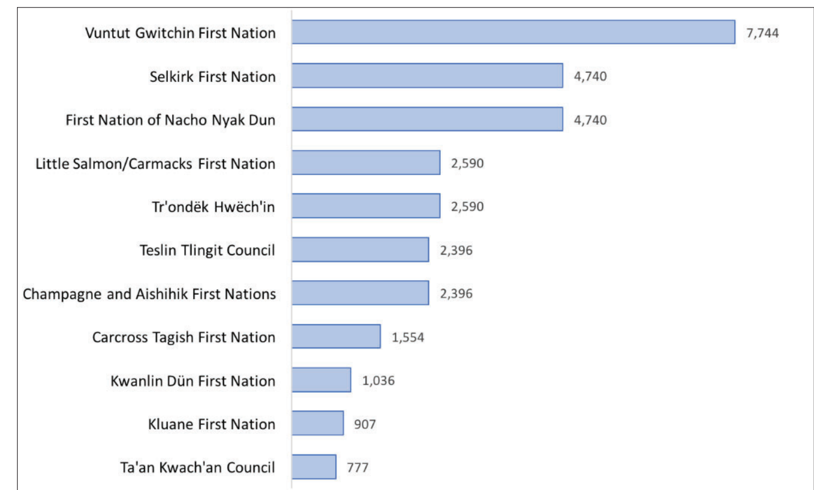


Figure 3. Allocation of Settlement Lands among self-governing Yukon First Nations, Category A and Category B combined (square kilometres). Source: Umbrella Final Agreement, Schedule A.

Benefits of Developing Settlement Land

A variety of benefits are expected to accompany the development of Settlement Land in the Yukon. Nine potential benefits were identified in the course of the scoping analysis and are described below.

Personal Income Tax Sharing Re-Allocation

Through the direct taxation powers of self-governing Yukon First Nations, 95% of the personal income tax revenues from individuals living on Settlement Land (both First Nations citizens and non-citizens), can be allocated to the First Nation owning that land. As Canada's income tax system is founded on a self-assessment approach, the diversion of personal income tax revenue to a First Nation requires that residents check two boxes on their T1 tax form. Increased availability of housing on Settlement Land, occupied by both citizens and non-citizens who check the required tax form boxes each tax year, will result in increased revenues for Yukon First Nations governments.

Property-Tax-Burden Shift

With direct taxation powers, self-governing Yukon First Nations could negotiate access to the property tax base in Yukon municipalities. To date, none have done so as it is not clear that the revenues raised would be sufficient to deliver municipal services at the level required. In the meantime, First Nations governments are obligated to remit property taxes to the municipalities within which Settlement Lands are located. Increased availability of housing and commercial development on Settlement Land will allow First Nations governments to shift their property tax burden to the leasehold owners of any properties located on Settlement Lands, should they choose to do so.

Improved Housing Allocation within First Nations Communities

Increasing the supply of market-based housing in Yukon communities will enable First Nations governments to better match different types of housing needs with housing availability. The delivery of housing services by First Nations governments has continued to reflect the pre-settlement allocation policies of the federal government, which focused largely on the supply of social housing.

Improved Housing Affordability

According to the 2021 Census, 13.1% of households in the Yukon were in core housing need on the basis of affordability, spending more than 30% of household income on shelter costs.[18] New housing on Settlement Land could help improve housing affordability for all Yukoners if the increased supply of housing moderates the significant increases in housing prices experienced in the territory in recent years.

Opportunities for First Nations Development Corporations

Many Yukon First Nations development corporations are well-positioned to benefit from the construction of residential and commercial projects on Settlement Land, from earthworks to final construction. For example, the completion of a four-unit condominium development in downtown Whitehorse in 2020 demonstrated the capacity of Chu Níikwän LP—the Kwanlin Dün First Nation's development corporation—to deliver turn-key housing to the Whitehorse housing market on leasehold Settlement Land.

Integration of the Resource Development Sector

In recent years, a significant number of mine workers have commuted to Yukon exploration and mining sites from locations throughout Western Canada. Having mine workers resident in the territory is favoured by mine operators for many reasons, not the least of which is reduced labour costs through avoiding airfare expenses. As such, potential continues to exist for the supply of leasehold housing for mine workers on Settlement Land.

Sharing Corporate Income Tax Revenue

With powers of direct taxation, Yukon First Nations governments could negotiate access to the Yukon corporate income tax base. If incorporated businesses can locate operations qualifying as permanent establishments on Settlement Land, corporate income tax revenues could also be shared with First Nations. Access to the corporate income tax base would require the re-establishment of the federal negotiating mandate and tri-partite negotiations among federal, territorial, and Yukon First Nations governments.

Improved Investment Climate

Improved certainty for leasehold transactions on Settlement Land will improve the overall investment climate in the Yukon, which could in turn lead to further investment and development opportunities both on and outside of Settlement Lands.

Future City of Whitehorse Residential Land Development
The City of Whitehorse's next large-scale residential land development project will need to be located a long distance from existing water and sewer infrastructure. With the associated infrastructure costs now in the hundreds of millions of dollars, rather than the tens of million dollars, any and all opportunities, including co-development of Settlement Lands within Whitehorse and near existing infrastructure, will likely be well received by the City of Whitehorse.

Synergies with Existing Housing Development Programs

In addition to the benefits from the development of Settlement Land described above, access to mortgage-favoured leasehold land opportunities can be combined with existing programs to rapidly expand the Yukon's housing supply. Some examples of territorial and federal programs that could potentially be leveraged include the following.

Yukon Housing Initiatives Fund
This territorial program provides funding for affordable rental housing projects across the Yukon through two streams: shovel-ready projects and project concepts. In Whitehorse, eligible projects must include a minimum of four affordable units. In Yukon communities outside of Whitehorse, eligible projects must include at least one affordable unit. Funding received through the Housing Initiatives Fund may be combined with other government funding programs. Community housing providers, First Nations governments and development corporations, municipalities, and private sector companies are all eligible to apply.[19]

Yukon Developer Build Loan Program
This territorial program provides low interest loans for short-term construction financing to Yukon developers who are building modest housing and are not eligible for financing from traditional lenders.[20]

Federal Housing Accelerator Fund
This program from the Canadian Mortgage and Housing Corporation (CMHC) is designed to accelerate new housing supply through transformational change in land use planning and development approvals at the local government level. Funds can be used for investing in affordable housing, housing-related infrastructure, and community-related infrastructure that supports housing.[21]

National Indigenous Collaborative Housing Inc.
This is a national initiative that brings together Indigenous-led housing, homelessness, and housing-related service delivery organizations. Federal funding delivered through the initiative is intended to provide lasting solutions that address diverse housing inadequacies including homelessness for Indigenous Peoples living in urban, rural, and northern areas.[22]

National Housing Co-Investment Fund
This program intends to support the construction, repair, and renewal of mixed-income, mixed-tenure, mixed-use affordable housing. The fund prioritizes projects that include partnering and co-investment by governments (including Indigenous governments), social enterprises, and private sector entities.[23]

First Nations Market Housing Fund
This is a $300 million credit enhancement fund and organization, First Nations-directed, created in 2008 to assist First Nations governments and individuals in Canada to obtain housing loans on a standard market basis from financial institutions. Five Yukon First Nations governments are qualified to participate in this fund, including Carcross Tagish First Nation, the Champagne and Aishihik First Nations, Kwanlin Dün First Nation, Teslin Tlingit Council, and Tr'ondëk Hwëch'in.

In summary, the potential benefits from the development of Settlement Land through access to mortgage-favoured leasehold land opportunities are numerous and extensive. In addition, several territorial and federal programs are already in place to facilitate housing construction and improvements on Settlement Land.

Remaining Challenges for Settlement Land Development

While many pieces in the puzzle of how to develop Settlement Land are now in place, this scoping analysis also identified several challenges. The challenges are described below.

Alignment of Settlement Land Development with Existing Planning Measures
The first challenge relates to the potential for discrepancies between the desired features of a given land development project and existing planning measures outlined in official community plans, subdivision bylaws, and zoning bylaws.

By way of example, Kwanlin Dün First Nation (KDFN) community lands are classified as being either Type 1, 2, or 3, with each type representing varying degrees of KDFN self-government authority for planning, zoning, and development.[24] On

Type 1 community lands, KDFN is able to exercise its self-government powers related to planning, zoning, and land development. On Type 2 community lands, KDFN is able to exercise planning, zoning, and land development powers that are consistent with designated land uses prescribed in the City of Whitehorse Official Community Plan.[25] On Type 3 community lands, KDFN is not able to exercise its planning, zoning, and land development powers.

Collaboration and good communication in the form of development agreements that speak clearly to the planning, zoning, and subdivision aspects of a project will be required to advance development projects in a timely manner. An example of such collaboration can be found in the February 2018 amendment to the City of Whitehorse Subdivision Control Bylaw. The Subdivision Control Bylaw generally requires that upon subdivision of a parcel of land, 10% of the land must be dedicated to public use (or that a payment in lieu be made). The February 2018 amendment exempts "First Nation subdivision applications that comprise Settlement Land" from the 10% public land use dedication (or payment in lieu), thereby preserving the integrity of the Settlement Land base of Whitehorse-area First Nations.[26]

Values-Based Community Land Planning

Previous attempts at development projects on Settlement Land in the Yukon have illustrated the importance of involving the community in values-based planning in advance of initiating a development project. Values-based land planning can be used to decide the general allocation of community lands for residential use, economic development, and traditional activities. The Kwanlin Dün First Nation's *Community Lands Plan* released in 2020 is an excellent example of what the output from a community land planning exercise can look like.[27]

Optimal Lease Length

The length of the lease term represents a balance between the interests of the lessor (the land owner) and the lessee (the individual seeking exclusive possession of a parcel of land). From the perspective of the lessor, a shorter lease term is preferred. The longer the term of the lease, the longer the stretch of time for which land cannot be used for another purpose. And the longer the term of the lease, the greater the risk that the lease could be earning a lower rate of return than if the land was used for an alternate purpose.

From the perspective of the lessee, the longer the lease term the better. If the market views a lease term as too short, it will be difficult to transfer a lease or sell a building located on leased land. Also, most lending institutions will not offer mortgages for lease terms of less than five years, meaning that a twenty-five year lease is only marketable for the first twenty years of the lease.

Leasehold arrangements are still relatively unfamiliar in the Yukon, especially in the residential market. In light of the relative unfamiliarity with leasehold arrangements, the thinking around the table encountered during scoping analysis interviews suggests that a reasonable lease term for residential properties is 99 years—this period gives the greatest assurance to lessees that the leasehold property can be transferred within an individual's lifetime. Current lease-length practice for leasehold commercial properties in the Yukon was reported to be thirty-five years.

Land Development Costs and Financing

Improved certainty for leasehold transactions on Settlement Land will help potential homeowners qualify for bank-issued mortgages. The financing of the infrastructure that needs to be installed in advance of residential and commercial building construction must also be considered in the land development equation.

The types of surface infrastructure costs to be paid and recovered as part of a land development project include:

- clearing, grubbing & grading;
- land remediation (for brownfield sites);
- roads (connectors & streets), sidewalks, traffic control & streetlights; and,
- landscaping, trails, parks & playgrounds.

The types of subsurface infrastructure costs include:

- water storage & distribution (reservoirs & force mains);
- wastewater collection & disposal, storm water diversion; and,
- electrical, telephone & cable.

Several types of planning costs must also be accounted for, including:

- geotechnical and heritage assessments
- zoning amendments and subdivision approvals
- environmental assessment
- planning and engineering
- project management and inspection
- development agreements
- feasibility studies
- legal survey.

Development costs (surface, subsurface, and planning) can be recovered at different paces, with the length of the development-cost recovery period determining the lease price. To illustrate, consider two "bookend" approaches based on a hypothetical lot development cost of $150,000 for a single-family residential building lot in Whitehorse.

With full-term cost recovery, the lease price is the development cost divided by the number of years in the lease. At the hypothetical lot development cost of $150,000, with a 125-year lease term, the lease price would work out to $1,200 per year ($150,000 divided by 125 years) and represents the preferred approach for potential lessees. The approach is not at all preferred by land developers, as it will take 125 years to recover the land development costs and the land developer will be required to somehow finance the development costs over 125 years.

With full prepayment, the entire cost of the lease is charged up front at the start of the lease. Using the hypothetical lot development cost of $150,000, the leasehold price is $150,000, due in full at the start of year one of the lease. With the full prepayment approach, the leaseholder holds exclusive possession of the leased land for 125 years (equivalent to more than four generations of families), a length of time similar in the abstract to holding fee simple title.

Full prepayment is the preferred approach for the land developer as it guarantees full and immediate payment of all land development costs. The land developer would incur no financing costs over the term of the lease and would be financially free to move on to the next development opportunity. In this example, the issuance of a 125-year lease is financially indistinguishable from the sale of a fee simple building lot.

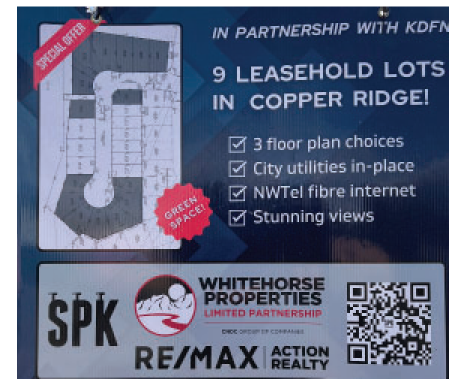
The full prepayment approach aligns with the reason why residential developers in Whitehorse prefer to build condominiums rather than apartment buildings. Development costs for condominiums are fully recovered at or near the time construction is completed. Development costs for apartment buildings are recovered through the payment of rent over a much longer time period, perhaps twenty or thirty years.

Conclusion and Early Successes

The new Yukon Land Titles Act has expanded the types of certificates of title that can be posted on the Yukon Land Titles Registry—now all categories of Settlement Land are included. The list for the types of subsidiary title has also been expanded to include leasehold interests. The legislative changes were a first step towards First Nations issuing long-term leases to third-party interests, while also retaining Aboriginal rights and title on Settlement Land.

As a result of the legislative changes, lending institutions can now register mortgages against parcels of Settlement Land, with sufficient certainty of exclusive possession in case a mortgage defaults. As a result, construction of buildings and facilities on Settlement Land has become "bankable," as the lending institutions have gained the authority to seize a leasehold land title if the mortgage defaults.

Two examples of early successes of Yukon First Nations Settlement Land development are illustrated in Figures 4 and 5.



A. Copper Ridge West
Location: Undeveloped area in Phase 8 of the Copper Ridge Subdivision in Whitehorse
Settlement Land Notation: KDFN C112
Number of Leasehold Lots: 24 residential lots (Phase 1)
Developer: Chu Níikwän LP (Kwanlin Dün First Nation's development corporation)
Market Date: 2024

Figure 4. Example of successful development on Yukon First Nations Settlement Land. Copper Ridge West developed by Chu Níikwän LP.
Source: Author photo. https://www.chuniikwan.ca/copper-ridge-west

B. South Access Industrial Park
Location: Northeast corner at the intersection of the Alaska Highway and Robert Service Way in Whitehorse
Settlement Land Notation: KDFN C34
Number of Leasehold Lots: 6 commercial lots
Developer: Chu Níikwän LP (Kwanlin Dün First Nation's development corporation)
Market Date: 2022

Figure 5. Example of successful development on Yukon First Nations Settlement Land. South Access Industrial Park developed by Chu Níikwän LP.
Source: Author photo. https://www.chuniikwan.ca/south-access

The introduction of Yukon First Nation-specific legislation and regulations was a further step in realizing the potential of Settlement Lands for the benefit of citizens and beneficiaries, and also for encouraging economic development throughout the Yukon. Legislative changes have so far included amendments to the self-government agreements for four First Nations. Some Yukon First Nations have also passed land statutes and associated regulations designed to enable the development of Settlement Lands.

Nine potential benefits expected to accompany the development of Settlement Land in the Yukon were identified in this scoping report. Realization of many of the benefits identified is already underway through synergies with existing Yukon and federal housing development programs. So far in Whitehorse, the realization of the benefits is also the result of collaborative efforts between Yukon First Nations and federal, territorial, and municipal governments to overcome some of the remaining challenges for Settlement Land development also described in this report.

Notes

1. Government of Canada, Council for Yukon Indians, & the Government of the Yukon. *Umbrella final agreement between the Government of Canada, the Council for Yukon Indians and the Government of the Yukon* (Minister of Indian Affairs and Northern Development, 1993), https://cyfn.ca/wp-content/uploads/2013/08/umbrella-final-agreement.pdf. The eleven self-governing First Nations are the "First Nation of Nacho Nyak Dun in Mayo, the Champagne and Aishihik First Nations in Haines Junction, the Vuntut Gwitchin First Nation in Old Crow, the Teslin Tlingit Council in Teslin, the Little Salmon-Carmacks First Nation in Carmacks, the Selkirk First Nation in Pelly Crossing, the Kluane First Nation in Burwash Landing, the Ta'an Kwäch'än Council in Whitehorse, the Tr'ondek Hw'echin in Dawson City, the Kwanlin Dün First Nation in Whitehorse and the Carcross Tagish First Nation in Carcross." See https://www.cyfn.ca/agreements/first-nations-final-agreements/. https://understandingtreaties.ca/discover/yukon/
2. For more background and context on the Yukon First Nations Settlement Lands, see Council of Yukon First Nations, "History of Land Claims," 2025, https://cyfn.ca/history/history-of-land-claims; Mapping the Way. Yukon First Nation Self-Government, "Settlement Land and Traditional Territory," February 7, 2022, https://www.mappingtheway.ca/our-stories/settlement-land-and-traditional-territory; https://planyukon.ca/.
3. The Yukon's eight incorporated municipalities are Carmacks, Dawson City, Faro, Haines Junction, Mayo, Teslin, Watson Lake, and Whitehorse.
4. For more on Aboriginal rights and title see Canada. Justice Canada, "Aboriginal Rights: The Nature of Aboriginal Rights, last modified March 21, 2025, https://www.justice.gc.ca/eng/csj-sjc/ijr-dja/35pedia-wiki35/p6.html; First Nations & Indigenous Studies, UBC, "Indigenous Foundations: Aboriginal Title," 2009, https://indigenousfoundations.arts.ubc.ca/aboriginal_title.
5. *Land Titles Act, 2015*, SY 2015, c 10. https://canlii.ca/t/56cqp.
6. See implementation dates for each agreement at Mapping the Way, Yukon First Nation Self-Government, "Our Agreements," 2025, https://www.mappingtheway.ca/our-agreements.
7. Draws from Alberta Government, Service Alberta, *An Introduction to Alberta Land Titles*, 2015, https://open.alberta.ca/publications/5649897. Note that Canada's three territories are constructs of federal legislation and as such do not hold the constitutional authority required to enjoy absolute ownership of land. Also see Land Title and Survey Authority of British Columbia, "Land Title Practice Manual," 2025, https://ltpm.ltsa.ca; Royal Bank of Canada. *Mortgage – Residential (Fixed Rate) Land Titles Act (Nunavut)*. (Internal RBC guidance document, 2006), https://www.rbcroyalbank.com/RBC:SU6YTKwWZA4AWaBkLv0/legalforms/download/3959(03-17-2006).pdf; Centre for Public Legal Education Alberta, "Land Titles—Canadian Legal FAQs," https://www.law-faqs.org/alberta-faqs/land-titles.
8. For more background on the Torrens system, see Greg Taylor, *Law of the Land: The Advent of the Torrens System in Canada* (University of Toronto Press, 2008), https://www.jstor.org/stable/10.3138/9781442688469.
9. As stated in the Yukon Government's Public Accounts for 2023-24 in Schedule 6 (Restricted Funds): https://yukon.ca/sites/default/files/fin/fin-2023-24-public-accounts-schedule-6-schedule-restricted-funds.pdf.
10. Certificates of title for condominium units could also be issued prior to the passage of the Yukon's Land Titles Act, 2015. Our discussion here, however, is limited to types of title involving physical parcels of land.
11. For example, section 5.10 of the Kwanlin Dün First Nation Final Agreement. Kwanlin Dün First Nation, "Governance. Land Claims Agreements," 2025, https://www.kwanlindun.com/land-claims-agreements/.
12. See Government of Canada, Council for Yukon Indians, & the Government of the Yukon, *Umbrella Final Agreement*, section 5.5.1.4.
13. See Kwanlin Dün First Nation final agreement, section 1 13.5.3.3. Kwanlin Dün First Nation, "Governance. Land Claims Agreements," https://www.kwanlindun.com/land-claims-agreements/.
14. Kwanlin Dün First Nation Lands Act, https://www.kwanlindun.com/wp-content/uploads/2020/06/KDFN-Lands-Act.pdf.
15. Kwanlin Dün First Nation, "Heritage Lands and Resources: Land Management," https://www.kwanlindun.com/heritage-lands-and-resources/land-management/.

16. Brian Ballantyne and James Dobbin, *Options for Land Registration and Survey Systems on Aboriginal Lands in Canada* (A Report Prepared for Legal Surveys Division of Geomatics Canada, January 2000), https://www.acls-aatc.ca/files/english/aboriginal/Ballantyne-Dobbin_report.pdf.
17. Kwanlin Dün First Nation, *Traditional Territory Land Vision* (June 2017, 25), https://kwanlindun.b-cdn.net/wp-content/uploads/2020/03/KDFN_Land_Vision_FINAL_June_2017.pdf.
18. *Housing, Census 2021, Highlights*, Yukon Bureau of Statistics (Government of Yukon, 5), https://yukon.ca/sites/default/files/ybs/fin-housing-census-2021-revised.pdf.
19. "Apply for Funding for Housing Initiatives," Yukon Housing Corporation, last modified Jun 9, 2025, https://yukon.ca/en/housing-initiatives-fund.
20. "Apply for a Developer Loan to Build Affordable Housing," Yukon Housing Corporation, last modified Dec 2, 2024, https://yukon.ca/en/housing-and-property/funding-and-loans/apply-developer-loan-build-affordable-housing.
21. "Housing Accelerator Fund," Canadian Mortgage and Housing Corporation, last modified May 12, 2025, https://www.cmhc-schl.gc.ca/professionals/project-funding-and-mortgage-financing/funding-programs/all-funding-programs/housing-accelerator-fund.
22. National Indigenous Collaborative Housing Inc., https://nichi.ca.
23. National Housing Co-investment Fund, *Highlight Sheet: New Construction - Standard Stream*, Canadian Mortgage and Housing Corporation, https://assets.cmhc-schl.gc.ca/sites/cmhc/nhs/co-investment-fund/nhs-co-invest-fund-highlight-sheet-en.pdf.
24. As outlined in the Kwanlin Dün First Nation Community Lands Plan: Kwanlin Dün First Nation, *Kwanlin Dün First Nation Community Lands Plan: A Plan for KDFN Settlement Land in Whitehorse* (KDFN, 2020), 20, https://www.kwanlindun.com/wp-content/uploads/2020/08/KDFN-Community-Lands-Plan-2020.pdf.
25. City of Whitehorse Official Community Plan, available at https://www.whitehorse.ca/whitehorse_project/official-community-plan.
26. See the City of Whitehorse's Subdivision Control Bylaw, available at: https://www.whitehorse.ca/wp-content/uploads/2022/06/SubdivisionControlBylawupd.pdf.
27. Kwanlin Dün First Nation Community Lands Plan.

The Northern Review
Exploring human experience in the North

New Research on Northern Development

Reflection

Acting on MacPherson's Advice: Continuing to Study and Learn from the Northern Co-operative Experience

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Abstract: In the Spring 2009 issue of the *Northern Review,* Ian MacPherson—historian and venerated co-operatives scholar, educator, practitioner, and activist—wrote an article entitled "What Has Been Learned Should be Studied and Passed On: Why the Northern Co-operative Experience Needs to be Considered More Seriously." The Canadian Centre for the Study of Co-operatives (CCSC) is acting on that advice. Building on important research and scholarship around northern co-operatives published by the CCSC and affiliated researchers and fellows, the Centre is working on and planning projects that revisit and reinvigorate previous initiatives and focus on a new set of questions meaningful to northern communities. We revisit, for example, the history of Inuit artists and artisans who deployed the co-operative model to retain artistic and community control of their cultural production. We explore how Arctic Co-operatives Limited is using its co-operative DNA to develop innovative business and training strategies. And we reflect on what the co-operative movement means to northern communities struggling with food insecurity, supply chain disruption, and climate change.

