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Centre for the North

Building a Resilient and Prosperous North.

Centre for the North Five-Year Compendium Report



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Building a Resilient and Prosperous North: Centre for the North Five-Year Compendium Report

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Preface

The last five years have been a time of great change for Northern policy. Against this rapidly changing backdrop, the Centre for the North has sought to raise awareness of the North's contribution to our national economy and its geo-political significance to Canada as a whole. This policy review situates our position on Northern issues and opportunities, and consolidates the main findings of our research program.

The salient question is not if the North will grow, but how that growth will happen. In this review we recommend three foundational policy starting points and priorities to help steer the conversation on how to plan for growth in a way that is sustainable and beneficial to the peoples of the North – today and in the future.

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Through our members' strategic guidance and active involvement, we developed a vision for the Centre as one that examines issues from a Northern perspective, seeks to maximize Northern engagement, and prioritizes Northern interests. Without diminishing the challenges facing Northerners, our members furthermore steered the Centre in a direction of identifying good practices and innovative approaches as a way to share and scale often ground-breaking initiatives that would not otherwise have reached a wider audience.

We are immensely grateful to our members for their thoughtful leadership and positive influence on our research and outreach over these past five years. This research compendium report is a reflection of their efforts and commitment to the Centre for the North.

Members 2009–14

The work of the Centre for the North is possible due to the active support and investments from its many members:

Aboriginal Affairs and Northern Development Canada
Agnico-Eagle Mines Limited
Arctic Co-operatives Limited
Assembly of First Nations
Bell Canada
BHP Billiton Canada
BMO Financial Group
Canada Mortgage and Housing Corporation
Canadian Institutes of Health Research
Canadian Northern Economic Development Agency
Cisco Systems Canada
De Beers Canada
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Enbridge
First Air
GE Canada
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Government of British Columbia: Office of the Premier
Government of Manitoba: Manitoba Aboriginal and Northern Affairs
Government of Newfoundland and Labrador: Labrador & Aboriginal Affairs

Government of Nunavut: Nunavut Department of Economic Development and Transportation

Government of Ontario:

Ontario Ministry of Municipal Affairs and Housing

Ontario Ministry of Northern Development and Mines

Gouvernement du Québec: Société du Plan Nord

Government of Saskatchewan: Saskatchewan Ministry of the Economy

Government of the Northwest Territories: Aboriginal Affairs and Intergovernmental Relations

Government of Yukon: Yukon Economic Development

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EXECUTIVE SUMMARY

Building a Resilient and Prosperous North: Centre for the North Five-Year Compendium Report

At a Glance

- The natural resource endowments of Canada's North guarantee it will grow; the question is whether growth will serve only short-term economic aims or advance larger and longer-term aspects of Northern prosperity.
- This report outlines policy starting points and priorities to help all partners in Northern development ensure that growth will build sustainable prosperity both for Canada and for the present and future inhabitants of the North.

The Conference Board of Canada launched the Centre for the North in 2009 with a five-year mandate to develop independent applied research on issues affecting the Canadian North. Supported by some 50 members from industry, government, academia, and Aboriginal organizations, as well as a wide network of stakeholders, the Centre held two successful national conferences, forged new connections between Northerners and Southerners, and “through solid and thorough research, helped shift the debate from generalizations and misinformation to clearly defined and well-researched issues.”¹

The half decade following the Centre's launch has been a time of great change for Northern policy. Against this rapidly changing backdrop, the Centre for the North has sought to raise the profile of issues and challenges that the national and international media often overlook. This policy review situates our position on Northern issues and opportunities, and consolidates the main findings of our research program. It starts by addressing why the North matters to all Canadians and the impacts of a changing North on Canada today and in the future. It presents three of the most important starting points for Northern policy-making, and concludes with an analysis of three priority items for Northern and Southern partners to address in building a resilient and prosperous North.

1 Ken Coates, Professor and Canada Research Chair in Regional Innovation, University of Saskatchewan, quoted in The Conference Board of Canada, *Past, Present, and Future*, 10.

Starting Points for Northern Policy-Making

The North looms large in our national imagination—but not in the daily lives of most Canadians, the vast majority of whom live in Southern Canada. In the North, the tensions between resource development and community benefits are playing out on local, community, and personal levels. No discussion about the North should take place without placing the interests of Northerners and Aboriginal peoples at the forefront. Effective Northern policy-making must incorporate an awareness of three starting points:

1. **Northern complexity:** Across the North, realities vary widely in terms of demographics, urban versus rural and remote population distributions, governance structures, and other factors. At the same time, many common elements distinguish the North from Southern Canada.
2. **Dimensions of Northern security:** While Arctic sovereignty is important for Canada's economic and environmental well-being, the dimensions of security that matter most to Northerners concern the capacity of communities to meet residents' basic needs and cope with daily challenges.
3. **Northern community resilience:** In the face of great socio-economic and environmental change, Northern communities must be enabled to anticipate and adapt to adversity.

High-Priority Areas for Northern Development

Over the past five years, the Centre for the North has found three areas to be consistently recurring themes in policy discussions, and considers them top priority items to address in building a resilient and prosperous North.

Priority 1: Aboriginal Youth

The need to invest in the next generation is particularly acute in the Aboriginal populations of Canada's North. While the North will face acute workforce pressures as development proceeds, many Northern

Northern communities must be enabled to be effective partners in collaborative Northern governance with the private and public sectors.

Aboriginal people lack the education and training needed to meet the skill requirements of industrial positions. Many Northern Aboriginal youth face intense life stressors and severe health and wellness problems. Tackling these problems involves an enormously complex range of interdependent social, cultural, educational, infrastructure, and other challenges. Programs to develop early childhood interventions and family services and to cultivate protective factors will also be essential.

Priority 2: Upgrading Northern Infrastructure

Upgrading infrastructure of many kinds is imperative both for economic and human development in the North. Northern infrastructure includes roads, ports, telecommunications, electrical grids, and housing as well as educational, cultural, and sports facilities—many of which are aging, inadequate, or simply non-existent. Public and private decisions on infrastructure financing will be pivotal in shaping the North's future. The priority must be on identifying and financing infrastructure projects that are relevant and appropriate to Northern communities, and that deliver strong economic, social, and environmental returns on investment. Community participation in planning will be essential to realizing that goal.

Priority 3: Good Governance to Steer Growth

Public policy development in the North is challenged by the relatively small size of the Northern public service and the considerable and pressing demands on its time. It must adapt to the unique dimensions of the Northern context by being flexible, inclusive, and adaptive. As well, it must address significant human resources challenges and be able to draw on sufficient data and research capacities to support evidence-based policy-making. Northern communities must be enabled to be effective partners with the private and public sectors in collaborative Northern governance.

The salient question is not if the North will grow, but how that growth will happen. The starting points and priorities outlined in this report will help steer the conversation on how to plan for growth in a way that is sustainable and beneficial to the peoples of the North—today and in the future.

CHAPTER 1

Introduction—Research in a Time of Change

Chapter Summary

- The five years since the Centre for the North's founding have seen great changes in policy discussions and priorities concerning Canada's North. These changes include a greater focus on climate change and bold economic potentials in the Arctic; Northern environmental catastrophes and conflicts around the industrialization of Northern regions; new program and funding decisions by Canadian governments and new modes of Northern governance; and landmark legislative and judicial decisions.
- Amid this change, building up the resilience of Northern communities should be a Canadian priority, since it both addresses local-level needs and is vital to maintaining national goals of sovereignty, security, and economic prosperity.
- Upfront investments in critical infrastructure, wellness, education, and skills, as well as good governance, in Northern communities will have the greatest impact on enabling citizens to partake in Northern economic development opportunities.

The Conference Board of Canada launched the Centre for the North in 2009 with a five-year mandate to develop independent applied research on issues affecting the Canadian North. Supported by some 50 members from industry, government, academia, and Aboriginal organizations, as well as a wide network of stakeholders, the Centre held two successful national conferences, forged new connections between Northerners and Southerners, and “through solid and thorough research, helped shift the debate from generalizations and misinformation to clearly defined and well-researched issues.”¹

The half decade following the Centre's launch proved to be a time of great change for Northern policy. Climate change and the potential for bold and risky Arctic economic activities—such as mining, marine shipping, offshore oil and gas exploration, and undersea intercontinental fibre optic networks—fuelled the imaginations of national and international media. New research revealed risks bound up with a changing Northern Canadian climate and environment, highlighting issues such as food security, environmental stewardship, and climate adaptation. Northern environmental catastrophes made front-page news, including major wildfires in the Northwest Territories (2014), Northern British Columbia (2014), Northern Alberta (2011), and Northwestern Ontario (2011), as well as flooding in Northern Saskatchewan (2013) and Northeastern Ontario (2012–14). Meanwhile, debates intensified around the industrialization of Northern regions, with conflicts around Northern Alberta's oil sands, the role of comprehensive land use management

1 Ken Coates, Professor and Canada Research Chair in Regional Innovation, University of Saskatchewan, quoted in The Conference Board of Canada, *Past, Present, and Future*, 10.