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The Northern Review
Exploring human experience in the North

Nouvelles recherches sur le développement du Nord

Commentaire

Mettre en pratique les conseils du Dr MacPherson : Poursuivre l'étude et l'apprentissage de l'expérience des coopératives nordiques

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Résumé: Dans le numéro du printemps 2009 de la revue Northern Review (volume 30), Ian MacPherson, historien et universitaire spécialiste respecté des coopératives, éducateur, praticien et militant, a publié un article intitulé « Les enseignements doivent être étudiés et transmis : Les raisons pour lesquelles l'expérience coopérative nordique mériterait plus d'attention ». Le Centre canadien d'études sur les coopératives (CCSC) met ce conseil en pratique. S'appuyant sur les travaux de recherche et d'analyse majeurs menés sur les coopératives nordiques publiés par le CCSC et ses chercheurs et collaborateurs affiliés, le Centre travaille actuellement à la planification de projets visant à réexaminer et à renforcer les travaux antérieurs, tout en se concentrant sur de nouvelles questions significatives pour les communautés nordiques. Nous réexaminons, par exemple, l'histoire des artistes et artisans inuits qui ont adopté le modèle coopératif pour préserver leur pouvoir artistique et communautaire sur la production culturelle. Nous explorerons comment Arctic Co-operatives Limited mobilise son ADN coopératif pour élaborer des stratégies novatrices pour les entreprises et la formation. Nous nous pencherons également sur la signification du mouvement coopératif pour les communautés nordiques confrontées à l'insécurité alimentaire, aux perturbations des chaînes d'approvisionnement et aux changements climatiques.

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> The North is only a margin for those who don't understand it or who wish to reduce it to a lucrative periphery. (Findlay 2014, 44)

If you have ever visited the Canadian Centre for the Study of Co-operatives (CCSC), an interdisciplinary research and teaching centre located in the Diefenbaker Building on the University of Saskatchewan campus, you may have noticed *Caribou Hunt* (n.d.), an exquisite stonecut by Inuit artist Geeshee Akulukjuk, on display in the hallway. This is more than intricate carving painstakingly inked onto paper, more than a beautiful work of art celebrating the traditional sustaining and sustainable caribou hunt, rooted in Inuit culture, tradition, and storytelling—it captures the theme of this issue: Northern Economic Development.

And this is by no means a stretch. For *Caribou Hunt*[1] came from the North to markets in southern Canada through Canadian Arctic Producers via the artist's membership in the Pangnirtung Inuit Co-operative on Baffin Island in Nunavut (Ramrattan 2025). One of many in communities across the Canadian Arctic, this Co-op began as artists collectively organizing to create employment and develop economic development opportunities, and the marketing, sales, and shipping capacity required to bring their works to southern markets at fair, competitive prices, while retaining control and agency over their artistic production. And the model through which they organized was co-operative.

Co-operatives are jointly-owned, democratically-controlled, people-centred enterprises controlled by and for their members to realize shared economic, social, and cultural needs. Grounded in values of self-help, self-responsibility, democracy, equality, equity, and solidarity, co-operatives aspire to the ethical principles of fairness, equality, social responsibility, community engagement, sustainability, and resilience. Co-operatives are guided by seven key principles: 1) open and voluntary membership; 2) democratic member control; 3) economic participation by members; 4) autonomy and independence; 5) education and training; 6) co-operation among co-operatives; and 7) concern for community (International Cooperative Alliance 2024).

That *Caribou Hunt* is on display to every visitor to the CCSC, over 2,700 km south of Pangnirtung, is emblematic of not only the innovation, self-determination, and resilience of the people and communities of the Arctic, but the history of co-operatives in the Canadian North and the power of putting those principles to work. Today, Pangnirtung Co-op operates a retail grocery

and general merchandise store, a hotel, cable service and property rentals—and continues to produce, market, and sell arts and crafts. The co-op is, and always has been, owned and governed by the people of Pangnirtung.

Caribou Hunt came to market from Pangnirtung's Co-op through membership in Canadian Arctic Producers (CAP). Founded in 1965, CAP was incorporated by twelve such co-operatives, in collaboration with the Canadian government, to produce and market arts and crafts, by Inuit artists and artisans, for Inuit artists and artisans—ensuring revenues generated were returned to the artists and their communities (Katilvik n.d.). In 1972, CAP merged with Canadian Arctic Co-operative Federation, a network of local grocery and general merchandise service and support co-ops, to become Arctic Co-operatives Limited (ACL) (Lund 2021, 4). Celebrating sixty years of "promoting, protecting, and preserving Inuit and Dene art," CAP has evolved into the wholesale art marketing arm of Arctic Co-operatives Limited (Canadian Arctic Producers n.d.).

Based out of the support office in Winnipeg, Manitoba, today ACL serves thirty-three co-operatives, Indigenous member-owned and driven, across Nunavut, the Northwest Territories, and the Yukon (Arctic Co-operatives Limited 2025a)—that is a geographic reach of over 3,000 km from Qikiqtarjuaq, Nunavut, in the east to Old Crow, Yukon, in the west, and the same again from the northernmost co-op in Grise Fiord (Canada's northernmost community, which lies 1,160 km north of the Arctic Circle)[2] to CAP's home base in Mississauga, Ontario, in the south.

The seven co-operative principles ensure co-ops remain inclusive, member-focused, and socially responsible, while promoting sustainable development and mutual support (International Cooperative Alliance 2024). This is demonstrated in the impetus behind ACL:

> Our members did not want people from outside their communities coming in and establishing businesses to provide services; we wanted to develop the services ourselves. We also wanted to keep the profits from our businesses and use them to develop new and better services for our members and provide employment within our communities. The Co-operative Model was the best way for us to meet these goals. (Arctic Co-operatives Limited 2025b)

While co-operatives were introduced to Arctic communities by government officials (Hammond-Ketilson and MacPherson 2001; Lund 2021)—often in service of colonial and sovereignty projects with interests vested outside those of the Indigenous Peoples in those communities—the "turnaround point" was member education. As co-op members learned about co-operative governance and business management and co-op principles, members assumed those principles and took responsibility for the co-ops and, as such, meeting their communities' needs through services that they empowered themselves to provide through the model. The co-ops provide a wide range of services including retail stores, hotel and tourism operations, cable television, arts and craft marketing, fuel distribution, construction, and property rental, and are home to everything from Canada Post outlets to banking and financial services. The services offered by each co-op are specific to the needs of their members and communities.

The co-op structure also allows for local control and profit retention within the communities they serve. In 2024, ACL posted sales of $340 million and net savings of $14.7 million, with $13.1 million in patronage returned to member communities. The regional impact of these local co-operatives is immense. In 2023, 1,109 local people, predominantly Indigenous, were employed across the local co-ops (Nunavut, Northwest Territories, the Yukon, and, at the time, Saskatchewan[3]), and paid wages of $44.1 million—money that largely stays in those communities. This is northern economic development that sustains communities and grows community wealth, rather than exploits northern resources and flows money out and south.

ACL's member co-ops are also major partners in subsidiaries, which provided $3.6 million in benefits to ACL in 2024 (Arctic Co-operatives Limited and Arctic Co-operative Development Fund 2025). For instance, ACL has a 38% stake in Nunavut Sealink and Supply Incorporated (NSSI), a freight service established in 2000 to ensure competitive rates and give member co-ops agency and decision-making power over crucial transportation, freight, and supply services in Nunavut, and to return profits back to the communities that NSSI was established to serve (Arctic Co-operatives Limited 2025c).

In 2023, $54.5 million in financing for local reinvestment in member communities was facilitated by the Arctic Co-operative Development Fund (ACDF), a financial services co-op controlled and owned by the local member co-ops to support their development, growth, and sustainability and that of the ACL system. The ACDF exemplifies co-operation amongst co-operatives (Principle 6) and is "a striking example of how co-operatives working together can create collective capital and share resources in the common good" (Hammond-Ketilson and MacPherson 2001, 27), but also how community needs assessment and buy-in make for viable and sustainable economic development. For while ACDF ensures resources and capital are available to co-ops and for communities to start, develop, and grow co-ops, as ACL Vice President, Governance & Member Relations Mary Nirlungayuk explains, the impetus always "has to come from the community itself before it can get started" (Co-operatives First 2020). This is but one of the lessons

to be learned from northern co-operatives when it comes to northern economic development. And there are many more.

In the Spring 2009 issue of this journal, Ian MacPherson—renowned historian and venerated co-operative scholar, educator, practitioner, and activist—wrote an article entitled "What Has Been Learned Should be Studied and Passed On: Why the Northern Co-operative Experience Needs to be Considered More Seriously":

> They represent the mobilization of local resources, in the beginning often associated with arts and crafts, but also, and ultimately more importantly, a wide range of economic and associated social activity. Over the years, they have mobilized an impressive range of direct voluntary contributions, of social and human as well as financial capital, and of continuous engagement with the special dimensions of community-based enterprise. They are the result of remarkable ingenuity derived from both northern and southern resourcefulness. The co-ops, therefore, are more than they appear. They deserve to be more fully studied, understood, and appreciated, not least in the Arctic and northern regions themselves. Given their past and present roles, the co-ops provide models that the people of the Arctic and northern regions should ponder as they search for a future in which they try to maximize democratic control over local communities, meet pressing social issues, and cope with environmental change. (MacPherson 2009, 60)

Lessons have been learned, but while CCSC researchers and fellows have published excellent work on Arctic and Indigenous co-operatives (Findlay 2014; Pattison and Findlay 2010; Hammond-Ketilson and MacPherson 2001)—often featuring members of these communities as key informants—there has been a dearth of such research engagement in the past decade. This despite ACL continuing to grow, evolve, adapt, reorganize, and reprioritize. While many co-operatives are struggling with how to engage members, and make good on their commitment to the co-op principles and values, northern co-ops like ACL need to be—as MacPherson implored—considered more seriously. Because not only do they deserve to be "more fully studied, understood, and appreciated," but the entire sector has much more to learn from them.

And the CCSC has a number of initiatives that seek to do just that. Research is currently underway on the following projects that revisit ACL and visit anew, with fresh eyes, perspectives, and questions.

1. Community Powered: Celebrating Canadian Co-operatives Exhibition

Planning and research are kicking into high gear for the fall 2025 launch of this exhibition, presented by the Diefenbaker Canada Centre (DCC) in partnership with the Canadian Centre for the Study of Co-operatives,[4] as part of our activities around the United Nations International Year of the Co-operative. Through the lens of the seven principles, the exhibit and programming—including an online exhibit, guided and self-directed tours, school visits and educational programs, speakers, and events—will engage co-operators and communities through explorations of co-operative values; demonstrations of how co-operatives work; Indigenous co-operatives and decolonization; and co-operative history, art, research, education and archival materials. *Community Powered* will be on display in the DCC's 1,500 square foot gallery space, located in the Diefenbaker Building (home of the CCSC) at the University of Saskatchewan.

The exhibit will feature the history of Inuit artists and artisans who deployed the co-operative model to retain artistic and community control of their cultural production. This story will be told through the art and artists whose work made its way into University of Saskatchewan's collections through Inuit co-operatives—like Akulukjuk's *Caribou Hunt*, produced and marketed through Canadian Arctic Producers via the artist's membership in Pangnirtung Co-op. The research team is collaborating with CAP to trace works to their local northern co-operatives to tell the story of how Inuit co-operators seized the co-op model to create employment and training opportunities, build infrastructure, and develop economies and community wealth through their traditional cultural activities—from soapstone and whalebone carvings to sustainable hunting and fishing—in some of the most remote and underserved regions in Canada. This research and knowledge will be mobilized through guidebooks, educational programming, an exhibit catalogue, speakers and presentations, and journal articles.

2. Ivey Business Cases featuring Arctic Co-ops

The CCSC is currently working with Arctic Co-ops to write and publish compelling business cases and teaching notes for use in business school classrooms, exploring how ACL is using its co-operative DNA to develop innovative business and training strategies. While the International Centre for Co-operative Management (ICCM) published a recent and thorough case study on the history and operations of ACL (Lund 2021), the CCSC's focus will be on writing business cases specifically for submission to Ivey Publishing. Canada's leading provider of business case studies and the second-largest publisher of case studies in the world, Ivey cases are used in 96% of *The Economist's* top-ranked full-time MBA schools and 97% of the Bloomberg Best International Business

Schools (Ivey Publishing 2025). Intended to teach students business concepts, strategies, skills, and theories and how to apply them by putting them in the shoes of decision-makers, the CCSC's cases will put students in the shoes of real people at ACL—senior leaders, board directors, and members, at the local and federation level—addressing real-world crises and challenges, stepping into decisions they have made and their solutions to big problems faced by their co-operatives and communities.

Drawing from research on strategic deployment and design of balanced scorecards for co-operatives (Kaplan and Norton 1996; Dhamayantie 2018; Côté 2019), and Keddy's work on implementation and measuring the impact on employee engagement at ACL (Keddy 2024), research is underway on the first of these cases, which focuses on Arctic's monumental shift in strategy to prioritize ACL's mission, purpose, and co-operative principles in its adoption of a balanced scorecard (BSC) approach to evaluation and measurement. Students will learn about ACL and the co-operative model while applying their learning and theories—from change management to HR to strategy—through the scenario.

While the first ACL business case features southern co-operative leaders, as we build these relationships out into their northern member-owner co-operatives, research questions will be guided by the Expert Panel on the Future of Arctic and Northern Research in Canada's approach to Northern Research Leadership and Equity: "centering Northern experiences and prioritized approaches to research by and for the North" (Council of Canadian Academies 2023, 8–9). Genuine learning from the northern co-operative experience requires reversing the flow of learning from North to South, and future cases will endeavour to focus on Inuit leaders and northern communities, and the business decisions and situations they face in their co-operatives at the local and federation level.

3. Lessons from the Northern Co-operative Experience

While much has changed since MacPherson and long-time CCSC faculty and fellow Lou Hammond-Ketilson assessed the situation in 2001, this has not: northern co-operatives in general, and Arctic Co-ops in particular, have been, and continue to be, "one of the most important economic forces in the Canadian North—arguably the most important of those owned by northerners" (Hammond-Ketilson and MacPherson 2001, 26).

In future work the CCSC plans to delve into the "special sauce" of northern co-ops and what can and should be learned from how they are tackling big problems and challenges like food security, climate change, threats to sovereignty and sustainability, and provisioning the North. As Findlay writes,

> In its challenge to the non-cooperative economy, the Inuit experience stretches the terms of co-operative engagement, substituting interdependence for independence and reimagining the seventh of the seven co-operative principles—concern for community—to include the land and all that it sustains and is sustained by. (Findlay 2014, 55)

This will apply work and theories on what makes co-operatives—and northern co-operatives in particular—resilient, successful, enduring, and adaptable, and the lessons learned from that should inform co-op development and northern economic development in the future (Novkovic 2008; MacPherson 2009; Findlay 2014). It will also seek to evaluate ACL's practices and strategies through the lens of mission drift and other factors that have been identified as contributors to the failure of co-operatives (Fulton and Couchman 2015; Fulton et al. 2009; Pigeon 2020)—anticipating and flagging potential threats and challenges to the co-operative.

Returning to the northern economic development theme of this issue of the *Northern Review*, the CCSC's in-progress and proposed research will contribute to understanding how, where, and why, MacPherson (2009) argues,

> co-ops should figure prominently in how the people of the northern regions envision and build their futures; in how governments develop policies to encourage enriched communities and sustainable economies. In doing so, they will invariably encounter enriched communities and sustainable economies, the frustrations and possibilities, that have dominated northern co-operative development for generations and they will continue to do so. They will be able to learn, however, how people in the existing movement, southern and Indigenous, overcame obstacles and built a successful movement. (MacPherson 2009, 77)

What has not changed in the quarter century since MacPherson wrote those words is this: in any discussion of northern economic development, serious consideration should be given to the northern co-operative experience—what has been learned, what should be studied, and what needs to be passed on. And this is how the Canadian Centre for the Study of Co-operatives will contribute to informing those discussions.

Notes

1. While *Caribou Hunt* is not dated, for context, Pangnirtung Inuit Co-operative Limited (incorporated as the Pangnirtung Eskimo Co-operative) was formed in May of 1968; the print shop was established in 1969, and the first collection was released in 1973 (Inuit Circumpolar Council Archives n.d.; Inuit Art Foundation 2018). While acquisition records are spotty, Akulukjuk's stonecut made it into the collection of the Institute for Northern Studies, which donated it to the University of Saskatchewan in 1980 before the Institute was phased out starting in 1981 (University of Saskatchewan Library 2012).
2. The founding of what now describes itself as "the most 'vibrant' community in Nunavut" (Hamlet of Grise Fiord n.d.a) is a dark chapter in Canadian colonial history. To strengthen Canada's claim to High Arctic territory during the Cold War, the government established Grise Fiord through forced relocation of eight Inuit families from Inukjuak, Quebec, with false promises of abundance and support, abandonment, and exploitation to strengthen Canada's claim to the High Arctic through a permanently occupied northernmost settlement (Hamlet of Grise Fiord n.d.b). Today Grise Fiord is home to around 150 people, many of whom are member-owners of a thriving co-op that includes a multi-service store (including groceries, hunting equipment, local arts and crafts, and the post office) and hotel. For more on the history and survivor accounts of Grise Fiord—and a parallel forced relocation to establish Resolute Bay—see the National Film Board of Canada's documentary *Broken Promises — The High Arctic Relocation* (Tassinari 1995).
3. Île-à-la-Crosse Co-operative Association was incorporated in 2020, and opened in 2022 as the one Saskatchewan-based Co-op in the ACL federation (White and Fulton 2022). In 2024, the assets of the Île-à-la-Crosse Co-operative Association were sold to the Meadow Lake Co-op, a member of Federated Co-operative Limited, which continues to operate a food store in the northern community (Arctic Co-operatives Limited and Arctic Co-operative Development Fund 2025, 12).
4. The University of Saskatchewan Library and Archives, Kenderdine Art Gallery/College Art Galleries (KAG-CAG), and Saskatchewan Co-operative Association (SCA), as well as Canadian Arctic Producers (CAP), are collaborators on *Community Powered.*

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The Northern Review
Exploring human experience in the North

New Research on Northern Development

Research Perspective

The Canadian Rangers: A Force Multiplier for the Canadian Armed Forces in the Territorial North

Zoë K.B. Pontikes

Abstract: The Canadian Rangers are a part-time, non-commissioned, community-based subcomponent of the Canadian Armed Forces (CAF). The Rangers operate in Canada's three territories and the northern regions of many Canadian provinces. This article focuses on the nearly 2,000 Canadian Rangers (specifically those in the First Canadian Rangers Patrol Group, 1CRPG) living in 65 communities throughout the Canadian Territorial North. Most Rangers in 1CRPG are Indigenous. This article examines the tangible and intangible value the Rangers provide to the CAF and the Canadian government, particularly in supporting Canada's security and sovereignty. It argues that the Rangers have existed for eighty years as a force multiplier for the CAF through their direct connections to the communities where they live, their intimate knowledge of the nearby land and waters, and their skills in surviving the harsh northern climate. The re-election of Donald Trump to the United States presidency and his isolationist and trade threats have caused Canadians to be more supportive of increased military spending. The security role of the Rangers within this higher level of military spending should be supportive of the CAF and focused on their skills and knowledge of northern conditions. This article concludes that the Canadian government can reinforce its sovereignty in the Territorial North and encourage sustainable northern economic development by supporting the Rangers in mobilizing northern people to continue building communities that are even more self-reliant and resilient.

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The Northern Review
Exploring human experience in the North

Nouvelles recherches sur le développement du Nord

Research Perspective

Les Rangers canadiens : multiplicateur de force pour les Forces armées canadiennes dans le Nord territorial

Zoë K.B. Pontikes

Résumé: Les Rangers canadiens constituent une sous-composante des Forces armées canadiennes, à temps partiel, non officier et basée sur la communauté. Les Rangers sont présents dans les trois territoires du Canada ainsi que dans les régions nordiques de plusieurs provinces canadiennes. Cet article se concentre sur les 2 000 Rangers canadiens — en particulier ceux du 1er Groupe de patrouilles des Rangers canadiens (1 GPRC) — vivant dans 65 communautés à travers le Nord territorial canadien. La majorité des Rangers du 1 GPRC sont autochtones. Cet article examine la valeur tangible et intangible que les Rangers apportent aux FAC et au gouvernement canadien, en particulier dans le soutien à la sécurité et à la souveraineté du pays. L'article soutient que, depuis plus de quatre-vingts ans, les Rangers agissent comme un multiplicateur de force pour les FAC grâce à leurs liens directs avec les communautés où ils résident, leur connaissance approfondie des terres et des eaux environnantes, ainsi que leur capacité à survivre dans le rude climat nordique. La réélection de Donald Trump à la présidence américaine et ses menaces isolationnistes et protectionnistes ont amené les Canadiens à soutenir davantage l'augmentation des dépenses militaires. Le rôle des Rangers en matière de sécurité, dans ce contexte de hausse des dépenses militaires, devrait soutenir les FAC en mettant l'accent sur leurs compétences et leur connaissance des réalités nordiques. L'article conclut que le gouvernement canadien peut renforcer sa souveraineté dans le Nord territorial et encourager un développement économique nordique durable en appuyant les Rangers dans la mobilisation des populations nordiques afin de bâtir des communautés plus autonomes et résilientes.

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The Canadian Territorial North, located roughly above the sixtieth parallel, includes all lands and waters within the territories of Nunavut, the Northwest Territories, and the Yukon.[1] Three roles the Canadian Armed Forces (CAF) have performed in the Territorial North are contributing to national and continental defence and security, enhancing Canada's sovereignty over the region, and supporting broader Canadian government-wide responsibilities in northern communities. Currently, the land force (army) of the unified CAF has approximately 300 military and civilian personnel at its Joint Task Force North headquarters in Yellowknife, Northwest Territories, as well as almost 2,000 Canadian Rangers living in sixty-five communities throughout the Territorial North.

The Canadian Rangers ("Rangers") and their relationship with the rest of the CAF are as a part-time, non-commissioned, community-based subcomponent of the CAF Reserve. Because they are recruited from and stay in their home communities, most Rangers in the Territorial North are Indigenous. However, the Rangers are not an Indigenous employment-equity or affirmative-action program of the CAF. Rather, they are valued as a separate entity within the CAF for the specialized knowledge and skills they bring to support the CAF's three roles in the Territorial North.

The research question for this article focuses on whether the Canadian Rangers, as a separate autonomous and decentralized subcomponent organization, are a force multiplier for the CAF in performing its three roles through its regular and other reservist forces in the Territorial North. The research question asks what tangible and intangible value do the Rangers provide to the CAF and the Canadian government, particularly in supporting Canada's security and sovereignty claims to the international community? This article examines an ongoing debate within military circles and in northern communities about the Rangers' value to the CAF as a separate reservist ground force with its own "operational culture" based on Indigenous traditions.

The article will argue that the Rangers have existed for eighty years as a force multiplier for the CAF through their direct connections to the communities where they live, their intimate knowledge of the nearby land and waters, and their skills in surviving the harsh northern climate. Since there has not been an armed conflict in the Canadian North and since sovereignty disputes have so far been resolved by diplomacy and agreement, the effectiveness of the Rangers as a force multiplier for the CAF has not been directly tested.

Introduction to the Canadian Rangers

Tasks of the Canadian Rangers

In performing their roles within the CAF, the Rangers' mandate is described by three assigned tasks.[2] First, the Rangers support the CAF's sovereignty operations, including reporting "suspicious and unusual activities" and collecting local information of possible "military significance." Second, the Rangers share local knowledge and survival skills with southern-based soldiers during training sessions, serve as local guides into unfamiliar areas, and take leadership roles as "first responders" in local search and rescue operations. Reflecting on these two tasks, General Wayne Eyre, former Chief of Defence Staff, has described the Canadian Rangers as "our eyes and ears and our guides in the North."[3] For the third task, they maintain a military presence within their communities, as well as being instructors, mentors, and supervisors for the Junior Canadian Rangers (a complementary component of the Canadian Rangers consisting of members between the ages of 12 and 18 years).

This article will show how, at least until recently, the relationship between the Canadian Rangers and the CAF has been a logical approach to Canadian defence policy in the Territorial North. Four factors underlie this conclusion. First, logistical, technical, and financial challenges have not motivated foreign private and state actors to challenge Canada's geographic sovereignty and legal jurisdiction in the Territorial North. However, the seasonal Arctic sea ice cover, retreating due to climate change, is opening new routes in the Territorial North for sea traffic, resource exploration, and tourism, as well as for illegal activities (such as drug-trafficking, people-smuggling, and other forms of organized crime), environmental degradation, and other potential disasters. Second, successive Canadian governments have not reprioritized and significantly enhanced their budgetary allocations to defence. Despite pressure from "friendly" nations, Canadian politicians have reflected their voters' satisfaction with the current domestic priority placed on defence spending and have not seen an urgency to refurbish the nation's ageing and obsolete military hardware. However, recent threats to Canada's sovereignty by the United States administration have refocused political attention on these deficiencies. Third, Canada is a "middle power" in the world order of nations. Yet, it is a member of the G7 and has participated in international missions of the United Nations and the North Atlantic Treaty Organization (NATO). It has also benefited from "proportionate" sharing of continental defence with the United States through NORAD (North American Aerospace Defence Command). Fourth, Canada has the world's second-largest land mass, and its geography presents a significant challenge for providing conventional defence throughout the country.

Origins of the Canadian Rangers

The Canadian Rangers trace their organizational roots to the Second World War. The Canadian government reluctantly created the Pacific Coast Militia Rangers (PCMR) in 1942 as a concession to a panicking public in British Columbia, who felt the federal government was ignoring their fears of a possible enemy invasion. The PCMR provided surveillance along the country's west coast, and if necessary could use guerrilla tactics to delay enemy forces from advancing into Canada until combat-trained soldiers arrived.

In 1945, the threat of an enemy coastal attack subsided and the PCMR was disbanded. However, after much debate within the CAF, they were re-established as the Canadian Rangers in 1947 to operate across the Arctic and Subarctic areas of the Canadian North.

By the early 2000s, the Rangers were no longer expected to use guerrilla tactics to engage with an enemy or to assist police in the discovery or apprehension of enemy agents or saboteurs.[4] This change recognized the Rangers' limited training and civilian-military identity, and was made to preserve the positive relationship between the CAF and Indigenous communities. Because Canada does not have a "national guard," the Canadian government has utilized the CAF to intervene in domestic crises, including those involving disputes between Indigenous advocacy groups and private and public interests. (An example is the CAF's intervention in 1990 during the Kanesatake Resistance, also known as the Oka Crisis.) A subsequent policy amendment removed the Rangers from any CAF interventions involving Indigenous groups anywhere in Canada. Nevertheless, the Rangers maintained their military status, even though they no longer had a "combat" role.

For the CAF and the Canadian government, the Rangers carry out their assigned military duties as part of their daily civilian activities in and near their communities. Unless specifically organized by the CAF, they perform surveillance while hunting and fishing to feed their families and communities. However, the Rangers are not on continuous watch and are only trained to identify and report suspicious or unusual activities, such as the surfacing of a submarine, they encounter by chance while on hunting and fishing expeditions.

P. Whitney Lackenbauer observes that the Rangers see their role as "custodians of their homeland" and not as "community-based citizens-soldiers," despite being part of the CAF.[5] The predominant motivation for many northerners to join the Rangers has been a personal commitment to protect their homes and communities.[6] Local patrols (rather than being called platoons) are named after their communities. As Lackenbauer explains, "numeric designation made sense for combat-oriented units but not for ones demonstrating sovereignty"; alternatively, the Ranger patrols' names linked to communities demonstrate the military's presence in the Arctic.[7]

Recruitment Requirements

The requirements to become a Ranger include being at least 18 years of age, being a Canadian citizen or landed immigrant, being physically and mentally fit to perform the duties, and not having been convicted of a serious offence. Northern residents are recruited into the Rangers for their intimate and life-long familiarity with the people, land, and climate where they live, as well as their civilian experiences, hunting expertise, and survival skills while living in the North. Rangers serve for as long as they can articulate their communities' need and can provide knowledge and advice to Regular Forces and Reservists during CAF training sessions; their older members are honoured as Elders within patrol groups.

Soldiers recruited from the Territorial North by regular forces are among the best-educated youth in the northern communities. However, retention rates are low as many recruited soldiers prefer staying in their communities and becoming Rangers. Indigenous families in remote communities do not want their children to travel south to join the CAF; most have experienced how young northerners are unable to cope with the culture shock of the military environment and the broader southern urban environment, and how this shock can lead to substance use disorder, suicide, and other social problems.[8]

For these reasons, the Rangers have much appeal to northern residents who, while focused on their communities and families, also can relate to a broader northern and national identity.

Operations

Each member of the Canadian Rangers is issued a rifle and an annual provision of ammunition. The Rangers are the only members of the Canadian military who receive rifles on a full-time basis because they can be used for personal hunting to feed their families and communities and for personal safety, such as killing predatory animals. The Rangers are encouraged to use their rifles for hunting to become more skilled in using them.

To enhance their status and pride of membership, Rangers are issued "parade uniforms," consisting of a red T-shirt and hoodie, combat pants, and ball cap with the Rangers crest, which have become an "iconic symbol for the military in Northern Canada."[9] However, when "on operations," the Rangers wear their own clothing, which is environmentally appropriate for their local conditions and personal comfort and safety.

The Rangers also supply their own equipment, such as snowmobiles, all-terrain vehicles, and watercraft. The equipment is used for both military and personal use, with each Ranger purchasing what serves both needs best, without having to compromise their personal requirements in favour of contractually determined military procurement policies. Also, they can use their equipment at their discretion, thereby avoiding bureaucratic authorization and expensing procedures as would occur with military-owned equipment. The Rangers receive some compensation for the use of personal equipment for military activities.

Governance

The governance practices for the Rangers are highly decentralized. They are organized into Canadian Ranger Patrol Groups (CRPGs) covering five geographic areas in the Canadian territories and the area north of the treeline in the Canadian provinces. The First Canadian Ranger Patrol Group (1CRPG), headquartered in Yellowknife, is responsible for the Territorial North, as well as a small portion of northern British Columbia. The commander of 1CRPG has considerable autonomy, despite a "shoestring budget," to respond to regional differences in its own natural environments, cultural demographics, operational requirements, and political circumstances. Overall, the Rangers appear more like a regional federation than a national organization.

Lackenbauer has observed that there is no other military organization like the Rangers anywhere in the world.[10] He describes the Rangers' governance at the patrol level as a "horizontal approach, exploiting individual strengths rather than formal networks arrayed by rank."[11] The local leaders of each Ranger Patrol (sergeants, master corporals, and corporals) are elected annually by each patrol's membership and are accountable to their subordinates. Each patrol is self-administered and decisions are made by consultations and consensus. Elders within a patrol are often asked for advice before a decision is made.[12]

Furthermore, Lackenbauer argues that patrol groups in remote and isolated communities are more effectively operated through an organization modelled as a series of "small posts" with decision-making decentralized at the community level.[13] He describes a decision-making process within the patrols as lengthy and complex. By adopting this approach in its relationship with the Rangers, Canada's military has revealed its willingness to be flexible, inclusive, and accepting of the culture of northern Indigenous Peoples.

Training

The training of the Rangers is a reciprocal learning process that brings together army and Indigenous Knowledge and skills. Many Rangers know their areas through physical markers, such as piles of rocks, positioning of stars and planets in the night sky, snowdrifts, and ice formations. Army instructors have taught the Rangers how to read and draw maps, to use compasses, and to operate global positioning systems (GPS) technology that allow them to communicate their observations and provide surveillance over a larger area. This training enhances the Rangers' usefulness to the CAF and hence makes the former into a better force multiplier.

The Canadian Rangers and Security in the Territorial North

First identified in 1973 by Nils Ørvik of Queen's University, defence against help theory is a geostrategic prescription for protecting the security and sovereignty of smaller-power countries that are located near larger-power countries.[14] Peter Pigott observed that "… as early as September 1945, speculation appeared in the press that the United States intended to protect itself with airbases and radar stations in Canada with Ottawa's permission – or without."[15] Therefore, it was in Canada's best interest from both security and sovereignty perspectives to negotiate a proportionate share of North American defence responsibilities through bilateral or multilateral cooperation such as participation in NORAD and NATO. Canada's objective was to have a "seat at the table" when the Americans made decisions serving their own self-interests and also affecting Canada's security and sovereignty.

By the late 1950s, North American military strategists on both sides of the Canada–US border agreed an enemy attack on the continent would be airborne, rather than by land or sea. The Sputnik satellite demonstrated how the Soviets had the technology to launch missiles over the polar ice cap and strike major North American cities. Peaceful co-existence in a nuclear world was established and maintained through the threat of massive retaliation, deterrence, and mutually-assured destruction. Continental defence became more reliant on technology such as the 5,000-kilometre radar system known as the Distant Early Warning System (DEW) Line, which was subsequently expanded to include the Mid-Canada Line and the Pinetree Line and was replaced in the 1980s by the North Warning System (NWS).[16]

With this technology, the Rangers' ad hoc surveillance role became less relevant for continental defence for most of the 1960s. Lackenbauer observed that "citizen soldiers with armbands and rifles could not fend off Soviet bombers carrying nuclear weapons."[17] Instead of focusing on international threats, the Rangers were more frequently responding as unpaid volunteers to search and rescue operations—each time enhancing their reputation within their local communities. Occasionally, they would assist the Royal Canadian Mounted Police (RCMP) to capture criminals. They continued to provide the CAF with intelligence on unexpected sightings of ships and aircraft. The Rangers avoided being disbanded, likely because they drew so little from the defence budget and also, as will be explained later, they played a significant role in serving Canadian sovereignty requirements in the Territorial North simply by being there.

Even though the military's attention was on nuclear missiles delivered over the North Pole by bombers, the possibility remained that the enemy could also attack by sabotaging strategically important ground-based installations, such as weather stations, the early warning radar system, and the Alaska Highway. Questions arose within the CAF and with its US partners as to how quickly Canada could respond to these threats, particularly if its regular troops and reservists were not stationed in the North. The Rangers with their local knowledge and expertise, such as their ability to move quickly on snowshoes, might provide an appropriate level of first response. However, members of the Rangers required additional military training "in patrolling and reporting, aircraft recognition, navigating, and field sketching, as well as group training in how to share information, survey vital points in their area, and participate [and establish direct relationships with regular troops through] military exercises."[18] These considerations opened a debate on whether the Rangers should become a combat-trained force within the CAF or an armed militia, such as a home guard.

However, the debate about "professionalising" the Rangers did not have much traction. Canadian political and military leaders were convinced the Soviets would strike first in the US heartland. Because they relied on radar to detect bombers in Canadian airspace, the priority for military spending was, therefore, the Royal Canadian Air Force. The Rangers were directed to continue their surveillance role, looking for enemy parachutists who might install navigational beacons and undertake "nuisance" attacks in remote and isolated areas.

The Rangers have reported several submarine sightings in the waters of the Territorial North.[19] Since Canada has not had naval vessels continually patrolling these areas and does not have subsurface sensors to monitor foreign naval traffic in the Arctic, the Rangers have provided surveillance information through their random process. Until the 1990s, when they were issued high-frequency radios, the Rangers had no immediate means to report such sightings and therefore, days and even weeks could pass before they could communicate this information for further investigation and diplomatic attention.[20]

Rather than stationing fully-trained soldiers in the North, the CAF followed a "staggered-response" approach and deployed them incrementally and as needed. Arctic Response Company Groups (ARCGs) provided most of the Canadian Army's response to emergencies and significant safety and security incidents, but they were not physically located in their state of readiness in the Territorial North. Consequently, the Canadian Rangers became first responders and the CAF's "watchful presence" for their communities and surrounding areas. Army Initial Reaction Units (IRUs) were also created to respond within eight hours to significant incidents with a four-person reconnaissance team, a twelve-person vanguard company within twelve hours, and a thirty-two-person main support body within twenty-four hours.[21]

To accommodate their first responder role, more Rangers were provided with enhanced training and more advanced equipment. Lajeunesse observed that

"when deployed, with regular forces or southern-based reservists, [the Rangers served] as force multipliers, increasing the effectiveness of any deployment by teaching, guiding, and generally keeping others alive and active."[22] With increased training in northern survival skills, Lajeunesse wrote that a larger number of trained soldiers in southern Canada were available for "small-scale [northern] deployments and tactical movements while self-sustaining for nearly three weeks":

> It may not be a robust military presence in the conventional sense, and has been criticised in the media for falling short of the government's aggressive promises for a strong presence; however, it is a focused and cost-effective system. It is designed with Canada's limited resources in mind and for the sort [of] sovereignty and security threats that the country is likely to face in the coming years.[23]

While the value of an ad hoc approach to ground surveillance occurring when individual Rangers are on personal hunting and fishing expeditions can be questioned, their contribution to military survival training cannot. Considering the challenges of the northern landscape and environment, the CAF benefits from the knowledge and skills gained from its interaction with northern Indigenous Peoples. No one else has the practical experience to provide a similar quality of information.[24] Furthermore, replacing the Rangers' operational services, such as surveillance, is difficult without on-the-ground information on the local environment and would be much more expensive. While their value as the CAF's "eyes and ears" in the North is being superseded by military technology, the Rangers' role as northern on-the-ground "guides" remains significant.

Canadian Rangers and Sovereignty in the Territorial North

The CAF's second identified role in the Territorial North is protecting Canada's sovereignty. Canada's territorial claims are based on nineteenth-century colonial practices which have largely been secured by treaty, by aggressive settlement, and, particularly in the North, by lack of interest by other states. While jurisdictional disputes over Canadian northern waters have almost all been resolved, melting ice caused by climate change is opening the long-sought Northwest Passage to foreign traffic and to sovereignty challenges. The Canadian government has suggested that the effects of climate change in the Territorial North present economic opportunities not only for Canada but also for other nations:

> By 2050, the Arctic Ocean could become the most efficient shipping route between Europe and East Asia. Canada's Northwest Passage and the broader Arctic region are already more accessible, and competitors are not waiting to take advantage – seeking access, transportation routes, natural resources, critical minerals, and energy sources through more frequent and regular presence and activity.[25]

Meanwhile, successive Canadian governments have equated sovereignty with military presence, despite international legal conventions suggesting that more is needed. Canadian governments have identified the Rangers as a convenient and inexpensive way to demonstrate Canadian sovereignty: they live in the North and most can trace their Indigenous presence through many generations. However, these considerations may be insufficient to justify sovereignty.

Shelagh D. Grant defines sovereignty in a Westphalian world as a circumstance where a nation-state has "supreme and independent political authority" over certain lands and people.[26] Through much of its history (before and after it was able to chart its own independent foreign policy), other states did not challenge Canada's jurisdiction over its northern lands or waters because they lacked the financial resources, technology, transportation accessibility, or willingness to take the risks to pursue the economic, commercial, or strategic potential of the Territorial North. With rising temperatures reducing the seasonal ice, many parts of the Canadian Arctic are opening to ships with reinforced hulls and advanced guidance technology. These ships can conduct geological research in previously inaccessible areas and are collecting data confirming and challenging international jurisdictional claims.

However, Elizabeth Riddell-Dixon has observed that while northern coastal states are interested in confirming their jurisdiction over offshore resources, the urgency to do so is low because there "are still many resources to develop … where the risks and logistical problems are less daunting …."[27] Currently, active jurisdictional challenges to Canada's sovereignty claims in the Territorial North have focused on its efforts to control potential pollution risks, overexploitation of Arctic wildlife resources, drug and human trafficking, oil and gas drilling, and seabed mining.

Canadian sovereignty was originally based on a concept known as "terra nullius," which means the land, when discovered, belonged to no one. This concept not only justified declaring sovereignty based on European discovery, but also ignored the presence of the Indigenous Peoples who lived on it at that time, thereby nullifying their sovereign rights as the original inhabitants of the land.

At the beginning of the twentieth century, Lassa Francis Lawrence Oppenheim provided the legal application of "terra nullius," arguing that when jurisdiction was declared by discovery (such as planting a flag, placing a plaque, and returning to the sponsoring monarch with treasures taken from the discovered land), sovereign title could be claimed if the land was "inchoate" (that is, undeveloped or temporarily vacant). However, this title would lapse if not followed, in a reasonable time, with "effective occupation," such as establishing permanent settlements, providing basic public services, establishing governance structures, and enforcing laws and regulations.[28]

After asserting ownership of the Territorial North, Canada needed to demonstrate its commitment to this ownership. However, permanent settlement of this cold and isolated region was difficult for relocated non-northerners and impractical when many Indigenous residents moved seasonally between camps for hunting and gathering activities. Canada initially asserted its authority through its national police force—the North-West Mounted Police (NWMP), and later the Royal Canadian Mounted Police. Oppenheim would have described these posts as "fictitious occupation only" since their operations were mostly symbolic.[29]

Two active disputes to Canada's jurisdiction over northern waters remain to be resolved—the maritime boundary between the Yukon and Alaska in the Beaufort Sea,[30] and international access to the Northwest Passage. Most relevant for this article is the outstanding jurisdictional issues associated with the Northwest Passage as a "shortcut" between the Atlantic Ocean/Europe and the Pacific Ocean/East Asia and an alternative to the Panama Canal and the trade route from Cape Horn in South America. The melting northern sea ice has opened more navigable sea channels, many of which still require the assistance of icebreakers or are too shallow for commercial ships transporting heavy cargo. The "opening" of northern sea channels more often refers to the lengthening of the shipping season (through more days per year when ice conditions allow shipping to occur), rather than year-round navigation. Thus, northern routes and ports continue to be disadvantaged by the length of their season and the reliability of access relative to their southern counterparts.[31]

Today, two maritime routes[32] through Canada's Arctic islands are considered seasonally navigable; together, they are described as the Northwest Passage. Canada has argued that the routes through the Canadian Arctic are internal waterways between its Arctic islands and has asserted its jurisdiction by drawing "baselines," which enclose all waters within the Passage (as well as the airspace above) as Canadian.[33] The United States, on the other hand, considers these routes as international straits connecting the Atlantic and Arctic Oceans and therefore has disregarded all domestic laws Canada has put in place to regulate traffic (particularly oil tankers) through these waters. According to Michael Byers, the Americans' position is less about fearing Canada would block US vessels from the Northwest Passage, and more about avoiding Canada's jurisdictional claim that would create a precedent for regulating their navigation through other continental waterways.[34]

The US challenges in the Northwest Passage have been the only serious threat, so far, to Canada's sovereignty in the Territorial North. An example is the large American oil tanker, the SS *Manhattan*, which entered the Northwest Passage in 1969 without prior Canadian approval. However, this Canada–US dispute hardly justifies a Canadian response involving large-scale expenditures in military personnel, equipment, and infrastructure within this region. Instead, from a diplomatic perspective, Canada has tried negotiating bilateral and multilateral agreements that protect, even with reasonable compromise, Canada's sovereignty interests. From a military perspective, proposals to enhance Canada's northern surveillance and regulatory enforcement, such as acquiring new icebreakers and nuclear-powered submarines, have been abandoned on budgetary grounds. While the CAF was being downsized, the Rangers were expanded, but not for military purposes. Instead, the Rangers were called upon to serve the federal government's objective of building and reinforcing Indigenous–military partnerships—a curious role when the CAF was specifically insisting the Rangers were not an Indigenous program.

The Conservative Government of Stephen Harper came to power in 2006 with an agenda of strengthening Canadian sovereignty in the Arctic, as well as rebuilding the CAF. The government equated a greater military presence throughout the Territorial North and along the Northwest Passage with protecting the country's sovereignty in the Arctic Archipelago. Consistent with the government's political agenda, the Canadian Parliament's Standing Committee on National Security and Defence observed in 2006 that "the Rangers are the sole military presence over large parts of the Canadian north"[35] and recommended expanding the Rangers from 4,100 to 7,500 members. As Lackenbauer points out, this recommendation came without "a clear rationale for this number nor an explanation of how an expanded force would provide Canada with greater security and sovereignty."[36] The government decided, however, to increase the complement to 5,000.

In 2007, two Russian mini-submarines descended more than two miles under the polar ice cap. A Russian flag, reproduced in titanium, was then placed on the seafloor at the North Pole known as the Lomonosov Ridge.[37] Russia's brazen action caught the attention of the Harper government, creating further rhetoric for greater military security in the Canadian Arctic. The Rangers received additional funding and a commitment to the "modernization" of its operations. While the expectation was that this funding would have the greatest impact on 1CRPG and the Territorial North, it later became evident that "two-thirds of the

expanded Ranger organization" would occur in the other four CRPGs, south of the Territorial North and in the provinces.[38] Lackenbauer suggests that political optics were behind the expansion—that is, "by championing the Ranger expansion …, the new government could claim an existing success story as its own."[39]

In 2009, the Canadian Parliament's Senate Committee on Fisheries and Oceans recommended making the Rangers "an integral part of the Canadian reserves" and providing them with "marine capacity."[40] These recommendations challenged the core principles of the Rangers—that is, being a subcomponent of the CAF, with membership drawn from local residents in northern communities who knew their areas intimately and could spot suspicious activities and protect their family and neighbours. Under these southern-generated proposals, the CAF's links to northern communities would be broken if the Rangers became part of the combat-trained Reserves. Also, these proposals could have significant consequences for recruiting northerners and for community-building. With pushback coming from its members and strong advocacy by the military's leadership, the Rangers' core principles and operations remained unchanged.

In summary, successive Canadian governments have tried to justify their claims over "sovereignty" and "presence" in the Territorial North through the Canadian Rangers. The Rangers have been highly visible and widely-dispersed representatives of the Canadian government through their affiliation with and funding from the Department of National Defence. Their Indigenous heritage was exploited as evidence of a long-term "Canadian" presence in the Territorial North—an ironic statement when historical facts show that the Indigenous presence in North America during European exploration was completely ignored and suppressed.

The Canadian Rangers and Community-Building in the Territorial North

As discussed earlier in this article, successive Canadian governments have used the presence of military defence (CAF) and police security (RCMP) to assert sovereignty in the Territorial North. According to Lackenbauer and Katharina Koch, this approach has created "false expectations":

> [Canada] often [has conflated] 'sovereignty' and 'security' as concepts …. Alongside traditional hard-security functions (such as defending territory from potential aggressors, power projection deterrence and containment), Canadian statements [have assigned] its armed forces the opaque mission of 'defending,' 'asserting' or 'demonstrating' Arctic sovereignty.[41]

In 2008, for example, the Conservative government's *Canada First Defence Strategy* anticipated that "the military will play an increasingly vital role in demonstrating a visible Canadian presence in this potentially resource-rich region, [including] helping other government agencies such as the Coast Guard respond to any threats that may arise."[42]

Despite its efforts to demonstrate its sovereignty by "showing the flag" throughout the Territorial North, the Canadian government later realized that a more legally defensible approach required populating the region through strategically located communities. Indigenous northerners were encouraged to settle into communities to receive certain government-provided social benefits. In 1985, William Marsden, a *Montreal Gazette* reporter, described the northern communities he visited as "essentially artificial communities kept alive by federal government welfare." Their source of income through the fur trade had been decimated by animal-rights protests, and substance use issues, suicide, and other social issues were prevalent.[43] Government officials could demonstrate Canada's presence through maps, which showed Canadians living in remote areas of the Territorial North. However, the maps did not show the effects of social seclusion, helplessness, and despair that existed among the population.[44]

By the latter part of the 1990s, the Canadian government had concluded that there were no looming Arctic security threats in the Territorial North requiring an increased army presence in the area. Through its membership on the Arctic Council, Canada has promoted circumpolar cooperation on a wide range of issues, such as "sustainable development, including economic and social development, and cultural well-being …, [as well as,] the protection of the Arctic environment, including the health of arctic ecosystems, maintenance of biodiversity in the Arctic region and conservation and sustainable use of natural resources."[45] This approach conforms with the Canadian government's soft security strategy for the Territorial North which has shifted its emphasis from "defence of sovereignty" to "exercising and demonstrating sovereignty."[46] Through this strategy, the Canadian government has reaffirmed its belief that in addition to a significant military presence through the Rangers, Canada's Arctic sovereignty can best be demonstrated in the Territorial North through a local population living in established communities, through regional civilian governance and administration, and through upgraded infrastructure and services, such as enhanced surveillance and monitoring equipment and expanded search and rescue capabilities.