The past five years have seen landmark legislative and judicial decisions.

frameworks (as in Yukon's Peel watershed), and the development of pipelines and mines on Aboriginal lands (notably the Northern Gateway pipeline in British Columbia and uranium mining in Northern Quebec).

In anticipation of increasing opportunities and threats, the federal government introduced a Northern Strategy in 2009 to address sovereignty, economic and social development, environmental protection, and governance. The strategy promised to develop deep-water Arctic port facilities, improve Canada's Arctic geographic information systems capabilities, and establish a High Arctic research station in Cambridge Bay, Nunavut. New federal funding also became available to develop regional and community infrastructure. However, existing federal commitments to Northern development have scaled back since 2009, leaving Northern regional governments to develop their internal capacities and seek private sector partners for capital projects and labour force development.

There have also been important changes in Northern governance during these years, both domestically and in the circumpolar context. In 2014, the Government of the Northwest Territories completed the final steps required for devolution. In 2013, Canada took over as chair of the Arctic Council and began to develop an Arctic Economic Council.

The past five years have also seen landmark legislative and judicial decisions. In 2012, the federal government streamlined national environmental regulations affecting Northern industrial development, and there were parallel policy developments at the regional level, including in Yukon and the Northwest Territories. In 2014, decisions of the Supreme Court of Canada clarified the Crown's duty to consult with Aboriginal peoples before initiating major projects on their lands, but raised questions about whether Aboriginal communities may have gained too much power to frustrate economic projects of national interest. The latter debate became more intensified in the aftermath of the Supreme Court's landmark decision granting Aboriginal title to the Tsilhqot'in Nation in British Columbia.

Against this rapidly changing backdrop, and with a broad mandate to conduct comprehensive research, the Centre for the North has sought to raise the profile of issues and challenges that the national and international media often overlook. As we noted in our 2010 foundational report on thriving Northern communities:

Climate change and its implications for Arctic sovereignty, as well as Northern security and economic development have placed the Canadian North at the forefront of the international and national policy agenda in recent years. These issues are attracting the lion's share of media attention and federal government resources. However, they often overshadow the broader issue at stake; the future of the North is largely dependent on the well-being of Northern residents and the strength of Northern communities.²

This need to think beyond the frontier mentality and focus on the well-being of Northern communities led the Centre for the North to drive a national conversation on such issues as education, housing, health, labour force capacity, and community resilience. The Centre also developed a strong portfolio of economic research covering mining and major projects, telecommunications, transportation infrastructure, and development in Arctic marine waters, as well as a biannual economic forecast for the territories.

In tackling Northern policy issues, our research advanced The Conference Board of Canada's activities and relationships around Aboriginal policy. The Centre for the North membership includes the Assembly of First Nations, Inuit Tapiriit Kanatami, and Métis National Council, as well as leading regional organizations. Several of our reports on Northern Aboriginal issues, including those on housing, health and wellness, education, and labour force capacity, touch upon the successes and concerns of Southern Aboriginal communities as well. We have been able to follow up successfully on several of those conversations through our Council on Corporate Aboriginal Relations.

2 Sisco and Stonebridge, *Toward Thriving Northern Communities*.

Building up
the resilience
of Northern
communities
should be a
Canadian priority.

The Centre has always maintained an action-oriented approach to research and outreach—one that embraces the North’s diversity, provides tools for better decision-making, and highlights innovative and successful ideas. Based on the aspirations of Northerners, the Centre has striven to document innovative approaches to persistent Northern problems. Among the foremost of these approaches is helping communities become more resilient and ready to benefit from major economic development opportunities. Examples of such innovation are cited in this policy review, and serve in themselves to illustrate the inherent resilience of Northerners.

After five years of research and meetings with Northerners from all walks of life, we maintain that building up the resilience of Northern communities should be a Canadian priority. Though impacts can be hard to quantify, we believe that upfront investments in critical infrastructure, wellness, education, and skills, as well as good governance in Northern communities, will have the greatest impact on enabling citizens to partake in Northern economic development opportunities. Focusing on Northern community resilience helps to address local-level goals and needs, and is also vital to maintaining Canada’s overall goals of sovereignty, security, and economic prosperity.

This policy review situates our position on Northern issues and opportunities, and consolidates the main findings of our research program. It starts by addressing why the North matters to all Canadians and the impacts of a changing North on Canada today and in the future. It then turns to three of the most important starting points for Northern policy-making: Northern complexity, different aspects of Northern security, and the imperative of Northern community resilience. The review concludes with an analysis of three priority items for Northern and Southern partners to address in building a resilient and prosperous North: investing in Aboriginal youth, upgrading Northern infrastructure, and building good governance.

CHAPTER 2

Our North

Chapter Summary

- The North matters to Northerners as an identity and as a homeland undergoing rapid economic, cultural, political, and environmental change. Tensions between resource development and community benefits are playing out on local, community, and personal levels.
- Changes in the North include growing youthful Aboriginal populations in some places and transient or rapidly aging populations in others; ecosystems increasingly vulnerable to the effects of climate change; economies heavily shaped by the natural resource and public service sectors; and inadequate infrastructure.
- Many Northern populations face acute challenges with respect to education, health, and housing.

The North has become a focal point for the development of our country’s economy, the evolution of our society, and the exercise of our sovereignty across its vast and multifarious terrain.

Since the Centre for the North was launched in 2009, much has changed across Northern Canada, yet many challenges remain. Northern communities share elements that distinguish them from their Southern counterparts. It can be argued that the North–South boundary is the most significant dividing line in the country. On many measures—unemployment rates, high school graduation rates, proportion of single-parent families, homes that are both overcrowded and in need of repair, and access to health and emergency services—the reality is much different on the Northern side of the line compared with the South.

The Centre for the North’s definition of the Canadian North comprises almost 85 per cent of Canada’s land mass, including the territories and Northern regions of seven provinces. (See Exhibit 1.) This area includes a 1,000-kilometre band of boreal forest extending southeast from Yukon and into Newfoundland and Labrador, as well as vast stretches of tundra stretching beyond the treeline to the Arctic Ocean.

How the North Matters to All Canadians

The North looms large in our national imagination—but not in the daily lives of most Canadians, the vast majority of whom live in Southern Canada. When the North does capture the attention of Canadians, it tends to be related to dramatic developments such as substandard housing or the discovery of the Franklin expedition. Yet many of Canada’s most pressing socio-economic, political, and geopolitical challenges are at their most intense in the North. These issues are not exclusively domestic, since other countries with circumpolar interests are watching and reacting to our actions with regard to the North.

Exhibit 1
Canada's North



The Centre's working definition of Canada's North includes the territories and the northern extents of seven provinces. The North/South boundary line was selected based on Statistics Canada's defined economic regions and census divisions. The resulting line corresponds closely to the definition of the North used by the Northern Development Ministers Forum.
Sources: The Conference Board of Canada; Statistics Canada; Northern Development Ministers Forum.

Over the past two decades, the North has been an important driver of growth in the Canadian economy, being home to many of the nation's new natural resource development projects. These developments, mostly in non-renewable resources such as oil and gas, metals, and minerals, have increased the wealth of Canadians nationwide. The slowdown in global commodity demand will do more than apply pressure on the national economic outlook; it will also challenge the sustainability of Canada's approach to developing these resources.

How the North Matters to Northerners

In the North, the tension between resource development and community benefits are playing out on local, community, and personal levels. For many Canadians who live there, the North is more than just a home—it is also a homeland and an identity. When the Centre for the North surveyed Northerners in 2011, 82 per cent of respondents said they felt strongly or fairly strongly that they are Canadian, while 78 per cent said they felt strongly or fairly strongly that they are Northerners. This dual identity surpassed that of local community, or province or territory. Most people living in the North consider themselves to be Northerners, including residents who have lived there for fewer than 10 years.¹

The North is also a historical and cultural homeland to much of Canada's Aboriginal population, encompassing First Nation, Métis, and Inuit communities. This homeland is changing rapidly in many dimensions—economic, cultural, political, and environmental. No discussion about the North can take place without placing the interests of Northerners and Aboriginal peoples at the forefront.

This chapter provides an overview of the changing North as it is today.

Demographics

With a population of 2.5 million, the North has less than 8 per cent of the 2011 national census population. The territorial North has a population of 108,000. In 2011, 21 per cent of Northern Canada's population identified as Aboriginal. Regions with the highest Aboriginal populations were Nunavut (86 per cent), the Northwest Territories (52 per cent), and Northern Manitoba (49 per cent). Regions with the lowest Aboriginal populations were Northern Quebec and Northern Ontario (13 per cent), Northern Alberta (17 per cent), and Northern British Columbia (19 per cent).²

1 Martin, *Building Labour Force Capacity in Canada's North*.

2 Statistics Canada, "Table 2."

The demographics of Canada's North are varied across the territories and Northern provincial regions.