Unlike the United States, for example, Canada does not have a separate home or national guard to provide domestic support during disasters and emergencies. CAF personnel and equipment often supplement overloaded civilian resources during domestic crises throughout Canada and "help stack sandbags to hold back floods, fight forest fires, evacuate people in danger, deliver supplies, help local

law enforcement, check houses door-to-door, assess damage, and more."[47] As previously noted, climate change has opened the Territorial North to more diverse maritime traffic, including criminal and terrorist activity (of primary concern to the RCMP and the Canadian Security Intelligence Service), environmental accidents (of primary concern to Environment Canada and Transport Canada), and search and rescue (of primary concern to the Canadian Coast Guard). The CAF supports the primary agencies in the performance of their duties. However, these agencies often are not physically present in remote northern communities and the lead responsibility therefore falls upon the Rangers.

Today, the 1CRPG has been directed by the CAF to be the "force of first response" in coordinating area-wide interagency planning and responses to search and rescue incidents, emergencies, and disasters. It works with local authorities (such as police, fire, and medical services) or other federal government agencies (such as the RCMP). However, in addition to often being the only organization immediately available in remote communities, the Rangers have the knowledge and training to lead search, rescue, and other urgent response missions. The CAF has supported the Rangers to assume leadership roles in their communities by providing training and equipment to organize and conduct locally-based responses to major disasters and crises, such as airplane crashes and local evacuations. Lackenbauer has noted that while the Rangers were recruited because of their skills and their knowledge of the local area, their CAF training as Rangers "taught patrols how to work as a group" and "to benefit their communities."[48]

In the 1970s, following the introduction of radar surveillance, the value of the Rangers to military security and sovereignty was in question. Major Ron McConnell of the CAF proposed giving the Rangers an expanded mandate focused on supporting local communities through land-based northern search and rescue responsibilities. At that time, primary responsibility for northern search and rescue was assigned to the RCMP and many calls for assistance were not answered because of insufficient police resources and coverage. To engage the Rangers, the RCMP had to initiate a formal request through bureaucratic channels which lost valuable time. However, on the ground, community leaders who were Rangers would not wait for approval to participate in a search and rescue mission when another community member's life was at stake. Rangers, therefore, often unofficially participated in such missions as volunteers, knowing that they would not get compensated as Rangers if they did not obtain formal approval. Lackenbauer observes, "this distinction [between being an unpaid civilian volunteer and being a compensated Ranger volunteer] confused ... many Rangers, but in emergencies they acted first and foremost as community members, regardless of discrepancies between their practical contribution and official policies."[49] The initial reaction to McConnell's proposal within the CAF was cool. Expanding the Ranger's mandate could not be financially accommodated within the CAF's budget allocations. Today, search and rescue are among the Rangers' highest profile responsibilities.

A CAF review of the Canadian Rangers in 2000 described their contribution to northern communities:

> By their nature, the Canadian Rangers are having a tremendous impact on the lives of people and communities in which they are located…. Rangers, in those communities where there is no other federal presence, are often perceived to be the elite of the community and are held up as role models for others. Frequently the Rangers represent the only identifiable and formed group that is readily available to the community in times of need.[50]

There has also been considerable political pressure to expand the number of Junior Rangers patrols in the four patrol groups located below the sixtieth parallel. However, Junior Ranger patrols require mentorship-affiliation in their communities with Ranger patrols. 1CRPG officials expressed caution that

> the organization as a whole could collapse under its own weight. Creating Ranger patrols simply to support Junior Rangers would drive up the costs through the roof and tax overburdened instructors and headquarters staff …. 1CRPG urged restraint before ambitious regional commanders [in the other four patrol groups, because of the organization's decentralized governance system] carried the Rangers in new – and dangerous – directions.[51]

This cautionary message reflected an understanding that the Rangers' low cost remained their political advantage, allowing the organization to survive the federal government's fiscal austerity measures. To maintain their military relevance, the Rangers had to keep focused on the sovereignty, security, and surveillance tasks that supported the CAF.

Finally, by proclaiming itself as a protector of the environment and resources in a self-defined portion of the Arctic, the government effectively expressed sovereignty less as a right and more as a responsibility, which involves regulatory action. There are costs to receiving international recognition of the jurisdiction to impose such regulations. These costs also involve committing resources to personnel, equipment, and infrastructure to facilitate enforcement.

When civil society is introduced into the analysis, the identification of force multipliers becomes more complex. Now, there are two beneficiaries of the Rangers' activities—the CAF and the Indigenous communities. The benefits flow

simultaneously. For northern residents, the Rangers have interests in the renewal of Indigenous culture, the practice of Traditional Knowledge and survival skills, and a sense of responsibility towards their communities and homeland. According to Lackenbauer, northern residents see the Rangers and their connection to the Junior Rangers as "a strong signal that the military accepted the importance of [Indigenous] cultures and that [Indigenous] communities trusted the military to teach their youth."[52] They have confidence in the Rangers to assist in addressing problems of suicide, substance use disorders, criminal activity, and other self-destructive behaviours being practised by their young people. However, Indigenous Elders are also concerned about "skills fade":

> The [traditional] skills are for the most part ... learned from elders. Retention of these skills is disappearing. Most Rangers over 40 years of age have them, but few under 30 have the same capability. Despite a resurgence of traditional values through the North, the common complaint in communities is that the young are becoming town bound and exhibit little interest in seriously pursuing traditional skills.[53]

The Rangers have, therefore, had to play a larger role in providing a broader range of training to participants in the Junior Rangers' program. Traditional land skills are threatened with extinction if they are not taught through the Rangers and Junior Rangers. The Rangers' role is more than the intergenerational passing down of cultural knowledge and experiences within Indigenous communities; it also is essential to the northern survival of CAF personnel and northern residents generally. The Rangers' training and mentorship programs are, therefore, a force multiplier for the CAF and also for the local communities where they are based.

The CAF is supporting community-building activities by providing the Rangers with relevant project-management training and encouraging them to facilitate civil-society collaboration. These activities will support Canada's northern jurisdictional claims. As communities rebuild capacity towards greater self-determination and resilience, Canada's presence and sovereignty is enhanced.

Northern residents also expand their skills and confidence to self-advocate. Through the Rangers, the CAF is seen as representing the Canadian government within the communities and therefore can be lobbied for greater financial and infrastructure support. It may become difficult for individual Rangers who are associated with such lobbying to distinguish between whether they are advocating as Rangers or as residents of their community. As voices in the North exert pressure to spend more on northern needs, the Canadian government may be less interested in having the Rangers encouraging such advocacy.

On the other hand, the positive consequences of the blurred line between civilian and Ranger roles are most obvious when their military training is applied to their community activities. This training has transformed the Rangers into community leaders, with an elevated sense of the values for volunteer service and social responsibility—the same civil society values that build stronger, self-sufficient, and resilient communities.

Communities in the Canadian North are pressing the federal government to address local social issues and are advocating for the same amenities that Canadian urban residents in comparable-sized communities receive. Northern leaders, who are also Rangers, will likely be forced to choose between the two leadership roles. Historically, Rangers have directed their loyalties first to their communities, and second to the Rangers and the CAF. In time, the Rangers will possibly be recruited from a smaller pool of applicants.

In the meantime, the blurred relationship supports those who envision the Rangers as a means for delivering social support to Indigenous Peoples in the Territorial North. The broadening of the Rangers' mandate raises the question of the legitimacy and appropriateness of engaging the CAF in non-military programs, rather than focusing the Rangers' role on contributing to the CAF's military mandate.

Another Perspective of the Rangers as Force Multiplier

By 1995, an internal review by the Canadian Army concluded that the Rangers' involvement in protecting security was of marginal value. However, their role within northern communities was being refocused in relation to community development and presence:

> [The Rangers'] presence is very worthwhile both from the perspectives of the communities themselves and for the Canadian Forces and the Canadian government. Frequently, the Rangers represent the only identifiable and formed group that is readily available to the community in time of need .... In pure business terms, which seems necessary these days to justify any military endeavour, the Ranger program is analogous to a 'goodwill' class of asset. Its value is above and beyond the meagre budget that sustains it, yet that difference in value could only be realized once another means had to be funded to replace those services that the Rangers provide.[54]

The final report of the internal review observed that the Rangers' value included their "significance in enriching the social fabric in remote areas."[55] This is a remarkable conclusion coming from a military organization and likely reflects

an acknowledgement of the Canadian government's financial priorities and a bureaucratic defensive reaction against further budget cuts. Vice-Admiral Larry Murray suggested that among the patrol groups within the Rangers, the CAF's priority was 1CRPG because "there is still a requirement to maintain a deployed observation capability and a military presence to demonstrate sovereignty."[56]

With respect to security and defence, the Rangers' surveillance role has been replaced by radar and satellite technology. Meanwhile, NORAD's surveillance systems and infrastructure have not kept up with advancing military technologies, and therefore major expenditures for upgrading or replacing equipment are required. Disbanding the Rangers would remove the CAF's on-the-ground surveillance capacity, which is part of NORAD's continental defence and which could still be useful until new technology is installed. The loss of the Rangers' surveillance could also affect the CAF's capacity to monitor, on behalf of non-military government agencies, increasing criminal and terrorist traffic, uncontrolled tourist activity, and environmental violations as climate change opens new northern waterways. The staggered-response approach to incidents in the Territorial North continues to place the Rangers in the position of being first responders. They also support southern-based soldiers from the Regular Forces and Reservists by providing survival training in extreme northern conditions and supplying the intelligence necessary to manoeuvre through the northern landscape. Disbanding the Rangers would require developing alternative methods of transmitting this important training to southern-based soldiers.

With respect to sovereignty, disbanding the Rangers would remove the military connections and visibility they provide in remote northern communities. The former Rangers would continue to be residents, but their distinctive ball caps, hoodies, and other clothing would have no further significance as symbols of the Canadian government's presence, the status of military recognition and training, or the CAF's commitment to their communities and their residents. To satisfy international conventions on asserting sovereignty, other symbols of presence would be required to replace the Rangers, particularly along the Northwest Passage, in isolated and remote parts of the North, and in areas where climate change has made resource extraction financially viable. It is unlikely that any replacement could be provided as inexpensively as the Rangers.

Finally, the Rangers have become important leaders in building community capacity in the Territorial North to respond to local emergencies and disasters, as well as supporting community-response to major health and safety incidents and other emergency situations. The CAF provides special training programs for Rangers on emergency preparedness. Disbanding the Rangers may not immediately place northern communities in a more vulnerable position for threats to their well-being and security. Other federal departments, such as the RCMP and the Coast Guard, might be able to provide the mobilization and coordination currently provided by the Rangers—but not necessarily in as timely a fashion or as effectively, from a civil society perspective, as the Rangers. Also, because local leaders often do not distinguish between their role as Rangers and their ongoing commitment as private citizens to the well-being of their communities, CAF-trained former Rangers could continue to lead facilitation and coordination roles during emergencies. However, this capacity would erode in the future if the next generation of leaders is unable to learn comparable or better leadership skills currently provided through the CAF.

Canada's Department of National Defence has committed to having a "footprint" in communities across the nation through CAF bases, armouries, other installations, and Ranger patrols.[57] Disbanding the Rangers would remove a significant number of locations in the CAF's northern "footprint." The military and perhaps even Canadian government presence would disappear, therefore having implications for sovereignty claims in the Territorial North.

International Interest in Canada's Territorial North

According to Lackenbauer, Canada and the United States have considered the Territorial North, from a defensive point of view, as "an exposed flank," rather than a land needing protection for its "intrinsic value."[58] The Americans fear an over-the-Pole attack by foreign adversaries to harm US citizens in large cities and key industrial, government, and military installations. Canada, on the other hand, has not been as concerned about being attacked by foreign interests, but rather fears the intrusion on Canadian soil by the United States to secure US interests, if they perceive Canada as unable to do so. Therefore, the "exposed flank" for Canada is its sovereignty in the Territorial North from a unilateral "invasion" by the United States.

Canada has taken an "if you can't beat them, join them" approach to the threat of US intrusion. It has delegated its airborne defence of the Territorial North to the United States through the bilateral NORAD agreement. Canada is the junior partner in this continental defence arrangement—for example, senior leadership in NORAD is always filled by Americans. Canada's involvement only pertains to surveillance; it has opted out of directly engaging in defensive counterattacks, with the Americans responding if a hostile state threatens an assault over North American airspace.

Recently, the assumption by Canadian military and political leaders that Russia no longer posed a threat to the world order has been shattered by Russia's invasion of Ukraine and the supportive intervention by NATO. When Russian President Vladimir Putin came to power, his mission was to rebuild his country's

military capabilities in Russia's northern regions. An Arctic Command, established in 2014, became responsible for managing fourteen new military airfields and sixteen built or restored deep-water ports.[59] Rob Huebert also points out that "most of [Russia's] submarine-based nuclear missiles were located with the northern fleet …."[60] The Russians have also extensively mapped the undersea infrastructure causing NATO to consider methods to protect underwater pipelines and cables.[61]

Meanwhile, since the late 1990s, China's interest in the Arctic has grown. Its first icebreaker (the *Xue Long*) arrived in Tuktoyaktuk in 1999. Furthermore, its maritime fleet and commercial ships have been upgraded to travel in the northern waters. China has aggressively expanded its jurisdiction, through the creation of artificial islands in the South China Sea and through its Belt and Road Initiative (Polar Silk Road), including an attempt to acquire, through investment, control over Canada's critical minerals and other natural resources.[62] In 2017, a Chinese icebreaker travelled through the Northwest Passage. Chinese monitoring buoys have been discovered in the Territorial North; China is also believed to be developing listening devices that could soon be monitoring underwater activity in Canadian waters. It has also developed new precision armaments, including "long-range, stealth cruise missiles and bombers, low-yield nuclear weapons and advanced conventional weapons."[63] China is soon expected to equip its nuclear-powered submarines with deep-diving submersibles.[64] Additionally, North Korea is rapidly expanding its capability to attack North America through its nuclear weapons and intercontinental ballistic missiles development program. The United States has determined that Alaska offers an effective strategic location to intercept long-range ballistic missiles launched from North Korea.[65]

Defence against help theory strongly suggests that the recent activity by the United States in the Northwest Passage, the Russian military presence in the Arctic, China's apparent Arctic interests, and North Korea's advancing nuclear technology will reignite the Americans' concerns about Canada's military defence in the Territorial North. While Canada may view itself as a peace-loving nation, US pressure is increasing for Canada to spend more on defence of the North, particularly in addressing deficiencies in surveillance technology. The Rangers may be enhanced as a symbolic response, but this reaction will not be sufficient to satisfy US jitters. The longer Canada delays enhancing its military strength in defence of North America, the greater the likelihood it will lose its defence against help preferred position within NORAD.[66]

Conclusion

Samantha Stevens describes the Canadian Rangers as "a success story of Indigenous/Canadian military collaboration."[67] She points to the CAF's non-hierarchical structure, its attention to Indigenous cultural and language proficiency, its appreciation of a community-first sovereignty, and its search for Indigenous partnerships. Lackenbauer and Kikkert describe the relationship between the Rangers and other units or elements of the CAF as "based on mutual respect that manifests in a productive exchange of skills that supports and strengthens the CAF's ability to conduct Domestic Operations."[68]

The Rangers coincidentally established a military and sovereignty presence in the remote parts of the Territorial North. As shown in this article, the CAF has been budgetarily squeezed into not investing in infrastructure or designating a permanent ground force in the Territorial North, relying instead on a staggered-response with troops based in the southern part of the country. Within available funding, Canadian military priorities do not support army and navy installations in a part of the country that is inhospitable to settlement.

This article shows how the Rangers with their distinctive ball caps, arm patches, and rifles have served since the late 1940s to protect Canadian sovereignty. Military practices and traditions have been modified to respect the way of life of northern Indigenous residents and to avoid rekindling the colonizing practices associated with the European settlement of Canada. These modifications have been necessary for the CAF to recruit and retain local residents into the Ranger force—therefore, establishing a visible Canadian government and military presence and "effective occupation" in the North.

The research question for this article is: are the Canadian Rangers, as a separate autonomous and decentralized subcomponent organization, a force multiplier for the CAF in performing its three roles through its regular and other reservist forces in the Territorial North? The article has also considered the question in reverse: how would Canada's sovereignty, security, and community building in the Territorial North be affected if the Canadian Rangers and the Canadian Junior Rangers were disbanded? From both perspectives, 1CRPG is a force multiplier for the CAF. Because of the arbitrary and ad hoc nature of their activities, the Rangers provide the weakest force multiplier to the CAF on surveillance, but have more significant impact on training southern-based regular and reservist soldiers on essential survival skills if they are deployed to the North—either for military defence or for emergencies—that in other countries would be addressed by a national or home guard. With respect to sovereignty by demonstrating a Canadian presence in the Territorial North, the Rangers provide a much stronger force multiplier—first, symbolically by living in remote northern communities; second,

by coordinating year-round essential services (notably search and rescue) within their communities; third, by supporting community development and enhancing civil society; and fourth, by tracing their presence back many generations through their Indigenous heritage. Working through the Junior Rangers program, the Canadian Rangers provide positive mentorship to northern youth, as well as skills and training for future leaders. However, it is possible that future participation in the Rangers by northern Indigenous residents will decline as they choose to engage as full-time community leaders who are advocating to secure greater financial support and self-government.

At a time when the Canadian government faces many political demands on its budgetary resources, any external pressure on the Canadian government by the US, NATO, or NORAD to substantially increase its military spending has not been well received by Canadian taxpayers. However, the re-election of Donald Trump to the US presidency and his isolationist threats, including the use of tariffs as a tool for implementing his "make America great again (MAGA)" ideology, have caused Canadians to be more supportive of increased military spending, but without a clear consensus on how this will be achieved and within what time frame. There is, however, growing public support for concentrating increased military spending in the Territorial North. Financing increased spending for the CAF will be challenging and involve difficult choices for the current federal government. How it proceeds will be clearer as it issues its fiscal and budgetary plans and how the machinery of government follows through with implementation.

Meanwhile, the Rangers continue to be the ad hoc "eyes and ears" and guides of the CAF in the North, as well as an important resource for teaching survival skills to southern troops when deployed to northern locations. The Rangers will continue to be a force multiplier to CAF and NORAD until deficiencies in early-warning surveillance technologies are addressed. Through their Elders, the Rangers can also share Traditional Knowledge of the survival skills and local expertise that can support southern-based troops.

With respect to sovereignty, Canada remains a country where most of its population prefers living in urban environments along the country's southern border. Populating the North requires economic development that creates attractive and well-paying jobs and living amenities for raising families. Remote areas are less likely to be populated by non-northern people. For this reason, the Rangers will continue to be important contributors to Canada's government presence in the Territorial North. Furthermore, climate change is introducing new non-military jurisdictional challenges to the region. Even if the Canadian government does not see a military urgency to enhance its presence in the North, it cannot ignore the implications of the opening of the Northwest Passage on non-military issues relating to potential pollution, resource development, criminal and terrorist activity, and even increased tourism through cruise ships. The Rangers, as first responders and subcomponents of the CAF, may not be appropriately positioned within the Canadian government's bureaucracy to support these functions.

The Canadian government has conveniently used the Rangers as a "smoke screen" to cover up its inadequate "whole-of-government" response to northern security and sovereignty challenges. The Rangers were never designed to be more than a community-based response to the CAF's northern roles. Expanding their mandate or incorporating them into the regular or primary reservist forces would effectively represent disbanding them.

The Rangers, regardless of whether they are part of the CAF, perform an important civil society function and enhance the safety and well-being of their communities. In the interest of Canadian sovereignty and sustainable northern economic development, they should continue to be supported by the Canadian government and be encouraged to focus on mobilizing northern people to continue building communities that are even more self-reliant and resilient. Meanwhile, the Canadian government needs to have a serious review of its military role in the Canadian North and within a broader strategy of how its security and sovereignty interests in this region can be adequately addressed. Spurred by political rhetoric and destabilizing economic threats from US political leaders, Canadian political discourse is beginning to acknowledge the need and the urgency of responding to these challenges to Canada's northern security and sovereignty. The time has come for Canadian politicians to respond with bold budgetary and policy actions that serve the best interests of Canada's independence, sovereignty, and place in the world.

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Notes

1. The analysis in this paper will be confined to the military's and the Rangers' roles in the Territorial North. However, it should be noted that the Rangers operate in the northern regions of several Canadian provinces—specifically Newfoundland and Labrador, British Colombia, Alberta, Saskatchewan, Manitoba, Ontario, and Quebec.

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8. Lackenbauer, *A Living History*, 289.
9. Lackenbauer, *Vigilans: The 1st Canadian Ranger Patrol Group* (Ottawa: National Defence Canada, 2015), iii.
10. Lackenbauer, *A Living History*, 18.
11. Lackenbauer, “Postmodern Militia,” 56.
12. Vullierme, “Cultural Understanding and Dialogue,” 132.
13. Lackenbauer, *A Living History*, 243.
14. Philippe Lagassé, “Nils Ørvik’s ‘defence against help’: the descriptive appeal of a prescriptive strategy,” *International Journal* 65, no.2 (2010): 464–465. https://www.jstor.org/stable/25681122.
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20. Lackenbauer, *Vigilans*, 67.
21. Lajeunesse, “The Canadian Armed Forces in the Arctic: Purpose, Capabilities, and Requirements,” *Policy Paper* (2015): 4 and 6.
22. Lajeunesse, “The Canadian Armed Forces in the Arctic,” 6.
23. Lajeunesse, “The Canadian Armed Forces in the Arctic,” 6–7.
24. Lackenbauer, *A Living History*, 282.
25. Government of Canada, *Our North, Strong and Free: A Renewed Vision for Canada’s Defence* (Ottawa: Department of National Defence, 2024), 4.
26. Shelagh D. Grant, *Polar Imperative: A History of Arctic Sovereignty in North America* (Toronto: Douglas & McIntyre, 2010), 16.
27. Elizabeth Riddell-Dixon, *Breaking the Ice: Canada, Sovereignty, and the Arctic Extended Continental Shelf* (Toronto: Dundurn Press, 2017), 33.
28. Grant, *Polar Imperative*, 12.
29. Grant, *Polar Imperative*, 21.
30. With respect to the border dispute in the Beaufort Sea, Canada’s position is that the Yukon-Alaska land border should be extended northward to the North Pole, while the US argues the border should be perpendicularly equidistant between the coastlines. The difference represents a wedge-shaped disputed area covering approximately 21,500 square kilometres of the Beaufort Sea which is purported to have hydrocarbon resources below the seabed. This dispute will likely be resolved through diplomatic negotiations between the two countries.
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32. The two routes of the Northwest Passage in Canada’s North are alternative ways of navigating around Victoria Island. One route is a passage north of the Island and the other is to the south between the Island and the Canadian mainland.
33. Grant, *Polar Imperative*, 449-450
34. Michael Byers, *Who Owns the Arctic?* (Vancouver: Douglas & McIntyre, 2010), 49 and 64.
35. Standing Senate Committee on National Security and Defence, *Managing turmoil: the need to upgrade Canadian foreign aid and military strength to deal with massive change* (Ottawa, 2006), 83.
36. Lackenbauer, *A Living History*, 438.
37. C.J. Chivers, “Russians Plant Flag on the Arctic Seabed,” *The New York Times*, last modified: August 3, 2007, https://www.nytimes.com/2007/08/03/world/europe/03arctic.html#:~:text=Chilingarov%20%20spoke%20as%20of%20he,great%20%20Arctic%20and%20%20scientific%20power.%E2%80%9D.
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39. Lackenbauer, *A Living History*, 448.
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46. Lackenbauer and Koch, "Northern and Arctic Security and Sovereignty," 19.
47. Veterans Affairs Canada, "The Canadian Armed Forces During Natural Disasters," *Veterans Affairs Canada* (2022), 1.
48. Lackenbauer, *A Living History*, 414, 422.
49. Lackenbauer, *A Living History,* 266.
50. CAN RAN 2000 quoted in Lackenbauer, *A Living History*, 387.
51. Lackenbauer, *A Living History,* 382–383.
52. Lackenbauer, *A Living History,* 381–382.
53. Lackenbauer, *A Living History,* 381.
54. Quoted in Lackenbauer, *A Living History*, 347–348.
55. Quoted in Lackenbauer, *A Living History*, 348.
56. Quoted in Lackenbauer, *A Living History*, 348.
57. Government of Canada, "CAF Footprint," *Department of National Defence*, last modified: November 23, 2023, https://www.canada.ca/en/department-national-defence/corporate/reports-publications/transition-materials/transition-mnd-26-july-2023/footprint.html.
58. Lackenbauer, *A Living History*, x.
59. Jeff G. Gilmour, "NORAD: Renewal of the North Warning System by Canada – or Not?" *Naval Association of Canada* (2021): 2
60. Rob Huebert in Christian Leuprecht, Joel J. Sokolsky and Thomas Hughes, eds, *North American Strategic Defense in the 21st Century: Security and Sovereignty in an Uncertain World* (Cham: Springer International Publishing, 2018), 178.
61. Emily Rauhala, "The Battle for the Top of the World," *Saskatoon StarPhoenix*, last modified: August 28, 2023, D2.
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66. On June 10, 2025, Prime Minister Mark Carney announced the Canadian government's intentions to expand defence spending to achieve NATO's target of two percent of Canada's Gross Domestic Product by March 31, 2026. This is a significant reversal of previous government plans to do so by 2032 (Chase and Jeff Gray, "Carney lays out defence boost, says era of US dominance over," *The Globe and Mail*, June 10, 2025, pp. A1 and A15).
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The Northern Review
Exploring human experience in the North

New Perspectives on Northern Economies

Research Article

The Changing Nature of the Social Economy in the Yukon: The Transformation of a Frontier Culture

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Abstract: The Yukon and the rest of the Canadian North have undergone tremendous social, cultural, and economic change over the past sixty years. Northern communities have experienced processes of development quite different from most other communities in Canada. These processes have resulted in many unique challenges. One of the ways northern communities have responded to these challenges is through the social economy—the use of community-based organizations that are neither profit-oriented or part of the government sector. Researchers have noted the particular importance of this sector for the North. Research has also noted regional differences within the Canadian North, and in particular between the Yukon and the rest of the region. The vestiges of a "frontier mentality" limited the use of co-operatives and other community-based organizations in the territory. More recent research has shown that social economy organizations have grown much faster in the Yukon than in other regions of the North. This article discusses the degree to which we can link this growth to a transformation in the traditional frontier culture of the Yukon.

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Nouvelles perspectives sur les économies du Nord

Article de recherche originale

La nature changeante de l'économie sociale au Yukon : La transformation d'une culture frontalière

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Résumé: Le Yukon, comme le reste du Nord canadien, a connu d'importantes transformations sociales, culturelles et économiques au cours des soixante dernières années. Les communautés nordiques ont connu des processus de développement assez différents de ceux de la plupart des communautés canadiennes. Ces processus ont engendré plusieurs enjeux spécifiques. L'une des façons dont ces communautés ont répondu à ces défis est par l'entremise de l'économie sociale — c'est-à-dire l'utilisation d'organisations communautaires qui ne sont ni à but lucratif ni gouvernementales. Des chercheurs ont noté la singularité de ce secteur pour le Nord. Ils ont aussi noté des différences régionales au sein du Nord canadien, notamment entre le Yukon et le reste de la région. Les vestiges de la « mentalité frontalière » ont limité l'utilisation des coopératives et autres organisations communautaires dans ce territoire. Des recherches récentes ont montré que les organisations d'économie sociale ont crû beaucoup plus rapidement au Yukon que dans d'autres régions du Nord. Cet article examine dans quelle mesure cette croissance peut être liée à une transformation de la culture frontalière traditionnelle au Yukon.

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The Yukon and the rest of the Canadian North have undergone tremendous social, cultural, and economic change over the past sixty years.[1] Northern communities have gone through processes of development quite different from most other communities in Canada. These processes have resulted in many unique challenges. One of the ways northern communities have responded to these challenges is through the social economy—the use of community-based organizations that are neither profit-oriented nor part of the government sector. These organizations, which seek to empower communities by developing social capital and human capital capacity through assisting non-profit, voluntary, and co-operative organizations, work more effectively in the interests of their communities. Researchers have noted that the social economy has a special importance for northern communities due to the central place of Indigenous traditions, the mixed economy, and the relative isolation of communities (Abele and Southcott 2016; Southcott 2015).

At the same time, research has indicated that the nature of the social economy varies by the region of the Canadian North (Southcott and Walker 2015). In particular, researchers have pointed out the specific nature of the social economy in the Yukon. The Yukon has had the highest number of organizations per capita in the North, but groups in the Yukon tend to be smaller in size and with less structure—many organizations lack formal budgets and employees and rely more heavily on volunteers. One of the most noticeable differences between the Yukon and other regions in the North is the relative absence of formal co-operatives (Lionais and Hardy 2015). Lionais and Hardy suggest that the unique nature of the social economy in the Yukon is related to the fact that the region has traditionally been linked to resource-extraction industries that are seen to provide economic growth, and which therefore dominate the "political imagination" of the Yukon. According to these researchers, "the rugged frontier capitalism of placer gold mining still holds much of the imagination of Yukoners" (163).

Yet as Coates and Morrison point out in their history of the Yukon, since the Second World War the state has played an important part in the social and economic development of the Yukon (Coates and Morrison 2005). Since the mid-twentieth century, the Canadian North has largely been the "Bureaucrats' North" and the Yukon is no different (Coates 1985). The continued highlighting of the frontier past of the Yukon seems to be a contradiction to the reality of a society where the public sector plays such an important role. At the same time, mining is still seen by many as the foundation of the Yukon economy. Placer gold mining continues to exist in the region, and while it provides little in terms of direct employment or wealth, it provides indirect value to the Yukon—as a cultural export in the form of television productions—as well as being a relatively stable economic

activity (Johnson et al. 2024; Lazenby 2015). Large capital-intensive mining projects have largely replaced individualistic placer mining since the opening of the Faro mine in 1969, but these have been prone to boom-and-bust development cycles. Still, the continued importance of mining in the Yukon can be seen as keeping aspects of the frontier imagination alive (Huskey and Southcott 2016).

Despite the continued importance of mining in the social imagination of the Yukon, recent research on the social economy in the region has revealed that the territory has gone through important social and economic changes in the past twenty years—much of it unrelated to mining. A survey of the social economy sector undertaken in 2023 shows that this sector of the Yukon's economy has experienced tremendous growth. Much of this growth is related to a rapid change in the socio-demographics of the territory. The image of the Yukoner as a rugged individualistic placer miner, as still seen on Yukon licence plates, is being replaced by a new type of Yukoner, with a high level of formal education and a new attitude towards what is important in the region. This article discusses the results of this research in an attempt to determine what impact the changing nature of the social economy, and the changing nature of the people who make up this new social economy, could be seen as a part of the transformation of the traditional frontier political imagination of the territory.

A History of the Yukon Social Economy

For almost all of the history of human habitation of the Yukon, social and economic needs were met by the social economy. The term has been used to refer to the traditional and cooperative relationships that exist within Indigenous communities and the social relations that characterize their subsistence economies. Natcher has noted the work of anthropologist Kalervo Oberg in 1931, which drew attention to the fact that "the economies of Aboriginal peoples not only entail highly specialized modes of resource production, but also involve the transmission of social values" (Natcher 2009). This interpretation of the social economy continues to exist in northern research (Harder and Wenzel 2012). The Indigenous communities of the Yukon can be seen as having been based on relationships similar to what today are called part of the social economy.

The first large-scale movement of non-Indigenous populations into the region started with the Klondike gold rush of the late 1890s. This resulted in a rapid migration of primarily single working-age males into the Dawson City area gold fields during the years from 1898 to 1901. The in-migration was short lived, with many migrating out of the region after a short period of time (Coates and Morrison 2005).

This gold rush was unique as a pattern in the Canadian North in that the migrants arrived in the region as hopeful prospectors and placer miners, people who were individual entrepreneurs and risk takers rather than employees. In this context, while short-term co-operation may have happened, the situation was not conducive to the formation of formal social economy organizations. The dream of adventure and quick wealth, combined with the romantic lure of gold mining that had developed in the American West in the second half of the nineteenth century, created unique conditions to attract thousands, many of whom were Americans, to the gold fields (Southcott 2010). Indigenous communities were destroyed and others marginalized, lessening the influence of Indigenous traditions on the formation of the social economy (Cooke 2016). This brief period of the Yukon's history has had a major cultural imprint on the territory—one that differentiated it from other parts of the Canadian North. As mentioned above, at least one study has indicated that the influence of an individualistic culture partially explains a relative lack of cooperative organizations (Lionais and Hardy 2015).

From a symbolic perspective, the Klondike gold rush is probably the most well-known mining development in the Canadian North. At its start, it can be seen to have followed what American historian Frederick Jackson Turner refers to as the "frontier" model of development (Turner 1920). For Turner, the frontier in North America was at the border of wilderness, or "savagery" and civilization. Its conditions produced

> That coarseness and strength combined with acuteness and inquisitiveness; that practical, inventive turn of mind, quick to find expedients; that masterful grasp of material things, lacking in the artistic but powerful to effect great ends; that restless, nervous energy; that dominant individualism, working for good and for evil, and withal that buoyancy and exuberance which comes with freedom—these are traits of the frontier, or traits called out elsewhere because of the existence of the frontier. (Turner 1920, 37)

Others have noted that in Canada, it produced a culture of "frontier masculinity" (Kikkert and Lackenbauer 2017). Yet the actual economic situation that produced these cultural images did not last long. Within ten years of the initial discovery of gold in the Dawson area, a shift in the economic structure of the gold mining industry had already occurred. A rationalization of the industry resulted in the transformation of it from one based on individual risk-takers to industrial wage workers (Coates and Morrison 2005, 157). The need for new technology to rationalize the production process meant that the government had to work closely with American and British investors to continue development on the gold fields.

Less than ten years after the initial discovery of gold, industrial activity in the Canadian North was dominated by a new logic based on close cooperation and planning between the national government and international capital. This was the logic followed in later industrial developments in the Canadian North, such as silver and lead mining in the Mayo and Keno City region of the Yukon starting in 1906.

This logic became even more prevalent following the Second World War when American government actions, with some help from Canada, had rapidly established new transportation systems in the Canadian North, such as the Alaska Highway along with a series of northern landing strips and air bases. In the eyes of many, these developments legitimized the superior nature of industrial developments planned by both government officials and large industrial interests. Following the war, industrial activity in the Territorial North became almost entirely controlled by the federal government as the region became "the bureaucrat's north" (Coates 1985, 191).

Unfortunately, it is difficult to say what impact these socio-historic conditions had on the development of the social economy in the region during the twentieth century. Indigenous traditions linked to the mixed economy, the role of the state, and dependence on natural resource exploitation can be expected to have had an impact on the type, form, operation, and development of social economy organization in the Yukon. Each of these factors impact the social economy in different ways. It is not a simple matter of saying that this factor will have a positive impact or that factor will have a negative impact. The reality will be much more complex. Since there were no studies of the social economy in the twentieth century, and few records related to voluntary and non-profit organizations in the Yukon, we have little idea, beyond anecdotal evidence, about what the impacts of these unique conditions were on the region's social economy.[2] If "frontier individualism" imprinted itself on the Yukon's settler society early, then such a culture would likely be averse to using the social economy to provide services that could be supplied by the private sector. The type of individualism supposedly inherent in a frontier culture would see little value in the social co-operation necessary for the successful operation of formal social economy organizations. It can be assumed that such a culture, if it valued the social economy sector at all, would prefer less-institutionalized, volunteer-based organizations.

The first clear idea we get of the social economy in the Yukon came with surveys conducted by the Social Economy Research Network for Northern Canada (SERNNoCa), and associated research, conducted from 2006 to 2013. This project started with a definition of the social economy that included community-based organizations that were neither profit-oriented nor part of government.[3] They were "part of a stakeholder economy, whose enterprises are created for and by those with common needs, and accountable to those they are meant to serve" (Southcott 2009, 4). At that time, the research was able to show that social economy organizations in the North were more numerous than in other regions of Canada (Southcott and Walker 2015). It was also able to show that there were important differences between the social economy sector of the Yukon and other regions of the Canadian North. The first difference was that the Yukon had a higher per capita number of social economy organizations than the rest of the region. In addition, compared to the averages for the Territorial North, it had a much higher percentage of social economy organizations engaged in sports, recreation and tourism, as well as in arts and culture. The Yukon had a lower percentage of social economy organizations engaged in trade, finance and/or insurance as well as development and housing (Southcott and Walker 2015, 35). This is linked to the relative absence of co-operatives in the retail trade sector in the Yukon when compared to Nunavut and the Northwest Territories. Only 2% of social economy organizations in the Yukon were co-operatives compared to 25% in Nunavut (37). While the social economy sector in the Yukon was bigger, and organizations were slightly older than in other regions, it was also less institionalized in the sense that a higher percentage were primarily volunteer organizations. At least 88% of social economy organizations in the Yukon used volunteers for their activities compared to 55% in Nunavut (Southcott and Walker 2015, 38). An important difference between the Yukon and other regions of the Canadian North, suggested as an explanation for some of the social economy differences, was the percentage of the population identifying as Indigenous. In 2011, 25.1% of the Yukon population identified as being Indigenous compared to 50.3% in the Northwest Territories, and 85% in Nunavut (Southcott and Walker 2015, 28).

A study conducted in 2007 noted the importance of the volunteer sector in Whitehorse and the surrounding area (Johnston and Twynam 2009). Through the study of volunteering for the 2007 Canada Winter Games, the researchers were able to isolate reasons why volunteering was so strong in the Whitehorse area. Some of the most important reasons expressed included a desire to feel part of the community, to create a better society, and to put something back into the community (109).

The image one gets of the social economy sector of the Yukon in 2013, when updating SERNNoCa's database concluded, was that it was vibrant and growing. At the same time, compared to the other regions of the Canadian North, the social economy of the Yukon was largely based on volunteers and was more oriented towards sports and recreational needs and art and cultural needs, of the territory. In other regions, social economy organizations were more engaged in responding to the social challenges of the region in health, housing, and development, as well as trade and finance.

Socio-Demographic Change in the Yukon

Additional funding enabled another study in 2023, to compare against what SERNNoCa found before 2013. Before examining these changes, it is useful to look at overall changes in the region. As noted in previous work, in the past, socio-economic shifts in the region were often linked to resource development projects opening or coming to an end (Huskey and Southcott 2010; Southcott 2015). Between 2013 and 2023, mining was relatively important for the Yukon economy and several mines opened and closed. The impacts of these changes can best be seen in changes in the population of the region during this period.

Table 1 shows the changes in population from 2011 to 2021 for five regions in the Canadian North. The data shows that changes varied greatly between regions. The population of the Yukon increased by over 18% during this period. Both Nunavut and Nunavik also saw substantial population growth at 15.5% and 16.2% respectively. One can assume that such drastic changes in the population, and the variances among the regions, would have impacts on their social economies. Despite growth in Nunavut, Nunavik, and the Yukon, the population of both the Northwest Territories and Labrador actually decreased slightly during this time period—by 0.9% in the NWT and by 0.3% in Labrador.

Table 1. Population in the Canadian North, 2011 to 2021, for five regions: the three territories, the Yukon, Northwest Territories (NWT), and Nunavut, and the northern regions of the provinces of Quebec and Newfoundland and Labrador.

Census Year	Yukon	NWT	Nunavut	Nunavik	Labrador
2011	33,897	41,462	31,906	12,090	26,728
2016	35,874	41,786	35,944	13,188	27,197
2021	40,232	41,070	36,858	14,050	26,655

Source: All census data for this article was obtained from Census Profiles of Statistics Canada, 2001 to 2021:
https://open.canada.ca/data/en/dataset/2775ad9a-8a68-4455-bf88-7b05d7ef6f87
https://www12.statcan.gc.ca/english/profil01/CP01/Index.cfm?Lang=E
https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E
https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E
Data for the Yukon, Northwest Territories, and Nunavut are based on the territory; data for Nunavik is based on the Nunavik Health Region; and data for Labrador is based on the federal electoral district.

Comparing population growth in the Yukon between 2016 and 2021, one can see that the population increased by 4,358, or more that 12.1%, the highest growth in Canada (Hatherly 2022). This was more than twice Canada's overall growth rate of 5.2% for this period. Statistics Canada referred to the increase in population in the Yukon as comparable to another gold rush. They noted that this rush had started slowly in 2001, following declines in late 1990s linked to the closure of the Faro and other mines in the early 1990s (Statistics Canada 2022). The study by Statistics Canada noted that, unlike the situation prior to the 1990s, when growth was largely due to mining and infrastructure projects in several smaller communities of the Yukon, recent growth was largely limited to Whitehorse and, to a lesser extent, Dawson City. They noted that in Whitehorse alone, there were "1,266 more dwellings built over this five-year period to house the additional 3,116 inhabitants" (Statistics Canada 2022).

While Indigenous communities are largely maintaining their populations, the rapid urbanization of the Yukon population in Whitehorse, and the lessening demographic importance of smaller communities—that once were the foundation of the mining sector of the Yukon—are leading to a call for changes in the Yukon, including changes to a political system that gives unequal representation to urban voters (Halliday 2024). In 2021, the City of Whitehorse represented 70% of the population of the Yukon. In 1996, after the closure of the Faro mine, Whitehorse represented 62% of the Yukon's population. If one includes the communities adjacent to the City of Whitehorse, the Whitehorse Census agglomeration represented 79% of the total population of the Yukon in 2021.

This urbanization of the Yukon population is happening alongside other important socio-demographic changes.[4] Industrial employment has also changed. Table 2 shows the changes in industrial employment in the Yukon from 2001 to 2021. What is interesting in this data is that mining represents a small percentage of overall direct employment in the Yukon during this period. In the 1991 Census, the Yukon was listed as having 990 people employed in mining, a figure that represented 5.9% of all jobs in the territory. By 2001, only 430 people worked directly in mining, including those in oil and gas extraction. It is true that 2001 was a bad year for mining, with only placer gold activities providing employment in this sector. By 2021, employment in mining and oil and gas increased to 675 as both the Minto Mine and the Eagle Gold Mine were in operation at the time. Still, mining jobs only represented 2.9% of all employment in the Yukon in 2021. Part of the explanation for the decrease in mining jobs is not so much the reduced importance of mining for the Yukon economy, but rather both technological change and the shift to fly-in, fly-out employment strategies (Finnegan and Jacobs 2015; Jones and Southcott 2015).

Table 2. Labour force aged 15 years and over, by industry, percent of total labour force in Yukon Territory in 2001 and 2021, based on the North American Industry Classification System (NAICS)

	2001		2021	
Total, all industries	17,665		23,140	
11 Agriculture, forestry, fishing & hunting	285	1.61%	365	1.58%
21 Mining and oil & gas extraction	430	2.43%	675	2.92%
22 Utilities	145	0.82%	215	0.93%
23 Construction	1,400	7.93%	2,045	8.84%
31–33 Manufacturing	385	2.18%	300	1.30%
41 Wholesale trade	330	1.87%	290	1.25%
44–45 Retail trade	1,940	10.98%	2,230	9.64%
48–49 Transportation & warehousing	770	4.36%	865	3.74%
51 Information & cultural industries	695	3.93%	555	2.40%
52 Finance & insurance	370	2.09%	320	1.38%
53 Real estate and rental & leasing	200	1.13%	300	1.30%
54 Professional, scientific & technical services	740	4.19%	1,240	5.36%
55 Management of companies and enterprises	10	0.06%	0	0%
56 Administrative and support, waste management, remediation	585	3.31%	610	2.64%
61 Educational services	1,180	6.68%	1,730	7.48%
62 Health care and social assistance	1,585	8.97%	2,745	11.86%
71 Arts, entertainment and recreation	555	3.14%	635	2.74%
72 Accommodation and food services	1,595	9.03%	1,285	5.55%
81 Other services (except public administration)	725	4.10%	945	4.08%
91 Public administration	3,735	21.14%	5,785	25%

Source: Statistics Canada 2002. 2001 Community Profiles. Released June 27, 2002. Last modified: 2005-11-30. Statistics Canada Catalogue no. 93F0053XIE. https://www12.statcan.gc.ca/english/Profil01/CP01/Index.cfm?Lang=E

While Table 2 shows us that mining employment increased slightly from 2001 to 2021, the categories that showed the largest increases were public administration as well as health care and social assistance. There were 2,050 more jobs in public administration in 2021 than in 2001, and 1,160 more jobs in health care and social assistance. The next largest increases were in construction, with 645 more jobs, followed by educational services with an increase of 550 jobs, and professional, scientific, and technical services with 500 jobs. It is evident that employment in the Yukon, outside of the construction sector, is increasingly based on "white collar" jobs in the public sector that are dependent on higher levels of formal education.

These changes are borne out by an examination of changes in levels of education in the Yukon. In 2001, there were 3,570 people living in the Yukon who had a university degree or higher as their highest level of formal education. By 2021 this number was 8,965, an increase of 151%. Indeed, the Yukon now has a population with a higher level of education than the Canadian average. For Canada as a whole, 26.7% of the population has a university degree or higher, while for the Yukon the percentage is 27.4%. Comparable figures for the other territories are 22.1% for the Northwest Territories and 10.6% for Nunavut.

Another interesting change that is noticeable when looking at the data for the highest level of education in the Yukon is the gender difference. As seen in Table 3, as concerns the working age population between the ages of 25 and 64, 38.9% of women in the Yukon have a university degree or higher compared to only 26.5% of men. This gender difference in education helps explain the fact that women now dominate employment in those industries that require higher levels of formal education. In 2021, women represented 57.6% of people employed in public administration, 71.7% of those employed in educational services, and 79.4% of those employed in health care and social assistance sectors.

These changes outlined confirm that society in the Yukon, while perhaps still placing importance on the frontier image that dominated its early settler history, has changed substantially away from the type of society that produced this image. Perhaps the most important indicator that the frontier society of the early twentieth century was becoming less of a reality was the negotiation and signing of modern comprehensive land claim agreements in the Yukon between 1993 and 2006. These treaties reduced the marginalization of Indigenous communities that a frontier society had promoted (Cameron 2019). In addition, as seen in our discussion above, Yukon society has become increasingly urbanized. Its economy has become increasingly dependent on the service sector. Educational levels have increased to the point where the Yukon is now one of the most highly educated jurisdictions in Canada. Finally, the economy and society of the territory has become increasingly feminized as women play a bigger role in the leading sectors of the economy.

Table 3. Yukon population 25 to 64 years of age, highest level of schooling, by gender, 2021.

	Men+		Women+	
Highest certificate, diploma, or degree for the population aged 25 to 64 years in private households*	10,950		11,945	
No certificate, diploma or degree	1,385	12.6%	845	7.1%
High (secondary) school diploma or equivalency certificate	2,715	24.8%	2,465	20.6%
Post-secondary certificate, diploma, or degree	6,855	62.6%	8,635	72.3%
Post-secondary certificate or diploma below bachelor level	3,960	36.2%	3,990	33.4%
Apprenticeship or trades certificate or diploma	1,715	15.7%	475	4.0%
Non-apprenticeship trades certificate or diploma	445	4.1%	290	2.4%
Apprenticeship certificate	1,275	11.6%	185	1.5%
College, CEGEP, or non-university certificate or diploma	1,905	17.4%	2,955	24.7%
University certificate or diploma below bachelor	340	3.1%	560	4.7%
Bachelor's degree or higher	2,900	26.5%	4,645	38.9%
Bachelor's degree	1,845	16.8%	2,850	23.9%
University certificate or diploma above bachelor	165	1.5%	280	2.3%
Degree in medicine, dentistry, veterinary medicine	55	0.5%	70	0.6%
Master's degree	730	6.7%	1,360	11.4%
Earned doctorate	100	0.9%	85	0.7%

Notes: * from the sample data from long-form questionnaire completed by 25% of households)

Source: Statistics Canada. 2023. (table). Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E

The Changing Social Economy of the Yukon

What is the impact of these changes on the social economy of the region? The study undertaken in 2023 can help shed some light on this question. Although limited resources did not allow as extensive a survey as was done previously, it allowed us to update the lists of social economy organizations in the same five regions of the Canadian North. This new "census" of the social economy allows us to compare the situation in 2023 to that of 2013. What was immediately noticeable was the growth of the social economy in the Yukon as shown in Table 4. Labrador, Nunavik, and Nunavut also saw growth in the number of social economy organizations, but to a much lesser extent than the Yukon. The Northwest Territories saw a decline in the number of social economy organizations between 2013 and 2023.