The demographics of Canada's North are varied across the territories and Northern provincial regions. Nunavut's population is expected to grow at a compound rate of 1.8 per cent per year from 2014 to 2025, far higher than Canada as a whole. The situation is quite different in the other territories: for instance, the Northwest Territories population is aging rapidly, and the Conference Board calls for it to peak in 2020 at 45,200. Unlike the other territories, Yukon can expect net migration to be favourable over the next decade, so its population is predicted to expand from 37,700 in 2014 to almost 43,000 in 2025.³

In both Manitoba and Saskatchewan, over 15 per cent of the population is Aboriginal. Furthermore, these provincial Aboriginal populations are very young compared with the non-Aboriginal populations in the two provinces, and with Aboriginal populations elsewhere in Canada. In 2011, the median age of the Aboriginal population was 28 years—13 years younger than the median of 41 years for the non-Aboriginal population.⁴

Also contributing to the demographic picture in the North is the so-called “shadow population,” found most prominently in Northern Alberta. The 2012 municipal census classified 39,271 people in Wood Buffalo, Alberta, as a non-permanent population, living in accommodations such as work sites or camps but still in need of basic services.⁵ With the recent drop in the price of oil, this phenomenon may change, but it remains a reminder that Northern economic booms bring consequences for local communities.

3 The Conference Board of Canada, *Territorial Outlook: Autumn 2014*.

4 Statistics Canada, “Table 4.”

5 Regional Municipality of Wood Buffalo, *Municipal Census 2012*.

Environment

The North is on the front line of climate change. Temperatures in parts of the Western Canadian Arctic have risen by as much as 2.2°C over the past 50 years,⁶ compared with a 1.3°C average increase in the rest of the country.

Northern ecosystems tend to be less resilient than their Southern counterparts because they are relatively small and have simpler structures. They also have shorter seasons in which growth and regeneration are possible. Thus, recovery from an environmental incident, such as an oil spill or blowout, may be slow and difficult. As Northern waters open up to freight-shipping and cruise ships, the increased potential for accidents heightens threats to the Arctic environment.⁷

Economy

The Northern economy typically consists of goods-producing sectors, which dominate its GDP (such as mining, forestry, oil, and natural gas industries), and services-producing sectors, including public services (government, health, education, and social services) and those offered by the private sector (wholesale and retail trade, finance and insurance, and other commercial services).

In 2011, the Conference Board concluded that real GDP in Canada's North in 2009 was \$84.8 billion, but that the North's share of the national economy had declined steadily over the previous decade. Primary industries, such as mining and oil and gas extraction, were the largest sector (\$16.2 billion). Health, education, and social services were worth almost \$11 billion of output, while the public sector was worth another \$5.3 billion.⁸

6 Intergovernmental Panel on Climate Change, *Climate Change 2007*, 30.

7 Bristow and Gill, *Northern Assets*, 51.

8 Palladini, *Estimating Economic Activity in Canada's Northern Regions*, 4–5.

Mining has become the backbone of the Northern economy, though the industry is constantly undergoing shifts.

Especially in the territories, the public sector is a major employer and occupies an outsized share of the economy. The civil service dominates the territorial workforce and has many of the highest-paid and stable positions in the territorial economy. Nunavut, for instance, derives between 30 and 40 per cent of its employment from the public service. The three capitals—Whitehorse, Yellowknife, and Iqaluit—play a dominant role in the economic, social, and political life of their respective territories. They are, in effect, company towns, with government being the largest corporation.⁹

In terms of GDP, mining has become the backbone of the Northern economy, though the industry is constantly undergoing shifts. The powerhouse of the Northwest Territories' economy, diamond mining, is rapidly maturing, with two mines scheduled to close within the next decade. In Yukon, a new gold mine is scheduled to bolster production in 2018. In Nunavut, the Meadowbank gold mine in Kivalliq has a solid outlook through to its scheduled closure in 2018 or 2019, and the Meliadine gold mine is in the advanced exploration stage as of early 2015. The territory's first iron ore mine, at Mary River, is expected to begin shipping product in 2015.¹⁰

The commodity price cycle hit its peak in 2011, when Nunavut alone saw exploration expenditures of \$535.7 million and Yukon saw \$332 million in exploration investment. In 2014, exploration expenditures are expected to have been \$107.1 million in Yukon, \$95.8 million in the Northwest Territories, and \$144.6 million in Nunavut.¹¹

At the height of the commodity price cycle, the Northern regions of the provinces were anticipating rapid growth through the development of mining hot spots. Since then, the picture has changed. The Ring of Fire in Northern Ontario, seen as a massive opportunity in chromite mining just a few years ago, is undeveloped as of early 2015. Production ceased at iron ore mines in Labrador and Northern Quebec in 2014

9 Coates and others, *The Role of the Public Sector in Northern Governance*, 37.

10 The Conference Board of Canada, *Territorial Outlook: Spring 2015*.

11 Natural Resources Canada, *Exploration plus deposit appraisal expenditures*.

due to low prices. However, there has been some good news. In British Columbia, Mount Milligan (near Prince George) is a copper and gold mine that went into commercial production in 2014.¹² The Avanti molybdenum mine is under construction in 2015.¹³ The Red Chris copper and gold mine began trucking copper concentrate in March 2015.¹⁴ Hudbay Minerals opened its Lalor and Reed mines in Manitoba officially in 2014,¹⁵ and Cameco began underground ore production in 2014 at its Cigar Lake uranium operation in Saskatchewan.¹⁶

Infrastructure

The North is rich in resources, but a lack of infrastructure makes extraction of these resources difficult and costly. The current state of inadequate regional as well as community infrastructure threatens long-term economic growth.

Many communities, due mainly to their geographic circumstances, can still be reached only by air or water. There are no railroads connected to the territories or provincial regions of Inuit Nunangat, other than a short railroad linking southwestern Yukon to the coast of Alaska. Isolated communities may have winter road access for only about eight weeks a year. Most communities in Yukon have year-round road access, but in the Northwest Territories only about half of the communities have access to all-season roads. Nunavut, meanwhile, has only one 21-kilometre all-weather road, located on Baffin Island between the hamlet of Arctic Bay and Nanisivik, a former mining town from the 1970s that is now used only by the Canadian Coast Guard. Major construction projects include the all-weather road connecting Tuktoyaktuk to Inuvik in the Northwest Territories, which is slated to be completed in 2017–18. Other significant

12 Thompson Creek Metals Company Inc., *Mount Milligan Mine*.

13 Alloycorp Mining, *Avanti Kitsault Project*.

14 Imperial Metals Corporation, *Red Chris Begins Trucking Concentrate*.

15 Hudbay, *Operations*.

16 Cameco, *Cigar Lake*.

Airports
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communities.

projects under consideration include linking Nunavut to Manitoba and connecting the 14 Inuit communities in Nunavik with each other and to destinations in Southern Quebec.¹⁷

In the absence of extensive road connections, airports and marine transportation serve as lifelines for many communities. The territorial capitals are the airport hubs, along with Hay River and Rankin Inlet, and are served largely by regional air carriers. Shipping, while a more economical transportation option, is hampered because marine infrastructure is often bare-bones and rudimentary.¹⁸ Though private deep-water ports service the Raglan mine near Deception Bay, Quebec, and the Voisey's Bay nickel mine in Newfoundland and Labrador, the only true deep-water port in the Canadian North is in Churchill, Manitoba.

Energy

Many remote Northern communities rely on local diesel generators to meet their energy needs. All of the 30 communities in Nunatsiavut and Nunavut are powered by diesel generators, as are the 14 Inuit communities in the Nunavik sub-region of Quebec. Aboriginal Affairs and Northern Development Canada (AANDC) has estimated that in 2011, communities across the territories consumed at least 76 million litres of diesel fuel, in addition to 219 million litres of fossil fuel or propane for heating. AANDC further estimated that over 800,000 tonnes of greenhouse gas emissions resulted from this fuel consumption.¹⁹

Faced with increasingly vulnerable energy systems, many Northern communities must allocate resources to backup systems. Communities with regional and micro-hydro grid access, such as in the Northwest Territories and Yukon, for example, maintain backup diesel generators to support their primary systems.

17 Parnasimautik, *Our Region—Transportation*.

18 Though many communities have only minimal water transport infrastructure, most are not strategically located along waterways that would necessarily make infrastructure improvements worthwhile.

19 Conrad, "Study on Non-Renewable and Renewable Energy Development."

Connectivity

In 2014, 51 out of 100 communities in the territories, Nunavik (Quebec), and Nunatsiavut (Newfoundland and Labrador) depended on satellite facilities to access basic telecommunications and Internet services. Their lack of scalable broadband transport facilities severely impedes their ability to participate in the digital economy or take advantage of innovative applications in emerging electronic services sectors, such as e-learning and telemedicine.²⁰

Thus far, remote Northern regions, such as Nunavut and Nunavik, depend entirely on satellite backbone services. Commercial satellite backbone prices have made it almost impossible for independent Internet service providers to serve residents and local businesses in these regions without government support. In regions such as Nunavut and Nunavik, the state of technology over the past decade has hampered attempts to deploy information communications technologies for applications such as distance education and e-health.

Education

Because rapid development brings growing demand for highly skilled workers, the education and skill levels of Northerners will therefore be crucial in determining whether or not local communities are able to take advantage of economic opportunities. In 2011, former Prime Minister Paul Martin told a national conference that improving the educational outcomes of Aboriginal youth is more than an economic issue: It is the single most important moral issue that Canada faces.²¹

20 These observations are based on Centre for the North research, starting with Fiser, *Mapping the Long-Term Options*.

21 Martin, "Human Capital and Economic Development."

In 2014, the Conference Board's *How Canada Performs* research program assessed the education and skills performance of the provinces and territories. In general, Yukon had the highest levels of educational attainment (high school completion, college completion, apprenticeship completion, and university completion) among the three territories, followed by the Northwest Territories and Nunavut.²²

The territories' Aboriginal populations generally lag behind their non-Aboriginal counterparts on educational attainment and adult skills. However, when education levels are taken into account, Aboriginal peoples' literacy and numeracy skills are generally on par with the non-Aboriginal population. Improving educational outcomes among the Aboriginal population does more than anything else to equalize opportunities.²³

Health and Wellness

The territories have small populations living in vast areas. When geography is coupled with poor infrastructure, health care is not easily accessible for most. Add in well-documented evidence of unhealthy socio-economic conditions—including poverty, cost of living, and housing—and it should come as no surprise that the state of health in the North is poor, particularly among Aboriginal populations.

The Conference Board's 2014 assessment of health outcomes in the territories saw them rank below all Canadian provinces and peer countries. As well, three Canadian provinces with Northern regions (Manitoba, Saskatchewan, and Newfoundland and Labrador) get D grades on the overall health report card.

Nunavut is below all other jurisdictions on 6 of the 10 indicators: life expectancy, premature mortality, infant mortality, suicide, mortality due to cancer, and mortality due to respiratory diseases. The Northwest Territories also does poorly on life expectancy, premature

22 The Conference Board of Canada, *How Canada Performs*.

23 Council of Ministers of Education, Canada, *PIAAC in Canada*.

Measures of wellness in many Northern communities show the importance of tackling mental health issues.

mortality, infant mortality, mortality due to cancer, and mortality due to respiratory diseases. Yukon sits third from the bottom overall, but has more balanced rankings on the health indicators than the other two territories.²⁴

Socio-economic status plays a role in health outcomes by affecting lifestyle choices. Obesity rates and smoking rates are well above the Canadian average in all three territories, while fruit and vegetable consumption is significantly below the Canadian average. Difficulties in accessing affordable fresh produce place the residents of the territories at a higher risk of developing chronic disease.

Measures of wellness in many Northern communities show the importance of tackling mental health issues, with the three territories ranking below all provinces on self-reported mental health. Nunavut received a D grade—in 2013, only 55 per cent of the population 12 years of age and older in Nunavut's 10 largest communities perceived their mental health as either excellent or very good, compared with 70.3 per cent in 2009. In 2013, the age standardized rate for Canadians was 71.6 per cent.²⁵

The impact of poor mental health can be devastating on a community, since mental illness is a common risk factor for suicide. While Yukon has a low suicide rate, the Northwest Territories and Nunavut have the highest rates in the country, with Nunavut at six times the Canadian average. In 2013, there were 45 suicides in the territory, the highest number in its brief history; this prompted the Nunavut coroner to call a public inquest, scheduled for March 2015.²⁶

24 The Conference Board of Canada, *How Canada Performs*.

25 Statistics Canada, CANSIM table 105-0503.

26 CBC News, *Nunavut Coroner's Suicide Inquest*.

Housing

A 2012 Centre for the North report on housing in Canada's North determined that the availability of affordable, adequate, and suitable housing plays a significant role in supporting economic development and employment in the North, in addition to supporting the health, wellness, and positive educational outcomes of Northerners.²⁷ Housing adequacy can be a significant issue for Northern regions. A comprehensive 2012 housing needs assessment undertaken in Nunatsiavut, for example, discovered that 74 per cent of homes were in need of major or minor repairs, and that 44 per cent of homes had issues with mould.²⁸

Businesses across the North struggle to attract and retain employees when there is a shortage of suitable housing. These findings dovetail with the findings from a survey of Northern business leaders conducted by GE Canada, which found that housing conditions contribute to the attractiveness of remote communities for private investment, and that "the lack of affordable housing stock, where it exists, inhibits business investment."²⁹

While housing suitability is a challenge across the North, severe overcrowding is most acute in Nunavik and Nunavut. According to 2011 National Household Survey data, 57 per cent of Aboriginal people in Nunavik live in unsuitable housing, followed closely by 54 per cent of Aboriginal people in Nunavut.³⁰ As the 2014 report of the UN Rapporteur on the Rights of Indigenous Peoples pointed out, "The chronic housing shortage has a severe negative effect on a wide variety of economic and social conditions," contributing to "higher rates of respiratory illness, depression, sleep deprivation, family violence, poor educational achievement, and an inability to retain skilled and professional members in the community."³¹

27 Pulla, *Framing Sustainable Housing Options*, 68.

28 Nunatsiavut Government, *Regional Housing Needs Assessment 2012*.

29 GE Canada, *Towards a Remote Communities Investment Strategy for Canada*, 12.

30 Statistics Canada, *2011 National Household Survey: Data Tables*.

31 UN Human Rights Council, *Report of the Special Rapporteur*, 9.

There are two main aspects of the housing affordability challenge in the North, both related to its remoteness and climate: Quality houses are difficult and expensive to build, and Northern housing is unusually expensive to operate and maintain. The Conference Board's 2012 report on housing found that governments spend considerable amounts of money to improve Northern housing affordability, yet they often spread that money too thinly.³² Northern housing programs are most effective when they develop housing options that suit the economic, cultural, and geographic characteristics of Northern locales.

32 Pulla, *Framing Sustainable Housing Options*.

CHAPTER 3

Three Starting Points for Northern Policy-Making

Chapter Summary

- Northern policy-making must begin by recognizing three central realities that both distinguish the North from the South and capture the range of differences within the North itself.
- The North is complex in its distribution of communities across urban, rural, and remote locations, and in the existence of an economy that mixes wage-earning and land-based activities.
- Northern security encompasses both national concerns about sovereignty and Northern residents' concerns about security risks on socio-economic, environmental, public safety, and governance fronts.
- Bolstering the resilience of Northern communities by enabling them to anticipate and adapt to adversity is vital to empowering their participation in Northern economic development.

Over the past five years of research and engagement, a point we have often heard is that Southerners can be too quick at times to provide Northerners advice on what to do next and how to expend their resources. Among the most important things we have learned from our outreach and research is the importance of approaching Northern policy-making with an adequate and nuanced understanding of Northern realities. Three of the most important starting points to understand are Northern complexity, the various dimensions of Northern security, and the imperative of Northern community resilience.

Starting Point 1: Northern Complexity

The first and most important learning about the North is that it is not a uniform entity. In fact, there are a wide range of Northern realities differing greatly in many dimensions central to sound policy-making—and differing greatly from realities in Southern Canada as well.

Far more than being just a frontier for resource development and occasional border disputes, the North is a homeland for substantial Aboriginal populations, encompassing First Nation, Métis, and Inuit communities. It is also home to a growing diversity of non-Aboriginal people, not just Canadian-born but immigrants as well. The North ranges from small, remote First Nation, Inuit, and Métis communities, to mid-sized single-industry boom towns, to larger government services hubs. Fort McMurray, Arviat, Whitehorse, and Sudbury are all Northern communities, yet their socio-economic realities and challenges are quite distinct. (See “The North: Urban, Rural, and Remote.”)

The North: Urban, Rural, and Remote

The complexity of Northern population distributions is shown by these figures from the 2011 census of the North.