Table 4. Change in number of social economy organizations: 2013 to 2023 for territories, and northern/Arctic areas of Quebec and Newfoundland and Labrador

Year	Labrador	Nunavik	Nunavut	NWT	Yukon	Total for North
2013	168	42	256	303	570	1,339
2023	248	49	286	250	838	1,671
Total Change	80	7	30	-53	268	332

The number of social economy organizations in the Yukon increased by 268, or 47%, from 2013 to 2023. As seen in Table 5, groups engaged in sports and recreation represent those social economy organizations that had the largest increase. There were 88 more groups in this category in 2023 compared to 2013. The next largest increase was in groups engaged in law, advocacy, and politics, whose numbers increased by 57 from 2013 to 2023. Groups engaged in arts and culture had the next highest growth in numbers. These organizations increased by 36 from 2013 to 2023, from 88 to 124. No category of activity saw a decrease in the numbers of organizations from 2013 to 2023 as far as the Yukon was concerned. All activity categories saw more groups in 2023 than existed in 2013.

What is evident is that the changes the Yukon has experienced recently have not had a negative impact on the growth of its social economy sector. In terms of numbers of organizations, the Yukon has seen substantial growth. Indeed, its growth has been much higher than in other areas of the Canadian North. There is increasing demand for the social economy to provide services for leisure activities for an increasingly urbanized and better educated population—both in terms of sports and recreational activities, as well as arts and culture. At the same time, there appears to be an increasing interest in becoming involved in organizations dealing with law, advocacy, and politics. It is important to note that these are organizations that tend to be less institutionalized and more dependent on volunteers than other types of organizations (Southcott and Walker 2015).

The changes that occurred in the social economy sector of the Yukon between 2013 and 2023 also indicate that there are increasing differences between this region and other regions of the Canadian North. Generally, the most important difference is that the social economy of the Yukon is more strongly focused on sports and recreation organizations than in other areas of the region. Table 6 shows that these organizations represent 27.2% of all social economy organizations in the Yukon. Looking at totals for the entire Canadian North, we see these groups only represent 20.3% of all social economy organizations. Similar, but less extreme differences are found in law, advocacy, and politics-based organizations and arts and culture organizations. These organizations are a larger part of the Yukon social economy than in the other regions of the Canadian North.

Table 5. Social economy organizations by activities: The Yukon 2013 and 2023

	2013		2023	
	Number of organizations	% within Region	Number of organizations	% within Region
Law, Advocacy, and Politics	59	10.4%	116	13.8%
Arts & Culture	88	15.4%	124	14.8%
Business Association or a Professional Association	50	8.8%	66	7.9%
Development and Housing	17	3.0%	18	2.1%
Education	28	4.9%	39	4.7%
Environment	37	6.5%	41	4.9%
Health	24	4.2%	27	3.2%
Manufacturing, processing, and/or construction	2	0.4%	5	0.6%
Religion	41	7.2%	54	6.4%
Social services	43	7.5%	49	5.8%
Sports & Recreation	140	24.6%	228	27.2%
Grant-making, Fundraising, and Voluntarism Promotion	41	7.2%	63	7.5%
Trade, Finance, and/or Insurance	0	0.0%	8	1.0%
Total	570	100.0%	838	100.0%

Several types of organizations seem less important in the Yukon than in the rest of the Canadian North. The most significant difference is that concerning organizations dealing with development and housing. For the Canadian North as a whole, these groups represent 5.4% of all social economy organizations while in the Yukon they are only 2.1% of the social economy sector. The next most significant difference is the number of groups involved in social services. These types of organizations represent 9% of all social economy organizations in the Canadian North. In the Yukon, only 5.8% of social economy organizations are engaged in these types of activities. Another important difference concerns educational services. Social economy organizations dealing with educational issues represent 7.4% of all social economy organizations in the Canadian North while the corresponding percentage in the Yukon is 4.7%. Finally, in terms of using cooperatives to provide retail trade, finance, and/or insurance services, the difference that we saw in 2013 between the Yukon and other areas of the Canadian North, continues to exist in 2023. These types of activities represent 3.7% of the social economy sector for the entire North but only 1% in the Yukon.

Table 6. Social economy organizations by activities 2023: The Yukon and Canadian North

	Yukon	Canadian North
	%	%
Law, Advocacy, and Politics	13.8%	11.1%
Arts and Culture	14.8%	13.1%
Business Association or a Professional Association	7.9%	8.0%
Development and Housing	2.1%	5.4%
Education	4.7%	7.4%
Environment	4.9%	3.8%
Health	3.2%	3.5%
Manufacturing, Processing, and/or Construction	0.6%	0.3%
Religion	6.4%	8.4%
Social Services	5.8%	9.0%
Sports and Recreation	27.2%	20.3%
Grant-making, Fundraising, and Voluntarism Promotion	7.5%	5.9%
Trade, Finance, and/or Insurance	1.0%	3.7%
Total	100.0%	100.0%

Observations

Data from the 2023 study shows that the social economy still represents an important sector of Yukon society. Indeed, numbers of organizations have increased substantially since 2013. While it is difficult to link changes in the social economy directly to other changes in the Yukon, it does appear that an increasingly urban, educated, and service sector-based society continues to see the social economy sector as an important means to provide services to Yukon communities, including Whitehorse. An important difference perhaps to the other regions of the Canadian North is that the social economy of the Yukon is increasingly oriented towards providing recreational and leisure services while in other regions, organizations are more focused on dealing with important social challenges such as housing, social services, and education.

A major reason for these differences is the demographic differences between the Yukon and the other regions of the North. While the overall population of the Yukon grew substantially, the percentage of the population that identified as Indigenous declined from 25.1% in 2011 to 22.2% in 2021. Differences in the

relative size of Indigenous Peoples in Yukon society compared to other regions of the Canadian North were used to explain differences in the Yukon social economy compared to other regions of the Canadian North in the original SERNNoCa study. It is likely these differences remain and are indeed increasing.

The non-Indigenous population of the Yukon has increased substantially since the original SERNNoCa research was carried out from 2007 to 2013. Increasingly, the typical resident of the Yukon, is urbanized, works in the public sector, and is highly educated. Women occupy an increasing role in the Yukon paid economy. The new Yukoner continues to place a large degree of importance on the social economy sector. However, unlike other areas of the Canadian North where the social economy is used more directly to deal with social challenges and economic needs, the Yukoners increasingly value social economy organizations to provide recreational and leisure services.

The demographic changes that are occurring in the Yukon can be seen to be quite different from that of a frontier society, at least that described by Frederick Jackson Turner. For Turner, the frontier was the antithesis to urban life—it was the "outer margin of the 'settled area'" (Turner 2008, 2). It was also "intolerant of administrative experience and education" (16). Given that the Yukon is becoming increasingly urbanized and that it is being urbanized by the increasing importance of public administration to its economy, and that this administration increasingly depends on education, one can reasonably ask the question whether the historic frontier imagery of the Yukon is becoming less acceptable to the new Yukoner. This is especially the case given that the frontier thesis is increasingly linked to some of the worst abuses of settler colonialism (Altenbernd and Trimble Young 2014).

Does this mean that the historic valuation of the Yukon as a frontier is in decline? Since the traditional frontier culture of the Yukon has been seen as important for shaping the social economy of the Yukon, does this mean that these unique aspects of the Yukon social economy are disappearing? The sociologist Max Weber was always critical of the Marxist idea that cultural change follows economic change (Weber 2002). For Weber, culture can be somewhat independent of economic change. Indeed, while economic conditions in the Yukon bear little in common with the frontier conditions of the gold rush era, this has been the case for some time now and yet the frontier image continues to be valued as part of the Yukon identity. Indeed, economic reasons for its continued existence can be seen in its use by the territory's tourism sector—although in a revised version that places greater importance on Indigenous culture.

It is difficult to say if the Yukon's unique frontier culture is in decline. Social media provides us with constant examples of people going to the Yukon to experience the frontier (Tukker 2022). Yet it is clear that this culture is being transformed. In the word of one author, at least in Whitehorse it is being gentrified (Nelson 2024). The increasing presence of a highly educated population that is only marginally dependent on the mining sector, along with an awareness of past negative impacts of the frontier mentality, especially as regards women and Indigenous communities, is creating a more cosmopolitan frontier culture, one that tries to accentuate the positive aspects of this culture.

In terms of changes to the social economy sector, the 2023 study indicates little has actually changed to indicate that the particularities of the Yukon social economy, supposedly linked to the importance of the frontier mentality, have not disappeared. While a few new co-operatives exist, they still play much less of a role than in other regions of the Canadian North. Most new social economy organizations in the Yukon continue to be less institutionalized and more dependent on volunteers than elsewhere.

Notes

1. For the purposes of the social economy research done for the SERNNoCa project, the Canadian North was defined as the three territories, Nunavik, and Labrador. As indicated, for some of the research, analysis was limited to the three territories due to data issues.
2. Some records do exist of social economy organizations as well as occasional listings of community organizations. Future archival work could help us clarify the development of the social economy during this period.
3. While for-profit enterprises were normally excluded, those with clear social purposes are often considered part of the social economy and are often referred to as social enterprises. In the Yukon, for example, Raven Recycling, a for-profit recycling operation, was included as part of the social economy of the Yukon. Several Indigenous partners noted that self-government inspired organizations should not be included as part of the social economy since to do so would raise sovereignty issues. As a result, Indigenous organizations were only included as part of the social economy if their existence was not directly related to treaty requirements.
4. One of the important changes, although not directly related to social economy organization changes, is an increase in the immigrant population resident in the Yukon. In 2001, 10.6% of the population were immigrants. By 2021, this had increased to 13.6% of the population. Source: Statistics Canada 2001 Census Profile for the Yukon and Statistics Canada 2021 Census Profile for the Yukon.

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The Northern Review
Exploring human experience in the North

New Perspectives on Northern Economies

Research Article

Creating a More Prosperous Northern Economy: Development Insights from Northern Finland

Carin Holroyd
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Abstract: This essay examines economic development and commercial innovation in Northern Finland as the country and region endeavour to capitalize on the opportunities and challenges associated with economic transitions in the Circumpolar North. A variety of economic strategies have been undertaken in the region. These have included marketing winter and Santa Claus for the tourism sector, developing cold-weather technologies, bioeconomy initiatives, and a vibrant high-technology sector, and promoting Sámi nature-based occupations. Collectively, these initiatives have created impressive developments in the region. While regional successes reveal much about Finland, they also hold considerable value for researchers and policy-makers in other areas of the Circumpolar North whose leaders, like those in Northern Finland, seek to overcome the challenges presented by their small populations, limited access to capital, distances from capital cities and metropolitan centres, and their long histories of resource dependency. This essay proposes that Northern Finland's economic successes could offer ideas for other regions in the Circumpolar North.

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The Northern Review
Exploring human experience in the North

Nouvelles perspectives sur les économies du Nord

Article de recherche originale

Créer une économie nordique plus prospère : Perspectives sur le développement dans le Nord de la Finlande

Carin Holroyd
University of Saskatchewan

Résumé: Cet essai examine le développement économique et l'innovation commerciale dans le Nord de la Finlande, alors que ce pays et cette région cherchent à tirer parti des occasions et défis liés aux transitions économiques dans le Nord circumpolaire. Une variété de stratégies économiques ont été mises en place dans la région, incluant la promotion touristique de l'hiver et du Père Noël, le développement de technologies adaptées aux climats froids, des initiatives en bioéconomie, un secteur dynamique de haute technologie, ainsi que la valorisation des métiers Sámi liés à la nature. Ensemble, ces initiatives ont donné lieu à des développements remarquables dans la région. Si les réussites régionales en disent long sur la Finlande, ils revêtent également une grande importance pour les chercheurs et les décideurs politiques d'autres régions du Nord circumpolaire, dont les dirigeants, à l'instar de ceux du Nord de la Finlande, cherchent à surmonter les défis liés à la petite taille de leur population, à l'accès limité aux capitaux, aux grandes distances qui les séparent des capitales politiques et des centres métropolitains, ainsi qu'à leur longue histoire de dépendance aux ressources. Cet essai propose que les réussites économiques du Nord de la Finlande pourraient inspirer d'autres régions du Nord circumpolaire.

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1. Introduction

Governments and communities across the world are focused on how best to expand economic activity thereby ensuring a steady supply of high-paying jobs, tax revenue, and future development opportunities. A key segment of twenty-first century economic development is rooted in the commercialization of science, technology, and innovation and the pursuit of "new economy" opportunities (Schwab & Davis, 2018; Smith, 2010). Economic success based on science, technology, and commercial innovation in the Circumpolar World has been concentrated primarily in the northern regions of Finland, Sweden, and Norway (Coates & Holroyd, 2020; Larsen & Petrov, 2020; Larsen & Fondahl, 2015). The rest of the Circumpolar World lags well behind, save for isolated centres of natural resource extraction. Advantages like milder weather and larger and less scattered populations distinguish the Nordic North from Alaska, northern and Arctic Canada, and much of the Russian Far North. However, there are enough similarities between the northern Nordic countries and the rest of the Circumpolar World—remoteness and cold, dark, long winters—that an exploration of the economic initiatives undertaken in Northern Finland is a worthwhile exercise. It is quite clear that the region offers important lessons for the management and acceleration of northern economies from the intersection of resource extraction, technological innovation, and post-secondary based commercialization. This essay examines those efforts at economic development and commercial innovation in Northern Finland and proposes that the region's economic successes could offer ideas for other areas of the Circumpolar North.

The focus of governments in the North, as it is elsewhere in the world, is primarily on urban areas; with rural regions and small towns in the Circumpolar North experiencing out-migration and economic marginalization comparable to rural areas globally, but with the spectre of rapid climate change also hanging over the region. The Nordic North stands apart economically from the Canadian North, Greenland, and much of Alaska; it is economically vibrant in terms of diversity of commercial activity, national investments in infrastructure, creative responses to circumpolar and global economic realities, and northern-centred business activities. Economic development, moreover, has expanded beyond the historic reliance on natural resource development, with greater attention to secondary processing, technical services, large-scale tourism, and technology-based enterprises.

An earlier study looked closely at the economic activities taking place across northern Sweden. In this region, innovations have ranged from a winter car-testing hub centred in Arjeplog, to the commercialization of space research in Kiruna,

Indigenous cultural tourism in Jokkmokk, and server farms and data centres in Luleå that make good use of cool weather and ready access to electricity (Coates & Holroyd, 2021). Sweden differs significantly from Northern Finland, particularly because of the dominance of the Kiruna iron ore mine (and the recent discovery of rare-earth elements deposits), and the prominence of the economically strong Swedish communities from Haparanda and Lulea, to Skelleftea and Umea along the southern edge of the northern Swedish coast.[1]

Northern Finland is not without its economic challenges. Rural areas and smaller centres, particularly close to the Norwegian border, do not share equally in the region's general prosperity (Kauppila, 2011). Sámi communities, while more economically stable than Indigenous settlements in many other parts of the Circumpolar World, are more seasonal and less prosperous than the urban areas in northern Finland. The Sámi population is recovering from generations of efforts at cultural domination and assimilation by the people and government of Finland. Sámi communities are endeavouring to protect their reindeer herding economy and to expand craft businesses and culturally-based tourism. Language revitalization efforts have expanded dramatically and Sámi political re-empowerment, including the Sámi Parliament (*Sámediggi*) in Inari continues to make promising strides (Spangen et al., 2015; Müller-Wille, 1979). The Sámi in Finland do not have the same legal and political rights as Indigenous Peoples in northern Canada and Alaska (as recognized by respective governments), and the Sámi carry the primary burdens from the assimilationist and discriminatory policies of the past, while benefiting directly and indirectly from the high level of government investments and general economic development in the region. The Sámi have turned to international tribunals to get attention to their land and resource rights. The United Nations Committee on Economic, Social and Cultural Rights (UNCESCR) ruled on the Sámi claim that Finland had violated their rights to land, resources, and culture, arguing that the national government had failed to consult with and accommodate Indigenous interests. The UNCESCR decision provided a boost to Indigenous asperations, but the practical impact of the United Nations' decision remains untested in Finland (United Nations, 2024).

This essay first discusses the variety of economic strategies undertaken in Northern Finland—including the marketing of winter and Santa Claus, cold weather technologies, Sámi nature-based occupations, the bioeconomy, and high technology—and describes the impressive developments in the region. Following up on extensive policy research and writing on northern Nordic economic innovation and earlier research trips to Northern Finland, the author made a focused research trip in the spring of 2024, meeting community economic development officers and business leaders, visiting commercial establishments, and assessing the general effectiveness of economic policies in the region.[2] Follow-up correspondence with northern contacts, combined with further policy and other research, expanded the portrait of regional development. This essay explores the interesting economic development lessons that can be drawn from this look at the Nordic North, and presents comparisons that could help inform northern economic development in Canada.

2. Northern Economic Development

The Nordic North is, in general, more prosperous than the North American North; the region does not have the extremely poor communities that exist in northern Canada and Alaska, nor does it lack roads and other infrastructure as does most of northern North America. The Arctic Council Secretariat regularly produces statistical profiles of regional northern economies. These studies reveal that in the Nordic North per capita incomes and Gross Regional Products (GRP) are higher than national averages in most northern regions (Glomsrød et al., 2021). The regional numbers lack specificity, however. Most northern communities, as Jennifer Schmidt et al. point out, have a single base industry: the military in Alaska; tourism in many locations; high technology in the case of Oulu, Luleå, and Tromsø. In the absence of such an economic engine, government employment and spending serve as the economic foundation, as is particularly the case in the Canadian territorial North and Greenland, and most remote Indigenous communities (Schmidt et al., 2015, p. 1). While most northern regions have incomes above national norms, the data masks structural inequalities between populations, with government employees and resource workers at the top of the scale. High GRP numbers, often reflecting a single mine, forestry operation, or energy extraction site, also hide the comparative underperformance of the private sector and the seasonality of many parts of the northern economies.

The Nordic countries have been seizing opportunities. In the case of Norway, long-term, thoughtful management of the massive hydrocarbon resources off its coast propelled Norway to a future of well-financed prosperity. Northern Sweden and Northern Finland, in comparison, historically had resource economies based on small-scale agriculture, forestry, mining, and hydroelectricity, much like the Canadian Subarctic. Analysts of economic development in the Circumpolar World have pointed out that, in most of the region, the formal economy tends to be largely focused on resource development (Larsen & Huskey, 2015). Fish, lumber, natural gas, minerals, and precious metals are harvested and sold around the world. This is supplemented, in a declining manner, by an informal economy based on traditional and small-scale work, including Indigenous and non-Indigenous fishing and hunting, production, and sales. For many northern centres, government transfers are a third, but often the most reliable and increasingly dominant, economic pillar. The public sector provides a significant number of

services and jobs to local residents (Huskey et al., 2015). As a base upon which to build future economic opportunities, however, a resource-based economy can be unsteady. The sale of resources, particularly if value-added activity is minimal, can be subject to rapid and sometimes dramatic changes in prices. Overdependence on government finances and employment often stifles innovation.

National governments with territories in the Circumpolar World have prioritized economic development, at least in theory, for decades. The main objective of these efforts has varied but includes the desire to solidify sovereignty in the North, improve access to natural resources, and raise the standard of living for local peoples, particularly the Indigenous populations. Much of the region's postwar growth was rooted in the northern resource boom—an investment explosion in mining, forestry, oil and gas, and hydroelectricity that reached throughout the Circumpolar World—and this, combined with government investment, established the roots of the modern North (Coates & Powell, 1989). Many northern regions grew rapidly from the 1950s through the 1970s, based largely on the marginalization of Indigenous Peoples and the arrival of a largely transient non-Indigenous workforce. Since that time, despite the fact that the northern regions and their national governments made concerted and often expensive efforts to build economic opportunity in circumpolar areas, technological innovation, globalization, and automation created economic shifts that left parts of the North behind.

The new economic realities of the twenty-first century prioritize knowledge work, technological innovation, and digital media. Northern governments and community organizations want to create stable economic conditions and jobs, improve opportunities for their residents, especially Indigenous Peoples, and find sectors with economic potential, but this has not been easy. Economic stability for much of the Circumpolar World remains elusive as reflected by the fluctuations in global demand and prices for commodities. A global surge in Indigenous-led entrepreneurship and, in North America, modern treaty settlements and agreements with resource firms, have helped build a commercial presence for Indigenous people, although community-level progress remains mixed.

Overall, technology has brought as many challenges as benefits. It has reduced employment in resource development and taken away service jobs in the retail, finance, and government sectors. The need for venture capital, highly qualified employees, and expensive research facilities has left the advantage clearly with the larger metropolitan centres although some individual entrepreneurs and businesses flourish in rural and remote areas.

Much of the Circumpolar World—although not the Nordic North—is economically stagnant, if not declining, as many young people move south, e-commerce undercuts local businesses, and the challenge to obtain risk capital, attract professional and scientific staff, and grow companies all continue to make building an economy difficult. Much of Russia, northern Canada, and Alaska have not yet adapted to current economic realities and the knowledge economy. Making that adaptation is a formidable challenge with uncertain results and high failure costs. It is in this context that my research and that done with Ken Coates, which previously has included a variety of studies across the Circumpolar World, drew us to northern Finland where the importance of economic diversification—both making traditional sectors stronger and more sustainable, and creating new industries—has been a high priority for some time. Northern Finland showcases what an innovative, regional economy can look like, with industries ranging from sustainable mining, hydro, forestry, and the traditional livelihoods of the Sámi, to bioeconomy, information technology, health technology, tourism, and new energy.

3. Northern Finland

Finnish Lapland and the provinces of Kainuu and Northern Ostrobothnia make up Northern Finland. This is about half of the land area of Finland, but the region is sparsely populated with a population of about 665,000 people, or 12% of the country's total population (Statistics Finland, 2024). One-third of Northern Finland's inhabitants live in the city of Oulu, another 63,000 live in Rovaniemi. The rest are scattered in smaller communities throughout the 150,000 square kilometres of the region. As described below, historically the natural resources of Northern Finland—minerals, timber, and hydroelectricity—contributed significantly to Finland's nation-wide industrialization and helped maintain a high level of regional prosperity throughout the twentieth century.[3]

A majority of Finland's mining operations are in or near Lapland. This includes the major Kolari iron mine; the Kittilä gold mine (the largest gold mine in Europe); the Kevitsa multi-ore property (nickel and copper concentrates along with cobalt, platinum, palladium, and gold); the Kemi chrome mine; the Lampivaara amethyst mine; and SMA Mineral's Kalkkimaa mine (limestone and calcium carbonate).

Forestry and the forest industry are also of considerable economic importance to Northern Finland, accounting for 12% of the region's GDP (Morales & Sariego-Kluge, 2021, p. 57). About one-quarter of Finland's commercial forests are in Lapland. However, Lapland's forests are subject to more restrictions than those in other parts of Finland in order to preserve old growth forest and to protect reindeer husbandry. According to Finland's Reindeer Management Act, reindeer husbandry "is based on the free access of semi-domesticated reindeer (Rangifer tarandus) to pastures irrespective of land ownership," meaning whether the land is privately or publicly owned (Minna et al, 2020). Nonetheless, forestry—lumber as well as pulp and paper—remains

an important part of Northern Finland's economy. Half a dozen private and family-run companies (Pölkky Oy, Kuhmo Oy, FM Timber, Junnikkala, Keitele Group, and Vaara Group) have sawmills and/or wood processing and production companies across Northern Finland. These companies export their products around the world (Wood from Finland, n.d.). Lapland itself has "two pulp mills, two paper mills, four sawmills, over 100 small-sized enterprises dedicated to timber and two mega-biorefineries investment plans in process" (Morales & Sariego-Kluge, 2021, p. 57).