- 18 per cent of the population resided in a *census metropolitan area (CMA)* of at least 100,000 people, centred on a city centre of 50,000 or more. The three regions with the highest population concentration in this category were Northern Quebec (38 per cent), Northern Ontario (36 per cent), and Northern Manitoba (4 per cent).
- 33 per cent lived in a *census agglomeration (CA)*, centred on an urban core of at least 10,000 but less than 50,000. The three regions with the highest population concentration in this category were Yukon (77 per cent), Northern British Columbia (61 per cent), and the Northwest Territories (46 per cent).
- 5 per cent lived in a municipal area where at least 30 per cent of the employed labour force commuted to work in any CMA or CA. The two regions with the highest population concentration in this category were Northern Alberta (7 per cent) and Northern Saskatchewan (6 per cent). Northern British Columbia, Northern Manitoba, and Northern Quebec were tied at 5 per cent.
- 13 per cent lived in a community where at least 5 per cent but less than 30 per cent of the employed labour force commuted to work in any CMA or CA. The three regions with the highest population concentration in this category were Northern Alberta (23 per cent), Northern Saskatchewan (21 per cent), and Labrador (18 per cent).
- 25 per cent lived in a community where more than 0 but less than 5 per cent of the employed labour force commuted to work in any CMA or CA. The three regions with the highest population concentration in this category were Northern Manitoba (54 per cent), Labrador (42 per cent), and Northern Saskatchewan (37 per cent).
- 6 per cent of the 2011 Northern census population lived in a community where none of the employed labour force commuted to work in any CMA or CA. This includes 15 per cent of Northern Manitoba's population, 23 per cent of Yukon's, 54 per cent of the Northwest Territories', and 100 per cent of Nunavut's.

Source: Conference Board of Canada analysis based on Statistics Canada, *GeoSuite*.

Where they exist, cultural cleavages can influence the development of residents' communities and regions.

Across the North, communities are facing shared economic, environmental, and social changes—but with distinct particulars and urgencies in different places. All these variations dictate different policy needs and priorities, as well as an appropriate pace and sequencing of development. Such efforts are devised and administered through governance structures that range from highly empowered territorial governments and significant transformations in Aboriginal self-government to the relatively static public governance of provincial Northern regions.

Co-existing with this internal diversity, however, is the reality that Northern communities often share common elements that distinguish them from the South and shape their development in distinctive ways. These common elements are not only geographic but also historic, demographic, environmental, economic, and social.

Policy-makers must be aware of divisions of opinion among Northerners on a range of socio-economic issues central to Northern development. Three important points of controversy are:

1. the social value of Northern industrial development in sectors such as oil and gas, mining, and forestry;
2. the role of English and French literacy, and non-Aboriginal teaching methods and knowledge in Aboriginal community schools in the aftermath of residential schooling;
3. the role and value of traditional economic activities in the North, such as hunting, fishing, and trapping. (See “Understanding the Northern Mixed Economy and Its Implications.”)

Such cultural cleavages are not present across all Northern and Aboriginal contexts—but where they exist, they can influence residents' decision-making about the directions of their own lives and the development of their communities and regions.

Understanding the Northern Mixed Economy and Its Implications

The Northern mixed economy—comprising both traditional household production and wage-based components—is structured differently from Southern urbanized regions. It is also highly variable across the North, since wage economies have not grown consistently in all Northern regions.

Today, Northern wage economies generate full-time, part-time, seasonal, and rotational jobs. The flexibility of these employment opportunities, as well as the time of year during which employment occurs, has a significant impact on the traditional economies of small communities. Part-time or seasonal jobs allow people to harvest at specific, crucial times during the year. Full-time employment, while detracting from time spent on the land, ensures that people can afford the gasoline, supplies, and equipment required for harvesting country foods. However, greater participation in wage labour may mean that the tight-knit fabric of small Northern community relations may loosen if the emphasis on sharing and reciprocity that characterizes many Northern and Indigenous cultures is being replaced by values that focus more on the needs of the individual.

The balancing act between wage labour and traditional pursuits in Canada's Northern and Aboriginal mixed economy has its own requirements and systems of value that are distinct from the pathways and links between positive educational achievements and career success in the Southern wage economy. As a result, Aboriginal young adults in the North may lack fundamental workforce-readiness and employability skills that Southerners take for granted. Integrating these disparate pathways requires community inclusion in curriculum design, as well as a respect for alternative methods of instruction, such as land-based and experiential learning.

To enhance the benefits of major developments in the North, occupations and career paths should be structured in a way that acknowledges the multi-faceted importance of the traditional-mixed economy: as a source of skills through prior learning assessment and recognition; as a means of offsetting the high cost of living in the North; and as a direct cultural expression of what it means to be a Northerner. This includes the provision of flexible work schedules to accommodate hunting/harvesting activities and related cultural, family, and community needs. The most successful resource companies operating in Canada's North today fully understand and embrace that dynamic.

Source: The Conference Board of Canada.

Starting Point 2: Dimensions of Northern Security

The phrase “Northern security” usually refers to Canada’s legal jurisdiction, or sovereignty, over the physical perimeter of Northern lands and seas, together with the potential need for military means of securing this sovereignty. While minor border disputes do exist and Canada is obliged to show “due diligence” in establishing an Arctic military presence, the likelihood of military conflict in the North is low.

The primary importance of Arctic sovereignty today is economic and environmental, in light of widespread interest in the Arctic Ocean among major powers with respect to shipping routes and natural resource deposits. For this reason, it matters to Canada’s security both to resolve existing boundary disputes and to secure and enforce internationally agreed-on Arctic shipping regulations that clarify access and protect the environment.

It is imperative to realize, however, that many other issues are also bound up with the concept of Northern security. Even the traditional paradigm of sovereignty includes not just perimeter control, but exercising control and protection of populations in areas inside the perimeter. And in the North, the aspects of security that matter to residents often have little to do with legal and military sovereignty;

Northern communities face a spectrum of security risks on many fronts.

instead, they concern the security of communities facing hazards to their well-being. Studies have shown that Northerners strongly tend to frame security concerns not in terms of national sovereignty or individual welfare, but in terms of their communities' capacity to meet basic needs and cope with daily challenges.¹

Northern communities face a spectrum of security risks on many fronts. These include:

- **Socio-economic development:** lack of economic diversity, resulting in job and skills shortages; housing affordability, shortages, crowding, and poor conditions; limited access to education, and health and social services; a lack of critical water, energy, transportation, and communications infrastructure; loss of culture and traditional ways of life; high rates of drug-related and violent crime.
- **Environment:** harsh weather conditions; remote locations; climate change; environmental harm from natural and human-made disasters.
- **Health:** lack of local hospitals and shortage of health professionals; food and water insecurity and high food costs, particularly for healthy fresh foods; toxic contaminants in local marine and wildlife food sources.
- **Public safety and security:** lack of access to reliable and immediate emergency and police services; high crime rates linked to rapid population growth and/or low education and employment.
- **Governance:** intergovernmental relations and jurisdictional barriers inhibiting capacity of local governments and community members to address security concerns.

Addressing community security requires measures to improve living conditions with respect to each of these factors. It also calls for prevention, mitigation, and emergency response and recovery in the face of natural or human-caused disasters.

1 See Rutten, *Security in Canada's North*; EKOS Research Associates Inc., *Rethinking the Top of the World*.

While conversations about Northern security must place residents' concerns about community security front and centre, it is not an either/or choice for policy-makers: Both geopolitical and community security are vital to pursue in the North. Southerners seeking to be effective partners in Northern policy-making must keep both kinds of security in mind, being aware of which interlocutors are likely to prioritize which of these dimensions. (See "Community Security and Environmental Change.")

Community Security and Environmental Change

Remote and Northern Aboriginal communities are particularly sensitive to the impacts of environmental change. Rising sea levels, in particular, are affecting Northern coastal communities dramatically. Since 2009, as many as eight metres of coastline have been lost to erosion in parts of the Canadian North, including the remote community of Tuktoyaktuk in the Northwest Territories.² Effects of climate change include reduced and thinning sea ice, reduced permafrost, and more extreme and unpredictable weather events. Annual snowfall is generally declining, while sea levels are rising due to glacial melting and thermal expansion.

Such environmental changes are affecting Northerners' health and wellness (particularly in remote Aboriginal communities) due to higher risks of disease and increased mortality and injury due to extreme weather events. As well, Northern Aboriginal communities are finding it increasingly difficult to access country foods such as fish, moose and deer, caribou, and seal—and the replacement of healthy country foods with store-bought foods comes at a high cost, especially for healthy market food choices.

Source: The Conference Board of Canada.

2 CBC News, *Tuktoyaktuk on Front Line of Climate Change*.

Building community resilience is about working collectively with local strengths and vulnerabilities to adapt to changing conditions.

Starting Point 3: Northern Community Resilience

The overall lesson emerging from the Centre for the North's evolving agenda is that various streams of our research aim at an overarching goal—that of bolstering the resilience of Northern communities to enable them to participate in, co-manage, and sustain Northern economic development.

In the fields of emergency management and regional planning, resilience refers to a community's ability to absorb and survive disasters, to anticipate adversity, and to remake itself in new ways in the aftermath of catastrophic change.