Pulp and paper has been a significant economic sector in Northern Finland for decades. In 2021, however, Stora Enso, a major Finnish pulp and paper manufacturer, announced the closure of its pulp and paper mill in Kemi (the northernmost paper mill in the world) due to declining global demand for paper. The previous year, the company had converted a pulp and paper mill in Oulu into a packaging production site (Bronder, 2021). On the positive side, that same year Metsä Fiber announced plans to build a bioproduct mill in Kemi. The Kemi bioproducts mill (pulp and other bioproducts, including bio-based electrical energy), a €2.02 million (euros) investment (CAD $3.15 million) , opened in 2023. The new mill employs 250 people on site "and 2,500 people through its direct value chain in Finland" (Metsä Fiber, n.d.). In 2021, around the same time as the Kemi bioproducts mill was announced, so were Vataset Teollisuus Oy's plans to build the Kemijärvi Biorefinery, specializing in processing biomass, in Kemijärvi (approximately 200 kilometres northeast of Kemi). Located just north of the former site of a Stora Enso pulp mill that had operated from 1965 to 2008, the biorefinery is expected to employ about 200 workers directly and another thousand people indirectly. Both the Kemi bioproducts mill and the Kemijärvi biorefinery are designed to operate as circular economies, meaning that all the input raw materials are used to create various bioproducts and/or bioenergy. The creation of a biopark in the area of the Kemijärvi biorefinery is underway. The aim is to attract businesses that can create synergies in the use of biomaterials and energy and create a larger circular economy (Kemijarvi Biopark, n.d.; Aho, 2007).

These initiatives connect with Lapland's strategic focus on a "forest-based bioeconomy." According to Morales and Sariego-Kluge, who have been investigating Lapland's green policies:

> The strategy targets the forestry industry, small-scale food production, energy, and rural micro- and small and medium-sized enterprises (SMEs) linked to the tourist, forestry or steel sectors. The aim is to boost an industrial modernization that cares for the fragile arctic environment (e.g., finding alternatives [sic] uses for waste and wood residuals), and to expand the economic exploitation of the forests beyond large forestry industries, hence breaking the pattern of declining economies in rural communities. (Morales & Sariego-Kluge, 2021, p. 58)

The third natural resource sector that has contributed to Finland's economy is hydropower. Almost 20% of Finland's electricity production comes from hydropower and much of that comes from the north of the country. Six of the top ten operating hydropower plants in Finland are in the north of the country (Power Technology, 2024). Kemijoki Oy produces one-third of Finland's hydropower and sixteen of its twenty plants are in the Kemijoki area in the north. Pohjolan Voima, one of the other large producers of hydropower, owns or co-owns twelve power plants and ten of those are in the north. The Fortum energy company has eleven hydropower plants along the Oulujoki river system. (The Oulujoki River is about 100 kilometres, beginning in Oulujärvi Lake and flowing into the Bothnian Bay at the city of Oulu). Suomen Voima, a power generating company, has announced plans to construct as many as three pumped storage hydropower plants in Kemijärvi. Pumped Storage Hydropower (PSH) enables utility-scale energy storage for approximately eight hours.

Over the past forty years, and most specifically the last two decades, Lapland and the rest of Northern Finland attempted to build on their natural resource base and attract or develop new sectors of their economies. Finland has worked to capitalize on its resource potential, adding processing and related commercial activities and seeking to create circular economies. It is not an accident that Arctic cities like Oulu and Rovaniemi have been able to develop Information and Communication Technology (ICT), tourism, Arctic design, and health technology industries (discussed below)—the country and region have been thinking about and planning northern economic growth. The 2015 report *A Strategic Vision for the North: Finland's Prospects for Economic Growth in the Arctic Region,* commissioned from Finland's former Prime Minister Paavo Lipponen by the Confederation of Finnish Industries EK and a variety of other industry associations, stated that,

> investments worth about EUR 140 billion are planned in the Barents region alone. Finland now has a window of opportunity to ensure that we will get our share of northern economic growth. Now that the 'Arctic hype' has evaporated, it is possible to assess business opportunities in northern regions more realistically, and the potential is substantial. Finland will have a wide range of opportunities in the sectors of industry, energy, cleantech, logistics, infraconstruction, as well as tourism and other services. The Arctic growth opportunity may, however, slip through our fingers unless the state and the business sector can together determine the key

> goals of our northern policy. It is equally important to commit ourselves to the action plan that determines the responsible actors, contributors, and follow-up. (Lipponen, 2015, p. 5)

The section of this report that focuses on business opportunities in different sectors includes a range of recommendations. One of the first calls for initiating "a sector analysis to promote business activities in northern areas together with the business sectors and enterprises. It must be examined what can be done together and which common issues strengthen the interest and competitiveness of businesses" (Lipponen, 2015, p. 30). Other recommendations include prioritizing Nordic energy cooperation, capitalizing on Finland's expertise with cold in the clothing sector, developing major public–private partnerships related to sustainable development, and improving northern infrastructure (roads, flight connections, and data cables).

The country also launched a series of "smart specialization" initiatives across the country, designed to capitalize on regional strengths and to promote local engagement in the global economy. For Eastern and Northern Finland, the government's plan, part of a general European Union strategy, called for a region-centred economic plan:

> The sustainable refining of natural resources and conditions is one of the backbones of ENF [Eastern and Northern Finland] economy, both now and in the future. The significance of natural resources in the Nordic areas has been emphasized in the EU in the past few years. At the same time, the region's unique nature attracts tourists from around the world. Whether we are looking at production activities or the development of services, increasing the value added is the common denominator and the general foundation for the creation of sustainable operating methods. This perception is highlighted in the smart specialisation strategies of the ENF regions. The regions have invested in the development of a versatile economic structure, and at the same time searched for distinct smart specialisation choices to boost the regional competitiveness. (ENFIT, 2025)

There is a concerted effort to make the Finnish economy sustainable, which is more appropriately understood as being more sustainable and longer lasting in the resource sector and more economically diverse in general (Marjamaa & Makeela, 2022; Marjamaa et al., 2021).

In *Finland's Strategy for the Arctic Region 2021*, from the Ministry of Economic Affairs and Employment, one of the four priorities is Arctic expertise and livelihoods with an emphasis on sustainable development. The Ministry summarizes this priority area:

> The strategy emphasizes the importance of diversifying the Arctic economy and increasing the value added of products and services. Activity that complies with sustainable development is a cross-cutting principle concerning business in the Arctic region. This supports the development of a favourable market for innovation and lays the foundation for the region's long-term economic development. A market favourable to new solutions attracts innovative companies and creates an interesting market for Finnish companies with high-level expertise.
>
> Finland possesses a great deal of competence in the cold sector and long practical experience in operating in Arctic conditions. The maritime industry, tourism, circular economy and bioeconomy, health technology, construction, sustainable mining, environmental and energy technologies, fishing industry and the traditional livelihoods of the Sámi have strong links with economic activities in the Arctic region. (Ministry of Economic Affairs and Employment of Finland, n.d.)

Finland has had a strong vision for its north, which has helped to make its plans become a reality. Northern resource companies are focusing increasingly on circular economies and bioenergy.

However, much of the impetus for innovation and creative development does not come from broad national policies, but rather through economically engaged local and regional authorities. An examination of the economic strategies in three of northern Finland's larger centres—Rovaniemi, Inari, and Oulu—demonstrates the significance of local initiatives and investments.

3.1 Rovaniemi

Rovaniemi is a city of 65,000 people (and 12,450 reindeer!) very close to the Arctic Circle. It is the administrative and cultural centre of Finnish Lapland. Rovaniemi hosts 10,000 students, some of whom come from outside Finland to study at the University of Lapland or the Lapland University of Applied Sciences. The scorched-earth policy during the German withdrawal at the end of the Second World War caused extensive damage throughout Lapland, particularly in Rovaniemi. Over 90% of the city was destroyed at that time. Alvar Aalto,

Finland's most famous architect, designed the reconstruction plans for the city. His design—the Reindeer Antler Plan—outlines a reindeer (i.e., the reindeer antlers, head and back) within the design of the city streets. The city may light up this outline in the future so that passengers arriving by plane will be able to see the reindeer (T. Rintala-Gardin, personal communication, May 23, 2004).

In June 1950, Eleanor Roosevelt, Franklin D. Roosevelt's wife, visited Rovaniemi to witness the city's rebuilding efforts. As she wanted to see the Arctic Circle, a small hut was built for her visit eight kilometres from the city. This cabin, which still stands, was the beginning of what would become Santa Claus Village (T. Rintala-Gardin, personal communication, May 23, 2004). Today, Santa Claus Village is one of Finland's best-known tourist attractions and welcomes 500,000 visitors annually. While meeting Santa Claus is the highlight, there are numerous activities on offer at the Village, including riding in reindeer-drawn sleighs, playing with Siberian huskies, meeting Mrs. Claus in the Christmas Cottage, visiting Snowman World, sending postcards from the Arctic Circle, and attending the Elf's Hat Academy. There are also numerous shops, restaurants, and cafes as well as on-site accommodation (1,000 beds as of 2024) including cottages, glass igloos, and a snow hotel.

Santa Claus has been part of Rovaniemi's tourism story for decades. One of the oldest photographs at Santa Claus Village is of the Shah of Iran from the Shah's 1970 visit to Rovaniemi. The first tourism groups came to Rovaniemi to see Santa Claus Village in 1980; the first Concorde flight from the United Kingdom arrived in 1982.[4] A joint marketing group made up of municipal employees and local entrepreneurs began even earlier. *Visit Rovaniemi* (Rovaniemi Tourism and Marketing Ltd.) is a non-profit tourism public–private partnership owned 51% by the city of Rovaniemi and 49% by approximately 230 travel-related companies in the area. It was established in 2007 as the tourism board for Rovaniemi and region. *Visit Rovaniemi* promotes Rovaniemi as a tourist destination domestically and internationally, strengthens Rovaniemi's brand as the official hometown of Santa Claus and the Arctic capital of Lapland, provides tourist information, and works with the media. Sanna Kärkkäinen, CEO of *Visit Rovaniemi*, noted that the organization began making a real push to emphasize Christmas and Santa Claus from about 2010; by 2016, the city had won an international tourism award for its successful marketing work (S. Kärkkäinen, personal communication, May 22, 2024). The desire to see the northern lights is another major reason people visit Finnish Lapland. The northern lights are visible 150 nights a year, between August and April. Lack of pollution—according to the World Health Organization (WHO) in 2018, Lapland had the cleanest air in the world—helps with ensuring the visibility of the northern lights, which can be seen even from the centre of Rovaniemi.

The number of visitors to Rovaniemi and the amount of money those tourists spend in the area has continued to increase (except during the COVID-19 pandemic). During the 2024 winter season, over 700,000 people visited the city. Projections call for that number to be over one million by 2030. Almost three-quarters of the visitors are international, with over 70% from Europe and 20% from Asia. There are currently twenty-four direct daily flights to Rovaniemi from cities across the United Kingdom and Europe (and one Turkish Airways flight from Istanbul). Turkish Air is also launching a direct flight from Beijing in 2025 and expanding connections to the Middle East. Flights from other European and international destinations can connect in Helsinki where flights to Rovaniemi run every half hour throughout the winter (S. Kärkkäinen, personal communication, May 22, 2024).

In the five years before the pandemic (i.e., 2014–2019), China had been the largest source of visitors to Rovaniemi. A photo of Chinese President Xi Jinping and Santa Claus when Xi was vice president created an explosion of interest in Santa's hometown among Chinese travellers. As of 2024, the number of Chinese travellers has not yet picked up to pre-pandemic levels. In 2024, the main source countries for visitors to Rovaniemi were Spain, Italy, France, Germany, the United Kingdom, Singapore, Israel, Ireland, the United States, Australia, and China. Tourism brought in over €400 million ($625 million) in local economic activity in 2023 (S. Kärkkäinen, personal communication, May 22, 2024).

An increase in flight options and local activities have resulted in tourists staying in the area longer. Many people are staying for a full week and much of the accommodation is booked a year in advance. Much of that accommodation—about 40%—has been in AirB&B apartments. Innovative accommodation options like the Arctic Treehouse Hotel or snow and ice hotels are also available. There are 130 locally owned tourism companies in the Rovaniemi region offering opportunities to see the northern lights (by bus, snowmobile, or snowshoe), and participate in activities such as dog sledding, snowmobiling, skiing, visiting reindeer, ice fishing, and winter hiking. Other tourism spin-offs that bring economic benefits to the Rovaniemi region include restaurants and locally made souvenirs and handicrafts for purchase (e.g., reindeer pelts, knives, leather goods). Norwegians even come to Rovaniemi to buy cars, which are less expensive than in Norway (S. Kärkkäinen, personal communication, May 22, 2024).

While winter tourism has been the region's focus for the past fifteen years, there is a growing desire to develop the summer tourism market. Increasing summer temperatures in much of the world could make northern Finland's cooler summer climate very attractive for even more tourists from southern Europe, China, and the Middle East. *Visit Rovaniemi* has recently decided to focus 75% of its marketing budget on the summer season. Tourists visit to experience the

midnight sun, explore nature, relax in a floating sauna on the river, or golf across the Arctic Circle. Within the city itself, there are numerous attractions, including Arktikum (Lapland's provincial science centre and regional museum with a focus on northern nature, culture, and history), the Science Centre Pilke with its focus on northern forests, and the Korundi House of Culture.

Although not traditional tourism, Finland has hosted numerous security meetings in Rovaniemi since joining NATO in April 2023. In fact, the city is now in desperate need of more conference facilities (S. Kärkkäinen, personal communication, May 22, 2024).

Outside of tourism, which is responsible for between 12% and 19% of Rovaniemi's GDP, other industries include the traditional public sector and the nearby military base (Lapland Air Wing, which expanded its operations following Russia's invasion of Ukraine), and services related to mining, which are supplied to the rest of Lapland and to northern Sweden. Rovaniemi and the surrounding area do not have a lot of surplus energy, so it cannot exploit energy-intensive industries. Forest processing is also not done near Rovaniemi, but further south in Kemi (T. Rintala-Gardin, personal communication, May 23, 2004).

Rovaniemi has moved into new innovative industries. The city has proclaimed itself the Arctic Design Capital and hosts Arctic Design Week each March, bringing together design experts and companies from many countries. During the week, there are meetings and seminars along with numerous events including fashion shows and design boutiques. Arctic design businesses producing products such as handicrafts, jewelry, home decor items, accessories, leather, and fur garments have flourished. The Faculty of Art and Design at the University of Lapland in Rovaniemi fosters and teaches new artists. One of the successful design companies from the area is Lappset, a family-owned company for 50 years, which manufactures innovative playground structures and outdoor exercise equipment for children and seniors (T. Rintala-Gardin, personal communication, May 23, 2004).

Rovaniemi-based companies focused on cold and winter technologies are also emerging. The most well-known is BRP Finland (Bombardier Recreational Products), which started as a subsidiary of the Canada-based Bombardier, and manufactures engines for various motorized outdoor recreational vehicles such as boats, all-terrain vehicles, and snowmobiles.

For a small northern community, Rovaniemi has done an impressive job of capitalizing on local and regional opportunities and producing a diverse, employment-rich economy. The region supports a blend of traditional and new-economy activity, which attracts students and workers and draws international attention to what used to be a remote, forestry-dependent economy. What stands apart for Rovaniemi is the degree to which the primary driving force comes from the local private sector without reliance on either heavy government subsidies or resource-based investments.

3.2 Inari

Even smaller communities in Northern Finland have made impressive innovations. The Sámi area of Finland is made up of the Lappi Reindeer-Herding District near Vuotso, and the municipalities of Inari, Enontekiö, and Utsjoki (the only Finnish municipality in which Sámi are the majority). However, over 50% of the 10,000 Finnish Sámi live outside the Sámi area of Finland (Sámi Museum and Nature Centre Siida, 2024).

The village of Inari has a population of approximately 600; the village is in a district of the same name, which has a population of 7,000 and just under one-third of this population are Sámi. Located in the village of Inari is the Sámi Education Institute (SAKK), *Sámi oahpahusguovddáš*, which started as a home-schooling institution and, in the 1970s, transformed into a Sámi folk school. Today SAKK is an upper-secondary school that also offers vocational training for adults. Its purpose is to sustain and support the development of Sámi languages and cultures, and promote nature-based occupations (e.g., reindeer husbandry and wilderness tour guiding) and employment. There are courses and programs offered in person and by distance. All programs are free and also open to non-Sámi students. Approximately 100 students study full-time and in person, and 1,000 students are enrolled in online courses. About one-fifth of the students come to SAKK upon completion of Grade 9; the other 80% enrol as adults (S. King, personal communication, May 25, 2024; Sámi Education Institute, n.d.).

The Institute offers intensive Sámi languages and culture immersion programs in each of the three Sámi languages: Skolt, Inari, and Northern Sámi. This program is taught in person and students live on-site in dormitories. Sámi languages and culture immersion has attracted a great deal of interest and the program has a lengthy waiting list, making it one of the more successful Indigenous language programs in the Circumpolar World (S. King, personal communication, May 25, 2024; Sámi Education Institute, n.d.).

As mentioned, SAKK offers certifications in nature-based occupations. Reindeer husbandry now requires certification, which is offered at the Institute. The professional reindeer husbandry qualification combines vocational qualification training with practical training. In the "Reindeer Husbandry Entrepreneurship" program, students learn how to care year-round for their reindeer herd and about the licensing, legislation, and compensation systems

involved in being the sole proprietor of a reindeer herding business. A "Specialized Upper-Level Vocational Qualification in Reindeer Husbandry" builds on what was learned in the entrepreneurship program and covers the changes and challenges facing the reindeer herding industry. The program also gives students an opportunity to meet and exchange ideas with reindeer herders from other parts of the Nordic North. In the "Vocational Qualifications in the Arts and Crafts Industry: Sámi Handicrafts" program, students learn about manufacturing traditional Sámi soft handicrafts using fabric, leather, and fur, or hard handicrafts using gemstones, bone, wood, and gemstones. More advanced programs in Sámi handicrafts are also available (S. King, personal communication, May 25, 2024; Sámi Education Institute, n.d.).

Students can also earn qualifications in fields as diverse as restaurant catering, media education, business administration, practical nursing, and tourism. A priority in all these programs is training people to work in the North. The Sámi Education Institute is important for developing and promoting Sámi languages, cultures, and nature-based employment, and ensuring these continue to flourish. The Institute brings the additional benefit of economic development through employment at the Institute to teach students in person and online. The annual influx of students who move to Inari to study and live, thereby supporting other businesses in the area, also has a significant economic impact. SAKK is actively engaged in national and international projects with the University of Lapland and the University of Oulu and with Indigenous people from across the Arctic (S. King, personal communication, May 25, 2024; Sámi Education Institute n.d.).

Inari is a vibrant and diverse small town, home to the Sámi Parliament of Finland and the impressive Sámi Cultural Centre Sajos and the Sámi Museum Nature Centre Siida, themselves important tourist attractions. The community has capitalized on Sámi resilience and determination to become a centre for Indigenous revitalization. With culture, education, and traditional industries as a centrepiece, Inari is more innovative than most circumpolar communities of comparable size.

3.3 ProAgria and Bioeconomy Initiatives

Inari is far from the only example in Northern Finland of a commitment to the revitalization and persistence of rural regions. ProAgria is a Finnish rural advisory organization with expertise in agriculture and business. Privately owned by farmers (although 10% of the organization's budget comes from the government), ProAgria offers farmers access to specialists and a variety of services to improve the profitability and productivity of their businesses. These services include business and financial management, livestock and plant productivity, rural entrepreneurship, bioeconomy, water systems, and climate solutions. Close to 85% of Finland's farmers use ProAgria services. One of ProAgria's eight regional centres is in Oulu, which looks after northern Finland. There are eighty staff in northern Finland out of a national total of 650 (V. Nuolioja, personal communication, May 28, 2004).

ProAgria receives funding from the European Union for a variety of rural economic development projects. One of these in Northern Finland was the European Union funded COOPID project—COOPeration of bioeconomy clusters for bio-based knowledge transfer via Innovative Dissemination techniques in the primary production sector—which ran from January 2021 to June 2023 and brought together primary producers from ten European countries to discuss bioeconomy business models. The Finnish partners were ProAgria Oulu and the Oulu Women's Advisory Organization (ProAgria, n.d.). The objective was to foster innovative biobased business models in the primary production sector. The participating countries chose a regional bioeconomy cluster and a successful bio-based business model. Finland chose Valio, a cooperative that collects milk from 4,300 dairy farmers and aims to do so in a completely carbon neutral way by 2035, as its success story (V. Nuolioja, personal communication, May 28, 2004).

Before COOPID, ProAgria implemented the Oulu Region Bioeconomy Leader Tour (2016–2019). Connected to this bioeconomy tour, the Oulu office hosted over 100 events. These were promoted to everyone in the region interested in bioeconomy, to discuss the opportunities for new bio-based businesses. Over 2,000 people participated. Numerous companies received business advice. As a result of this project, fifty-five small rural bioeconomy businesses were started, including two new biorefineries for biogas and bio-based products (V. Nuolioja, interview, May 28, 2004). Intense localization remains the focal point of the initiative:

> The whole project was built to promote the sustainable use of local resources. Promoting local products, made with local raw materials and processed using local renewable energy and local collaboration models were the key building blocks of the project's approach. (European Network for Rural Development, n.d.)

The success of the Oulu Region Bioeconomy Leader Tour brought international attention to the region and led to the region's participation in the COOPID project. This kind of cooperative initiative, connected to national and international educators and business developers, is another indication of the unique forces and concerted regional and national effort that sustains northern Finland's innovation economy.

3.4 Oulu

The best-known element in northern Finland's economic renaissance is the city of Oulu. Located 100 kilometres south of the Arctic Circle, Oulu is the third largest of the most northern cities in the world, outside of Russia, with a population over 100,000. (Unless otherwise noted, this section is drawn from an interview with, and materials supplied from, Juha Ala-Mursula, Executive Director of Business Oulu, May 29, 2024.) In 2024, Oulu was home to 215,000 people and it is growing by 3,000 inhabitants annually, making it Finland's fastest growing region. It is the biggest city in the Nordic North and often markets itself as the "capital of northern Scandinavia" (a status that Tromsø, Norway, also claims). In the centuries after its founding in 1605, the city was known for its production of tar, which was very important in the shipbuilding industry. Once the need for tar declined, the city rebuilt itself with a focus on technology and innovation, developing industries such as pharmaceuticals, chemicals, steel, wood processing, and paper.

In 1958, the University of Oulu was founded. Oulu is an excellent example of university-driven economic development.[4] Like Luleå in Sweden and Tromsø in Norway, the university influenced regional development and underpinned a strong commitment to developing an innovation system (Hintsala et al., 2017, p. 7). The University of Oulu gradually became a leader in information technology and computer sciences. Oulu-based tech companies emerged, many with an international reach. Between 2010 and 2016, increased competition and changes in the market caused by the rapid decline of communications pioneer Nokia saw the region lose thousands of jobs.[5] In their article on *Arctic Innovation Hubs*, three Finnish researchers discuss how, early on, it was clear that:

> rearrangement of the local economy was going to be led by emerging technology start-ups. To support this development, both universities (University of Oulu and the Oulu University of Applied Sciences), and the business development organization of the city of Oulu (BusinessOulu) joined forces … Researchers, teachers, and business advisers worked together with companies to build business models and commercialization plans for new technological innovations. These co-creation activities were aimed at increasing the number of knowledge intensive companies and also accelerating the growth of the start-ups. (Hintsala et al., 2017, p. 9)

As a result, the city's ICT ecosystem transformed itself and thousands of new jobs were created. These jobs were in existing local companies, Oulu-based new and rapidly growing companies (many started by former Nokia employees), and in outside firms (both Finnish and global) that established research and development units in Oulu to tap into the local talent. Oulu has remained an important research and development site for Nokia. Nokia Bell Labs and Mobile Networks R&D are located within the Oulu factory. The research into radio research, development, and manufacturing that takes place in Oulu has earned the city the appellation "home of radio." Nokia built a new company campus in Oulu, slated to open in 2025.

Oulu is home to high-technology companies that directly employ approximately 20,000 people (in 2024). There are hundreds of companies in ICT and nanotechnology, wellness, and life sciences, and over 1,500 firms in green and smart industries. Oulu now spends more per capita on research and development (5.3% of its GDP, less than 10% of which is public funding) than any other city in Finland. (And Finland itself spends about 3% of its GDP on research and development, making it one of the largest per capita R&D spenders.) Together, the University of Oulu and the Oulu University of Applied Sciences have 25,000 students from all over Finland and around the world, providing an excellent economic boost to the regional economy and a steady stream of skilled workers for local firms.

BusinessOulu is tasked with making Oulu a strong and vibrant city by attracting business, students, and immigrants. Owned by the city, BusinessOulu offers unemployment services and helps companies from start-up to internationalization, including missions to overseas markets. It offers business coaching and funding services for both companies and investors (€60 million is dispersed annually; $94 million). There are three start-up funds run by a private investor company. Polar Bear Pitching is one of Business Oulu's many creative initiatives. At this annual winter event, company representatives make their pitch for investment while standing outside in a hole in the ice. This encourages speedy and concise presentations!