These latter two aspects of resilience—the capacity to anticipate and adapt to adversity—are critical to effective Northern policy-making. In this extended sense, resilience spans areas including regional planning, health and wellness, social services, and education. It encompasses local policies and practices as well as competencies that enable Northern decision-makers from all walks of life—leaders, workers, entrepreneurs, families, and youth—to overcome challenges by collaborating to improve local conditions. Community resilience is expressed in the socio-economic status, life chances, livelihoods, and overall health and wellness of Northerners, as well as in the state of Northern infrastructure, and in the administrative capacity of Northern communities and regions to self-govern in good times and in bad. Building community resilience is about working collectively with local strengths and vulnerabilities to adapt (with varying degrees of success) to changing socio-economic and environmental conditions. Policies to build community resilience, therefore, require persistent and comprehensive strategies that work across jurisdictions and disciplines to mobilize multiple sectors of community development.

In order for community resilience to be strengthened, however, needs and benchmarks must first be determined. Various methodologies and tools can be used to measure community resilience, including standardized risk assessments, measures to gauge key public safety, community capacity and well-being indicators, and emerging frameworks

known as “resilience assessments.” To be effective in building Northern community resilience, any tool, model, or methodology used should be comprehensive and iterative, and include qualities such as simplicity, inclusivity, and flexibility.

Each community will have its own locally defined priorities, cultural values, strengths, and resource constraints to be incorporated into resilience-building initiatives. (See “Whatì Resilience Assessment.”) Creatively leveraging strengths and building upon what is already working well within communities reduce the complexity and unfamiliarity that can accompany the introduction of strategies and plans designed by outside experts and organizations. This also helps to ensure feasibility and uptake, since community members tend to develop a greater sense of ownership over locally developed strategies and plans.

Whatì Resilience Assessment

To test the merits and applicability of resilience assessment tools within the context of the Canadian North, in 2013 the Centre for the North worked directly with Canada’s Rural Disaster Resilience Project (RDRP) and the remote Tłıcho community of Whatì, in Canada’s Northwest Territories. Together with community leaders, the Centre explored the applicability of RDRP’s resilience assessment framework to the community’s security and related emergency management planning requirements.

The project in Whatì demonstrated that local planners need tools customizable to their local Northern context. Tools must be:

- **Inclusive, and simple enough to engage all stakeholders:** Community resilience is best established from the bottom up through a whole-of-community approach. An assessment process that encourages broad-based engagement and promotes self-reliance is especially salient in Canada’s North, where communities stand a good chance of facing emergencies and incidents largely on their own.
- **Flexible and adaptive:** Communities located in Canada’s North face a unique risk environment. Flexibility implies that the assessment process is customizable, and can take this context into account, integrating the

culture and practices of the community and adapting to local capacity and resource constraints.

- **Comprehensive in scope:** Because resilience is a function of community strengths as well as vulnerabilities, a comprehensive approach is needed to gather resources and strength from a range of public and private actors, both Aboriginal and non-Aboriginal.
- **Iterative, and able to facilitate continual improvement:** Many communities in Canada's North are subject to uncertain pressures stemming from a variety of sources (e.g. climate change or an influx of major resource projects). An ongoing process allows for continual adjustment of the assessment framework and includes action plans as the context changes and new information becomes available.

Source: Fournier, *Getting It Right*.

CHAPTER 4

Three High-Priority Areas for Northern Development

Chapter Summary

- Northern development must prioritize the well-being of Aboriginal youth by addressing current deficits in their health and wellness, by improving early childhood interventions and family services, and by addressing educational attainment and skills development.
- Northern infrastructure must be upgraded in order to advance both economic and human development. Priority areas include transportation, electrification, telecommunications connectivity, and infrastructure finance.
- The North requires good governance to steer its growth. This calls for accommodating the unique dimensions of Northern policy development, for addressing human resources needs in the public sector, for supporting evidence-based policy-making, and for fostering community capacities for collaboration in governance.

Virtually every area of public policy-making is implicated in the goals of developing a region as vast and complex as Canada’s North for the benefit of its present and future residents as well as for Canada as a whole. As Chapter 1 shows, enormous challenges are present on the social, economic, and environmental fronts. Fostering natural resource-focused economic development can happen only in tandem with fostering the human development of the North’s residents. Chapter 2 presented what the Centre for the North has learned to be three indispensable perspectives for approaching Northern policy-making.

Because consultation and partnership are indispensable—and because our five years’ worth of Northern experience has brought substantial, but by no means comprehensive, insight—the Centre cannot offer a detailed agenda of policy recommendations. What we can do, however, is highlight three areas that we have found to be consistently recurring themes in policy discussions and thus top priority items for Northern and Southern partners to address in building a resilient and prosperous North. These priorities are investing in Aboriginal youth, upgrading Northern infrastructure, and building good governance. For each of these priorities, this chapter provides an overview of areas that must be addressed along with some highlights of successful developments already under way.

Supporting Aboriginal youth through to post-secondary education and beyond will be vital to the economic development of Canada as a whole.

Priority 1: Aboriginal Youth

Across Canada, much is at stake in investing in the next generation. Conference Board of Canada research estimates that the economic losses attributed to children failing to reach standard developmental benchmarks could be as high as 20 per cent of Canadian GDP over the next 60 years, and that the largest human capital payoffs could come from public investments in children and youth.

The need is particularly acute in the Aboriginal populations of Canada's North. Between 2001 and 2026, more than 600,000 Aboriginal youth will turn 15, including more than 100,000 in each of British Columbia, Alberta, Saskatchewan, Manitoba, and Ontario. This growth represents a massive influx into the working-age population—particularly in Saskatchewan (where 36 per cent of the population aged 15 to 29 is projected to be Aboriginal by 2026).¹

Some of the most acute workforce pressures in the North will be felt in the mining sector, since the industry is facing a wave of retirements and yet represents a great source of future economic growth. However, many Northern Aboriginal people lack the education and training needed to meet the skill requirements of positions available in the mining industry.²

Today, Aboriginal youth lag behind other young Canadians in post-secondary education outcomes, with the gap in high-school attainment the highest among Inuit. Supporting these youth through to post-secondary education and beyond is an imperative for their well-being and for that of their communities. It will also be vital to the economic development of the North, and of Canada as a whole.

Doing so, however, requires serious efforts to address the barriers that currently stand in the way. Many Northern Aboriginal youth face intense life stressors, such as poor housing, physical and sexual abuse, substance abuse, and unemployment, along with higher levels of suicide

1 Townsend and Wernick, "Opening," 4.

2 The Conference Board of Canada, *Understanding the Values, Challenges, and Opportunities*, 4.

and accidental death.³ In recent years, the poverty rate of status First Nations children living on-reserve has tripled compared with that of non-Indigenous children.⁴ In Nunavut, many Inuit children and families face pressing hardships—in 2012, half of the territory’s population received income support for at least a portion of the year and almost 60 per cent of the population lived in public housing.⁵

Health and Wellness

Health and wellness problems abound among Aboriginal youth. Studies in 2010 found that infant mortality rates were 190 per cent higher for First Nations compared with non-First-Nations, and 360 per cent higher for Inuit-inhabited areas compared with non-Inuit-inhabited areas.⁶ In 2010, one-fifth of children in Nunavik under the age of 5 were reported for neglect.⁷ In 2011–12, 36.2 per cent of households in Nunavut experienced food insecurity (compared with 13.6 per cent in the Northwest Territories, 11.5 per cent in Yukon, and 8.3 per cent across Canada as a whole). From 2005–07, the suicide rates for youth aged 19 or younger in high-percentage First Nations identity areas were 30 per 100,000 for males and 25.5 per 100,000 for females; and from 2004–08, the suicide rates in Inuit Nunangat for the same age cohort were considerably higher, at 101.6 per 100,000 for males and 41.6 per 100,000 for females. Aboriginal children and youth experience well above the national average in rates of exposure to violence and substance abuse. Obesity among Aboriginal children is more than double that of their non-Aboriginal peers, bringing in its wake chronic diseases such as Type II diabetes and cardiovascular disease.

3 Pulla, *Building on Our Strengths*, 51–52.

4 Bryant and others, “Canada,” 52–53; MacDonald and Wilson, *Poverty or Prosperity*.

5 Impact Economics, *Understanding Poverty in Nunavut*.

6 Luo and others, “Neighbourhood Socioeconomic Characteristics, Birth Outcomes and Infant Mortality,” 55–61; Luo and others, “Birth Outcomes,” 235–42.

7 Sisco and Stonebridge, *Toward Thriving Northern Communities*, 35.

Inuit families in particular have been characterized by higher rates of single and young parents, as well as by household overcrowding and lower rates of secondary school attainment. For the past decade, Inuit women aged 15 to 19 years have had substantially higher fertility rates than the national average— in 2009, one-fifth of births in Nunavut were to mothers aged 15 to 19 years, compared with just 4 per cent of births among Canada’s general population. A 2012 Statistics Canada study found that children of Inuit mothers aged 12 to 19 had higher reported cases of a variety of illnesses and behavioural problems than other cohorts. Young Inuit mothers under the age of 20 are also more susceptible to socio-economic problems, including poverty and limited educational attainment. The majority of children born to young Inuit mothers live in Inuit Nunangat, where health facilities and access to services are limited by the relative isolation and small size of communities.⁸

Tackling these problems involves an enormously complex range of interdependent social, cultural, educational, infrastructure, and other challenges. Some effective programs have been devised, though much remains to be done. (See “Resilience, Biology, and Health: The Sandy Lake Diabetes Study.”)

Resilience, Biology, and Health: The Sandy Lake Diabetes Study

Diseases such as Type II diabetes are hypothesized to result partly from inherited genetic factors interacting with lifestyle changes, such as limited physical activity, a low consumption of dietary fibre and vegetables, and obesity. These lifestyle changes are in turn associated with so-called “socio-economic determinants of health,” such as food security, family incomes, and the adequacy of community recreational facilities. From 1993–95, 728 members of the remote Sandy Lake First Nation in Northern Ontario participated in screening

8 First Nations Information Governance Centre, *First Nations Information Governance Centre*.

tests for diabetes, producing the finding that Sandy Lake had the third-highest rate of Type II diabetes in the world. The study found a genetic risk factor that appears to be unique to members of the Sandy Lake community.

The Sandy Lake Health and Diabetes Project works with community members, and particularly youth, by encouraging healthier food choices and improving food options, by improving awareness of risk factors (through community radio and youth camps), and by organizing more physical and land-based activities among community members (e.g., sports and walking trails).

Source: Kakekagumick and others.

Early Childhood Interventions and Family Services

There is a growing consensus among educators and health professionals in support of early interventions to strengthen the resilience of disadvantaged children and youth living in the Canadian North.⁹ Significant strides have been made by extending opportunities for family services and early childhood development programs in Northern Aboriginal communities. Since 1995, the federal government has supported a variety of community-based and family/home-centred early childhood development programs intended to promote a comprehensive approach to fostering health, wellness, personal competencies, and educational achievement among Aboriginal children under the age of 9. These programs include educational programs and services for children and in many cases young parents, ranging through prenatal care, childcare/daycare, family resource centres, family support programs, nurseries, preschools, Head Start programs, kindergarten, and primary grades in public school.¹⁰ (See “Aboriginal Head Start.”)

9 See, for example, Anisnabe Kekendazone, *Building Resilience*.

10 Impact Economics, *Understanding Poverty in Nunavut*.

Aboriginal Head Start

Aboriginal Head Start in Urban and Northern Communities (AHSUNC) was established by the federal government in 1995 with the goal of addressing disparities in educational attainment between First Nations, Métis, and Inuit children and non-Aboriginal children living in urban centres and large Northern communities.¹¹ The program is made up of six components: culture and language; education and school readiness; health promotion; nutrition; social support; and parental/family involvement. In 1998, following the expansion of AHS to include children living on-reserve in First Nation communities, all Aboriginal children aged 3 to 5 are now eligible for the program. AHS aims to ensure that children who will most benefit receive first priority to attend.

AHS programs are typically designed and managed by groups within Aboriginal communities or by “First Nations governments in consultation with parent advisory committees,” and “national and regional committees of Aboriginal representatives [who] oversee their implementation.”¹² Strong efforts are made to hire Aboriginal staff and expose children to Indigenous languages. Early childhood educators work directly “with Elders, Aboriginal language specialists, traditional teachers, and parents to enhance the development, cultural pride and school readiness of young children.”¹³

Sources: Anishnabe Kekendazone; Impact Economics; Ball.

Aboriginal communities across Canada have been developing their own approaches to designing early childhood education programs and family services, including home visitation, nurseries, and preschools. In addition to fostering health, wellness, and personal competencies, these programs seek to reinforce a positive Aboriginal identity in children and their families. Such programs may also include family services components to help at-risk families through means such as program support for parental supervision, healthy nutrition, and parental

11 Ball, *Promoting Equity*, 14.

12 Ibid., 15–16.

13 Ibid.

activities that help nurture the child in his or her home environment. Some programs specifically target children with health or developmental challenges, such as fetal alcohol syndrome or speech pathologies.

Preventive measures for older youth are also important. Programs such as FOXY (Fostering Open eXpression among Youth), a community-based participatory action research project, works with youth across the North to facilitate dialogue about sexual health issues, develop leadership and coping skills, and build greater self-confidence for making healthy life choices.

However, there continues to be a general lack of resources for early childhood interventions,¹⁴ with deficits in public support for early childhood education being particularly pronounced in the more vulnerable Northern regions. For early childhood educators across Inuit Nunangat, concerns include a lack of standards and licensing practices, diminished training opportunities, and the prevailing constraints of high costs to deliver services.¹⁵ In the Northwest Territories, “The demand for trained early childhood practitioners in the [region] exceeds the supply.”¹⁶

Also lacking are formal systems to assess and compare early childhood interventions in the Canadian North. Few resources are expended to support the standardized assessment of early childhood education in Northern Aboriginal communities, and it appears that some Northern administrations also struggle to monitor the basic quality and safety of daycares and other preschool facilities.¹⁷ More joint federal and regional investments are needed to support reliable assessments for comparative study of outcomes and long-term impacts.

14 TD Economics, *Early Childhood Education*.

15 Inuit Tapiriit Kanatami, *Understanding the Training Needs*.

16 Lutra Associates Ltd., *Early Childhood Development Training Evaluation*, ii.

17 The 2010 Auditor General of Canada report to the Government of the Northwest Territories Department of Education, Culture and Employment also flagged that government monitoring of daycare facilities is incomplete.

Finding the right model of culturally appropriate education in the North continues to be challenging.

Educational Attainment and Skills Development

There is a persistent disparity between the average educational attainment of Northern Aboriginal and non-Aboriginal people. While the number of Aboriginal people with university degrees has nearly doubled over the past decade, the gap in education levels between Aboriginal and non-Aboriginal people has only grown wider. According to the 2012 Aboriginal Peoples Survey, 72 per cent of First Nations people living off-reserve, 77 per cent of Métis, and 42 per cent of Inuit aged 18 to 44 had a high school diploma or equivalent, compared with 89 per cent of non-Aboriginal people.¹⁸

Having an Aboriginal first language impacts performance on standardized skills tests for literacy, numeracy, and problem-solving, which are typically administered in English or French; and almost one-third of Aboriginal children and youth in the territories have an Aboriginal language as their sole mother tongue.¹⁹

Policies for Aboriginal education must balance Aboriginal cultural needs with the realities of Northern labour market demands. That said, the importance of cultural continuity in educating Northern Aboriginal students has come to be recognized in the aftermath of the Royal Commission on Aboriginal Peoples report in 1996, and in light of the Truth and Reconciliation Commission of Canada's work to document the historical impact of the Indian Residential School system. Finding the right model of culturally appropriate education in the North continues to be challenging. Some early attempts at bilingual curriculum design have suffered from abrupt transitions between cultures and languages of instruction, which left Northern Aboriginal students at a disadvantage in both languages, and disrupted their sense of cultural continuity and personal identity.²⁰

18 Aboriginal Affairs and Northern Development Canada, *The Aboriginal Peoples Survey at a Glance*.

19 O'Sullivan and Goosney, *Get Ready, Get Set, Get Going*.

20 Hodgkins, "Bilingual Education in Nunavut."

Formal education is still a topic of concern and mistrust in some Northern Aboriginal contexts due to the historical impacts of the Indian Residential School system. Overcoming the stigma of residential school experiences requires a comprehensive approach to curriculum design. The Canadian Council on Learning's Aboriginal Holistic Lifelong Learning Model, based on its consultation work with leading Aboriginal educators and national organizations, determined that a comprehensive approach to Northern Aboriginal education needs to include nurturing guides (parents, teachers, mentors, counsellors, and Elders); address collective well-being (spiritual and cultural, social, economic, and political); and respect diverse sources of knowledge, including Indigenous and non-Indigenous.

Data from the 2012 Aboriginal Peoples Survey reveal a variety of factors involved in motivating Northern Aboriginal students to complete high school.²¹ Some of the most important factors concern social relationships at school and in the family. These include the level of support a student receives from parents, teachers, and friends; the types of routines and daily structures in place in the student's home environment; and the types of role models the student has to look up to.

Protective Factors

Protective factors can help Aboriginal children, adolescents, and young adults adapt positively to adversity. Three of the most important protective factors are cultural continuity; community healing; and civic engagement, mentorship, and youth leadership. Each of these protective factors should be a focal point for resilience-building interventions among vulnerable Northern Aboriginal youth.