BusinessOulu serves 2,400 companies and sets some significant annual targets, including a net increase of 2,000 new jobs, and the attraction of €300 million ($468 million) worth of private investments excluding housing, a €150 million ($234 million) increase in exports, and €50 million ($78 million) in equity investment to start-up companies. Oulu has a strong industrial base in sectors including chemicals, paper, steel, forestry, and energy. Even in these more traditional sectors, according to BusinessOulu, this is a leading region in the world at utilizing ICT and digitalization to create a resource-efficient circular economy.

As mentioned, the city also has several thousand high-technology companies. These companies (and many start-ups) receive support through Oulu Innovation Alliance, a consortium of Oulu companies and organizations that work in research, development, and innovation, and partner to help each other and improve the innovation ecosystem. Oulu also boasts numerous testing labs like the PrintoCent innovation centre (printed intelligence and optical measurement innovation),

OuluHealth (hospital, health, and well-being product commercialization test bed), 6G Test Centre (5G and 6G wireless communications research and testing), Fab Lab Oulu (digital manufacturing workshop), and Hilla Runway marketing (brings innovations to market within a year). Tekes, the Finnish Funding Agency for Technology and Innovation, first supported a research and development project in printed intelligence in the late 1990s. This was followed by the first Printo project, which launched in 2002; by 2015, Oulu had an ecosystem of forty companies in the printed intelligence field. Oulu is a leader in 5G wireless technologies and is home for hundreds of companies making wireless core products. The 6G Test Centre offers leading 5G and 6G testing environments for dual use (defence and non-military) advanced wireless communications.

Oulu is not resting on its laurels but is continuing to expand and innovate into other sectors. For example, the Port of Oulu is being expanded, and investors are sought for the new Oulu Port Green Transition Industrial Area, which will focus on sustainable industries such as clean energy. Gasgrid Finland and Nordion Energi have plans to build cross-border hydrogen pipelines in the Bothnian Bay region (the Nordic Hydrogen Route), opening the hydrogen market. This should help attract hydrogen-related investments into this new development. The nearby Nuottasaari industrial park hosts Stora Enso's factories, which produce biogenic C02, and the chemicals company Nouryon among other industrial companies.

Oulu has made a determined effort to build a livable city with opportunities for sports and the arts. Oulu has been named a European Capital of Culture for 2026.[6] It is the most northerly city with a full-sized symphony orchestra and supports a film industry, sports facilities, and arts and theatres. In 1996, Oulu launched the Air Guitar World Championships, which now take place annually and attract competitors from across the globe.

More than anything, Oulu demonstrates that a northern or circumpolar city can compete at the highest economic and commercial level. The city has not allowed its northern location and distance from the southern capital to be an excuse for economic marginalization and decline. Where other northern centres rely on the military (Anchorage and Fairbanks), government (Whitehorse, Yellowknife, Iqaluit, and Nuuk), or national universities (Tromsø and Luleå) as an economic foundation, Oulu's success is founded on private sector investment, entrepreneurship, and an impressive academic–business alliance.

4. Lessons from Northern Finland and its Nordic Neighbours

Interesting economic development lessons and comparisons can be drawn from this look at Northern Finland and previous research into northern Sweden. First, the Nordic North demonstrates that northern regions need not be limited to economies based on government spending and subsidies, and prolonged resource dependency. Finnish Lapland has a GDP growing faster than the rest of the country. In contrast, areas like Greenland, much of northern Canada (outside the territorial capitals), and non-metropolitan Alaska have experienced stagnation, if not economic decline, and are struggling to find a place in the twenty-first century economy.

A tentative, but potentially important, conclusion arises from this work: being northern does not automatically mean economic marginality, resource dependency, and comparative poverty. This commentary, earlier work on northern Sweden (Coates & Holroyd, 2021), and a great deal of comparative work on the Circumpolar World (Larsen & Fondahl, 2015), argue for a more comprehensive understanding of northern economic development. Much of the scholarship has, for years, focused on a deficit model, implying (save for comparatively short-term major resource developments) that circumpolar regions cannot experience levels of sustained economic prosperity comparable to that often experienced in southern and metropolitan regions.

The Circumpolar World has economic options. As seen above, Northern Finland embraces winter and its northern location, rather than using these as excuses for a failure to be economically competitive. Large signs from the University of Oulu greet visitors arriving at the Oulu airport, saying "Welcome to the new latitude" and "Science with #arcticattitude" and "People with #arcticattitude." Oulu hosts its Polar Bear Pitch initiative, Rovaniemi bills itself as the "official hometown of Santa Claus," and the Sámi Education Institute promotes nature-based occupations. Many businesses focus on winter tourism, cold and winter technologies, or Arctic-based design. Currently, Lapland is capitalizing on intense international interest in northern lights and Santa Claus. Northern Sweden likewise welcomes winter. It is home to the world's first ice hotel, the Aurora Sky Station (a chairlift takes visitors to watch the northern lights from the top of a mountain), winter car testing, server farms and data centres cooled by winter air, and the Polar Explorer Icebreaker cruise and swim in the icy Arctic Ocean (Coates and Holroyd, 2021).

Finland is also making efforts to broaden the tourism sector to include cool summer tourism designed, as southern areas heat up, to attract people fleeing major cities in summertime for a Subarctic respite. As mentioned, *Visit Rovaniemi* is now devoting three-quarters of its marketing budget for the summer season.

Tourism in northern locations with cooler summer temperatures has enormous economic potential. The rest of the Circumpolar World should pay attention to Finland's efforts.

The Far North, in Finland as around the Circumpolar World, is entering uncertain times (Corell, 2006; Hanna et al., 2021). Northern Finland illustrates that with the right leadership and vision, post-secondary institutions in northern locations can make an enormous difference to long-term regional development. The wide-ranging impacts of the University of Oulu, primarily in attracting talent and applied research and business development, illustrate the potential benefits arising from national investment in northern post-secondary education—and, equally, of a university that refused to be confined by its location and geography but instead remained committed to fulfilling its international ambitions. The University of Oulu's leadership in information technology and computer science contributed to the development of the city's high-technology sector.

The Nordic North is not immune from global and regional economic forces. Transitions in the forestry sector, particularly in pulp and paper, had marked effects on several communities. The region, though, has taken these changes and adjusted to focus on a sustainable use of resources and "closed loop" systems so that biological resources are used, and products created, in a sustainable circular system. This focus can be seen in both forestry and agriculture. In addition, the urban areas in northern Finland have successfully invested in "new" economy sectors. Oulu is building an economy around a combination of information and communications technology, nanotechnology, the life and health sciences, and other emerging high-tech fields.

In the fast-changing economic realities of the twenty-first century, it has become increasingly evident that the reliance on traditional resource extraction will not be sufficient to sustain, let alone enhance, the prosperity of northern regions. Northern economic revitalization and long-term success require a combination of entrepreneurship, a supportive and experimental business culture, sound government policy, appropriate and competitive infrastructure (which increasingly prioritizes energy and internet connectivity), access to capital, and a willingness to look to the future for opportunities and commercial ideas. Much of the Circumpolar World lacks many of these characteristics, and the Nordic North stands out well ahead of most other areas of the region.

Northern Finland's record of innovation and collective action—marked by an impressive revitalization and stabilization of Sámi culture and traditional industries, globally-competitive commercialization of science and technology, innovative approaches to traditional northern resource sectors, and an expanding commitment to tourism's "experience economy"—holds a great deal of inspiration and solid lessons for northern regions seeking to convert Subarctic disadvantages into advantages that will allow them to push their way into national and international markets.

The key insights from Northern Finland are quite straightforward—although not all are readily transferable to the rest of the Circumpolar North:

- Northern regions, to be truly competitive, must benefit from substantial and sustained investment from southern governments, particularly in regional infrastructure (building to national norms) and the development of national-class institutions, like the universities in Oulu and Rovaniemi.
- Subarctic areas should build on the strengths and realities of the North, including the dominance of winter, darkness, and remoteness, rather than ignoring the significance of climate and geography.
- Economic realism requires careful attention to potential major threats. In Northern Finland, Russian militarization is producing short-term economic opportunity while raising the spectre of severe downstream dangers. The larger, more systemic and unpredictable risks of climate change loom over the entire Circumpolar World, with unknown implications for the future of the northern economy.
- Regional aspirations must match the potential of the region. At times, northern promoters exaggerate the wealth and opportunity in the area and establish unrealistic expectations. At other times, they underestimate the possibilities and sell themselves short economically. Northern pride and potential are the key foundations for long-term economic stability and growth.
- Indigenous Peoples and communities must be included in plans for regional growth and development. The Sámi in Northern Finland, while small in number and living largely in small towns and northern rural areas, have engaged with planning and business development and have been supported by the general prosperity of the region. Northern Finland's emphasis on Sámi cultural revitalization and Sámi-based tourism has been particularly important.
- Northern Finland demonstrates the importance of engaging with the potential and the disruptions of the new economy. Many northern areas assume that high technology is the preserve of southern areas and not readily available for northern communities. Rapid technological change is transforming the global economy. The North must be part of the global new economy.

- Circumpolar regions should follow Northern Finland's recognition of the long-term global appeal of the Far North, which is a major economic resource attracting tourists, investment, and international attention—all representing substantial potential for long-term growth.
- While the establishment of national-quality infrastructure brings major quality of life improvements to rural areas and small towns, the primary economic opportunities lie in medium-sized and larger cities. Major investments in Oulu and Rovaniemi had ripple effects on the rest of the region, which improved commercial and professional services, motivated northern people to stay in the North, and generally raised their aspirations.

Finland's economic achievements reflect how politicians, entrepreneurs, investors, institutions, and communities have been committed and have found innovative approaches to the challenges of building and transforming economies in the modern North. While regional successes reveal much about Finnish approaches, they hold considerable value for researchers and policy-makers in other regions of the Circumpolar World whose leaders, like those in Northern Finland, seek to overcome the challenges presented by their small populations, limited access to capital, distances from capital cities and metropolitan centres, and their long histories of resource dependency. More than most other areas of the Circumpolar World, Northern Finland has elevated itself above its geographical limitations, embraced winter, and sought connections to the broader global economy. More than most of the Circumpolar World, Northern Finland has converted liabilities into advantages and refused to accept the defeatist narrative that has long constrained northern economic development.

Notes

1. The best source to explore these economic patterns is Larsen & Fondahl, 2015; see also Larsen et al., 2010 and Smith, 2011.
2. During a visit to northern Finland in May 2024, interviews were conducted with the following individuals: Sanna Kärkkäinen, CEO, Visit Rovaniemi, May 22, 2024; Tuula Rintala-Gardin, Director, International Relations, Business Rovaniemi, May 23, 2024; Suvi King, Sámi Education Institute, May 25, 2024; Vesa Nuolioja, CEO, Proagria, and numerous Proagria staff, May 28, 2024; Juha Ala-Mursula, Executive Director, Business Oulu, May 29, 2024. Individuals were interviewed in their professional capacities and understood that their information would be used in the preparation of this study. We agreed, further, that no one would be quoted directly without permission.
3. For more information on the history of Northern Finland's demographic transitions and economic development see Ingold, 1973; Lahteenmake, 2006; Sotarauta et al., 2023; Arter, 2001; Ala-Karvia, 2018; Heleniak & Glassen, 2020; Malmberg, 2010.
4. According to Finland's Reindeer Management Act, reindeer husbandry "is based on the free access of semi-domesticated reindeer, *Rangifer tarandus*, to pastures irrespective of land ownership," meaning whether the land is privately or publicly owned (Minna et al., 2020).
5. For background on the development and challenges of tourism in Northern Finland, see: Jarkko, 2003; Tuulentie & Mettaiimem, 2007; Grenier, 2007; Halpern, 2008; Popescu & Corbos, 2010; Tervo-Kankare et al., 2013; Mäkitie et al., 2013; Rusko et al., 2013, Rahman, 2014; Tommasini & Zhou, 2016; Tervo-Kankare & Saarinen, 2020; Bohn & Hall, 2022.
6. For discussions on the University of Oulu's importance to regional development, see Lajunen et al., 1999; Niinikoski et al., 2017; Pinheiro, 2014.
7. For information about Oulu's economic transformation, see Donnelly & Hyry, 2004; Salo, 2014; Hyry, 2004; Simonen et al., 2016.

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New Perspectives on Northern Economies

Reflection

Building a Policy Muscle: Learning from Northern Youth about Arctic Tourism

Steven Showalter
The Gordon Foundation

Abstract: This article reflects on policy recommendations from the third Arctic Policy Hackathon, the importance of cross-Arctic collaboration, and why young leaders from the Canadian North should engage with policy development. Policy Hackathons see young leaders from diverse backgrounds collaborate on a significant policy issue, in this case how to keep the next generation of leaders in the Arctic. It is a model of learning about policy that prioritizes the voices and lived experience of the next generation of leaders, brings their ideas to the forefront, and gives them the skills to turn ideas into action. The third Arctic Policy Hackathon, organized by the Gordon Foundation in partnership with the Arctic Mayors' Forum and with support from Global Affairs Canada, saw emerging leaders from the Canadian North join their counterparts from across the Arctic in Reykjavik, Iceland. Participants also engaged with policy leaders and shared their recommendations at the Arctic Circle Assembly, taking valuable lessons back to their home communities.

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The Northern Review
Exploring human experience in the North

Nouvelles perspectives sur les économies du Nord

Commentaire

Renforcer les capacités d'intervention politique : Apprendre de la jeunesse nordique à propos du tourisme arctique

Steven Showalter
The Gordon Foundation

Résumé: Cet article présente les recommandations politiques issues du troisième Hackathon politique pour l'Arctique, souligne l'importance de la collaboration circumpolaire, et explique pourquoi les jeunes leaders du Nord canadien devraient s'impliquer dans l'élaboration des politiques. Les Hackathons politiques réunissent de jeunes leaders de divers horizons pour collaborer sur une question politique majeure, ici comment assurer la relève des leaders en Arctique. Ce modèle d'apprentissage politique met en avant les voix et l'expérience vécue de la nouvelle génération, valorise leurs idées et leur donne les outils pour les transformer en actions concrètes. Le troisième Hackathon politique pour l'Arctique, organisé par la Gordon Foundation en partenariat avec l'Arctic Mayors' Forum et avec le soutien d'Affaires mondiales Canada, a rassemblé des leaders émergents du Nord canadien avec leurs homologues de tout l'Arctique à Reykjavik, en Islande. Les participants ont aussi échangé avec des décideurs politiques et partagé leurs recommandations lors de l'Assemblée du Cercle Arctique, ramenant des leçons précieuses dans leurs communautés.

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Effective public policy prioritizes the experiences of the communities it affects. However, across the Arctic, policy is often shaped by external forces rather than the people directly impacted.

The Gordon Foundation's Policy Hackathons[1] aim to help shift this imbalance in policy-making. Hackathons bring together passionate young leaders from diverse backgrounds to collaborate on a significant policy issue. Participants discuss, question, and brainstorm, then develop innovative policy recommendations drawn from their lived experience. This model of learning about policy prioritizes the voices of the next generation of leaders, brings their ideas to the forefront, and gives them the skills to turn ideas into action.

Policy Hackathons were first convened by the Foundation in the Canadian North. The first Northern Policy Hackathon took place in Nain, Nunatsiavut, in 2017, when participants developed policy recommendations about country/traditional food.[2] The next year, young leaders gathered in Iqaluit, Nunavut, to focus on policy for small and medium sized enterprises.[3] In 2019, a third group came together in Inuvik, Northwest Territories, to address housing policy.[4]

The success of the Hackathon program led to an international expansion. In 2022, the first Arctic Policy Hackathon took place in Reykjavik, Iceland, with emerging leaders from across the Arctic collaborating on policy recommendations addressing food sovereignty in the Arctic.[5] The following year, a new group of participants examined how to keep the next generation of leaders in the Arctic.[6]

The Third Arctic Policy Hackathon, 2024

Following the success of the first two international Hackathons, The Gordon Foundation, with support from Global Affairs Canada[7] and in partnership with the Arctic Mayors' Forum,[8] hosted the third Arctic Policy Hackathon in Reykjavík, Iceland, in October 2024.[9] Sixteen emerging leaders from Arctic Indigenous and local communities in Sweden, Finland, Norway, Sápmi, Greenland, Canada, and Alaska came together for two intense days of policy development.

From the moment the young leaders arrived in Iceland, it was clear they were there to make a difference; they were committed and excited to begin working together. Much like the fresh volcanic steam rising from the land surrounding Reykjavik, the curiosity and eagerness of the participants were plain to see.

Canadian participants included Andrea Andersen (Iqaluit), Melynda Ehaloak (Cambridge Bay), Samantha Saksagiak (Nain), and Jake Olson (Yellowknife), who each brought their unique perspectives and experiences to the forefront. Representing the Canadian North, they shared the concerns, challenges, and opportunities facing their communities.

For this Hackathon, the policy topic was *Sharing the Arctic: A Sustainable Future for Arctic Tourism.* Currently, the positive economic impacts of Arctic tourism do not always stay in the Arctic to benefit the communities and people living there, which highlights the need to strengthen communities socially, culturally, and economically. Relationships should be mutually beneficial, ensuring that local communities—not just tourists and companies—retain the rewards.

Canadian perspectives relating to tourism and sustainability differed between each community represented at the Hackathon. In some cases, tourism is perhaps growing too rapidly, whereas in other areas, an increase would boost economic growth. While some communities have infrastructure in place, others are concerned about developing sustainable infrastructure to support growth in the industry.

Together, emerging leaders discussed the challenges and opportunities related to sustainable Arctic tourism, including prioritizing local needs and supporting infrastructure, health services, and sustainable access to natural resources. Throughout the Hackathon, participants were focused on policy that empowers local communities in decision making and increases local employment opportunities.

Through these discussions, four key themes emerged: Indigenous Peoples, Environmental Stewardship, Community, and Infrastructure. Together, emerging leaders discussed the challenges and opportunities related to sustainable Arctic tourism, including prioritizing local needs and supporting physical infrastructure, transportation costs, market prices, health services, emergency planning, and sustainable access to natural resources. Sharing their thoughts, opinions, and stories helped each participant determine which theme they would focus on in a small group. Each thematic group then agreed on a final set of policy recommendations, ranging from mandating the prioritization of Arctic Indigenous guides in hiring processes to pan-Arctic environmental standards.

By the final hours of the Hackathon, the participants had developed practical solutions to ensure tourism benefits the Arctic and its inhabitants. These recommendations were targeted directly at policy- and decision-makers, as well as tourism organizations and operators, offering many opportunities for collaboration and improvement. As the participants expressed in the final document's opening statement: "The paradox of Arctic tourism is clear: while visitors want to experience this environment before it is further altered, tourism itself accelerates that transformation."[10]

A key principle throughout the Hackathon was, "Nothing about us, without us"—emphasizing that Arctic youth must guide tourism practices, and Indigenous voices and local communities must be accurately represented in policy-making:

> Regulations must be informed locally, rather than imposed from afar, fostering genuine representation of the diverse lifestyles within these communities. Recognizing and respecting our unique way of life across the Arctic is essential to fostering a more equitable and sustainable approach to tourism.[11]

Immediately following the Hackathon, several participants attended the annual Arctic Circle Assembly in Reykjavik[12] and presented their recommendations. Melynda Ehaloak and Timo Tuuha of Salla, Lapland, Finland, presented the group's work during a panel moderated by Selma Ford, Program Director, The Gordon Foundation, from Nain, Nunatsiavut, alongside panellists Frigg Jørgensen, Executive Director, Association of Arctic Expedition Cruise Operators (AECO), Norway; Ásthildur Sturludóttir, Mayor, Akureyri, Iceland; and Teah Dickson, Tourism Professional and Resource Management Specialist from Yukon, Canada. The session was overflowing with Arctic leaders, media, and other stakeholders. The freshly printed Hackathon policy recommendations were quickly dispersed and not a single copy was left behind.

During their time in Iceland, participants also learned about policy development from political leaders. At the Hackathon, they met with Jenny Hill, the Canadian Ambassador to Iceland, who helped lay out the context for their policy discussions and spoke with the participants: "I could have sat there all morning listening to these leaders talk about best approaches for developing sustainable, positive and locally beneficial tourism in the Arctic."[13]

Meanwhile, at the Arctic Circle Assembly, participants spoke with Robert Sinclair, Senior Arctic Official and Director General, Arctic, Eurasian, and European Affairs for the Government of Canada; Nunavut Premier PJ Akeeagok; and the European Union Special Envoy for Arctic Matters, Claude Véron-Réville. These discussions left the participants prepared to share their policy recommendations more broadly.

Building Policy Muscle

Participants left the 2024 Arctic Policy Hackathon and Arctic Circle Assembly feeling inspired and determined to continue the work they started in Reykjavik. Each of them was proud of what they had accomplished in a short amount of time and were excited to share their recommendations.

The young leaders had exercised and built their policy muscle—learning how to be part of the policy process, seeing that their perspective is valuable, and knowing that change can happen. In the weeks and months following the Hackathon, participants shared the recommendations and their message with their communities, peers, and decision makers.

The participants, including those from the Canadian North, clearly understood the needs of their communities, and it was inspiring to hear them elevate these perspectives. They spoke passionately and constructively with one another, demonstrating their understanding of one another's situations and the importance of striving for a balanced approach.

Through each iteration of the Gordon Foundation's Policy Hackathon, we are inspired and impressed by the knowledge sharing, commitment, collaboration, and passion that new participants bring to the table. It is their hard work, determination, and desire to engage that allows this important work to continue with such success. As participants come together from across the Arctic, they bring important issues in their home communities to light on an international stage.

The relationships the participants made were foundational in creating and developing a policy document that reflects the cooperation needed among Arctic states. The Hackathon served as an exciting forum for these emerging leaders to connect and exchange ideas with one another—a reflection shared by several participants. The enthusiasm, dedication, and commitment expressed by the entire group were astounding. The future of the Arctic is in very capable hands.

Notes

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Cover Art

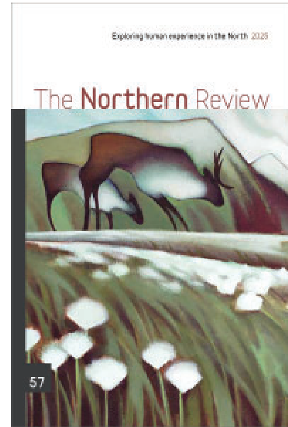
Arctic Cotton Grass

Nathalie Parenteau
Whitehorse

Artist Statement

This artwork was inspired by a week-long visit at the Dechenla Lodge located along the North Canol Road in the Northwest Territories near the Yukon border. This area is rich with wildlife and is part of the traditional land of the Kaska and Sahtu Nations.

nathalieparenteau.com



Detail from Arctic Cotton Grass
Acrylic on canvas, 20" x 16", 2013

Biography

When asked how her images come to life, Yukon artist Nathalie Parenteau promptly replies: "They takes shape on their own. I just scratch the canvas with the paint brush and there they are." Or so it seems.

Born in Montréal, Nathalie was raised in a family that cherished the arts and her youth was spent surrounded by the colourful Québec culture, easing her early on onto an artistic path. She came to the Yukon after high school, volunteering with a youth group, and was immediately under the spell of the North. There, her love for nature and solitude found their perfect vessel. The years spent in the wilds of this mythical territory in tepees, wall tents, and cabins provided the perfect breeding ground for her calling. The seasons' play of light on mountains, the melting of ice on lakes in the spring, the coming and going of forest creatures, all enchanted her and still do.

After months circling the globe and then earning a biology degree at the University of Western Ontario in her twenties, she set up her studio and got to work full time, letting her imagination manifest itself in bright colours and harmonious lines. Although her paintings seem to have their own volition, Nathalie admits to spending long hours with each piece to reach the final result. Her art aims at pulling people into a new world and to explore their subconscious. It touches all genders and has a universal appeal. She paints in acrylic and oils and her style is easily recognizable. Her work is sold exensively across Canada and the United States and is collected by people from all over the world.

Nathalie lives with mountain man Peter in Whitehorse, Yukon, at the edge of the forest. They have an old dawg they fuss over and a library that contains too many unread books.