1. **Cultural continuity:** A growing generation gap between Northern Aboriginal youth and Elders is contributing to a loss of knowledge of cultural heritage. Studies over the past decade highlight the significant connection between Aboriginal youth wellness, educational achievement,

21 Details on this survey are available from Statistics Canada, *Aboriginal Peoples Survey, 2012*.

and an individual's personal identification and involvement with his or her culture. A strong sense of cultural identity has been correlated with higher levels of psychosocial resilience for Aboriginal youth, and may be an important protective factor against suicide. Strong cultural identities also help Aboriginal youth to navigate mainstream society while being able to positively distinguish themselves from it.

2. **Community healing:** Community relations are a necessary part of individual wellness and personal resilience in remote Northern communities. A whole-of-community approach to wellness and resilience-building recognizes the importance of community members coming together to overcome common adversities and move toward positive adaptation. Efforts to nurture vulnerable Northern youth may introduce them to traditional healing practices, and teach them how to replace unhealthy coping strategies—such as alcohol, drugs, and violence—with opportunities for self-reliance, leadership, and personal achievement.
3. **Civic engagement, mentorship, and youth leadership:** Interventions that focus on mentoring youth and building their leadership competencies can help them become active participants in the decisions that affect them. This, in turn, can help youth to find confidence in themselves and become positive role models for their peers and younger generations. (See “Fusion Jeunesse.”)

Fusion Jeunesse

Fusion Jeunesse is a charity launched in 2010 to encourage Aboriginal youth in Northern Quebec to stay in school. It forms partnerships between high schools and universities and develops a variety of arts, leadership, sports, and outdoor activities to engage youth and keep them interested in school.

Throughout the school year, Fusion Jeunesse provides daily extra-curricular activities to motivate students to attend school and to deepen relationships between the students and their community. The program teaches youth about community leadership through volunteering opportunities that encourage them to get involved in local initiatives and become a visible part of community life. Fusion Jeunesse also works to build up school spirit and encourage student pride in academic achievement, to enhance young people's sense of belonging at school, while creating positive perceptions of what they can achieve.

Source: Pulla, *Building on Our Strengths*.

Priority 2: Upgrading Northern Infrastructure

Upgrading infrastructure of many kinds is imperative both for economic and human development in the North. Northern infrastructure includes roads, ports, telecommunications, electrical grids, and housing as well as educational, cultural, and sports facilities—many of which are aging, inadequate, or simply non-existent. Building Northern infrastructure is costly, and disagreements over who should pay are common. As the infrastructure deficit grows, both business and quality of life for Northerners suffer.

Though the link between infrastructure investment and economic return is difficult to quantify exactly, the Institute for Research on Public Policy has concluded that strategic investment in public infrastructure could generate productivity returns ranging from 17 to 25 per cent.²² Conference Board work has also identified a “strong correlation between the physical stock of public capital and an economy’s overall productivity.”²³ The Canadian Chamber of Commerce has found that “it is not [necessarily] more infrastructure that contributes to growth and productivity, but the right infrastructure in the right places.”²⁴ In a survey conducted by GE Canada, which involved more than 350 respondents,

22 Brox, “Infrastructure Investment,” 17–18.

23 Antunes, Beckman, and Johnson, *The Economic Impact of Public Infrastructure*, 3.

24 The Canadian Chamber of Commerce, *The Foundation of a Competitive Canada*, 4.

Poor transportation compounds the challenges Northerners face.

including Northern business and community leaders, infrastructure was ranked by 70 per cent of those surveyed as “the single most important criteria [*sic*]” for attracting investment and facilitating business development in remote communities.²⁵

The kinds of infrastructure most correlated with increased productivity and growth are transportation, energy, and telecommunications. Transportation infrastructure, such as roads, harbours, ports, rail-lines and airports, may be especially important for economic activity in general and for certain industrial sectors in particular, such as mining and oil and gas. The link between natural resource development and transportation, energy, and telecommunications infrastructure is particularly important for regional governments, Aboriginal businesses, and strategically located communities in the North.

Transportation

Transportation infrastructure across the Canadian North is often poor or absent altogether. Road infrastructure is more predominant in Northern regions, and particularly local roads, but its construction has various environmental challenges and all-season road access is limited. As a result, in many regions the cost of living and of doing business is very high due to the price of air transportation. The lack of transportation options can delay other infrastructure development projects. As well, poor transportation compounds the challenges Northerners face when trying to access health care, find employment, or acquire post-secondary skills and certification.

To address these concerns, the Government of the Northwest Territories has invested in major infrastructure projects, such as the Deh Cho bridge, which now provides year-round highway access for half of the territory’s population. Other governments across Canada are also investing in major transportation infrastructure development in the North. Newfoundland and Labrador committed to completing the Trans Labrador Highway, and Ontario continues to invest in airports,

25 GE Canada, *Towards a Remote Communities Investment Strategy*, 8.

ports, highway improvements, the realigning of winter roads, and the development of permanent roads in the North. Via its Plan Nord, the Quebec government will coordinate the preparation and implementation of a comprehensive, integrated plan for all modes of transportation.

Electrification

Many Northern communities are being challenged to increase their energy capacity to meet growing community demands, including the needs of locally based economic development initiatives. Yukon and the Northwest Territories appear to lead in comprehensive energy policy development. The Northwest Territories government is expanding its regional energy grid and diversifying its energy sources to provide needed capacity to mining projects while helping isolated “thermal” communities achieve more cost-effective solutions than diesel for their growing energy demands. Similarly, Yukon is looking to expand hydropower, adopt more alternative energy sources, and examine the potential to interconnect its systems with the North American Power Grid.

Remote Northern Canadian communities, with the support of government programs, as well as support from industry, have been experimenting with alternative sources of power, including biomass, wind, and solar projects—often as part of hybrid diesel and backup systems. Also, communities are increasingly investing in microgrid technologies to increase reliability and to reduce costs and emissions from diesel consumption. The governments of Yukon and the Northwest Territories, for example, have mapped out comprehensive alternative energy pathways and prospects in partnership with their member communities and regional industries. At the same time, Northern industries are searching for energy solutions to ease the high cost of thermal energy sources, such as diesel. In the Northwest Territories’ non-renewable resource sector, for example, Rio Tinto’s Diavik Diamond Mine has been actively testing the potential benefits of wind energy.

Connectivity

Telecommunications infrastructure is a critical enabler of both economic opportunity and social cohesion. Canada's Northern communities require critical connectivity infrastructure that is reliable, scalable, and supportive of locally affordable services. Though the state of telecommunications infrastructure varies widely across Canada's North, many remote Northern communities continue to be vulnerable to "bottlenecks" and service disruptions. It is not easy or cheap to connect remote communities, and no single type of telecommunications investment is most appropriate for all Northern regions. Currently, Nunavut and Nunavik (Quebec) face some of the biggest challenges due to their satellite dependence.

A 2013 Northern Communications Information Systems Working Group study concluded that for all three territories combined, a total capital expenditure for required network upgrades ranges from \$622.68 million (for main link upgrades alone) to \$2.2 billion, depending on the extent of infrastructure build-out and the exclusion/inclusion of redundancy.²⁶ The Northwest Territories could gain the most GDP from enhanced connectivity—at a total of \$294.2 million by 2023 compared with \$174.9 million of GDP to the Yukon economy and \$133.1 million of GDP to the Nunavut economy.²⁷ Similar forecasts for Nunavik estimate productivity gains of as much as \$55 million in GDP over an 8-year period and \$225 million over a 15-year period, based on investments in new infrastructure in the order of \$100 to \$150 million.²⁸

Without new sources of funding, this level of telecommunications development would require substantial trade-offs from other types of regional and community infrastructure development. Strategic government investments therefore have an important role to play in the Northern telecommunications landscape. In some cases, this

26 Nordicity, The Conference Board of Canada, and the Canadian Northern Economic Development Agency, *Northern Connectivity*.

27 Ibid.

28 Rogers, "Broadband Network Would Increase Nunavik's GDP."

could mean not simply subsidizing an incumbent or a new market entrant, but co-investing in Open Access Networks to provide shared critical infrastructure that multiple services providers can use (and be responsible for). (See “Eeyou Communications Network.”)

Eeyou Communications Network

In 2010, the Cree of Eeyou Istchee partnered with neighbouring Jamésien municipalities and Hydro-Québec to develop a carrier class fibre optic network, with funding support from the federal government and the Province of Québec. Local/regional, provincial, and federal government partners each paid one-third of the total cost of approximately \$29 million.²⁹ The Eeyou Communications Network is a not-for-profit enterprise that wholesales essential telecommunications backbone services to support private sector services providers, while providing critical infrastructure for regional public services (such as connectivity for schools, health centres, and public offices). Public and private interests can thus mutually benefit from shared open access infrastructure while setting wholesale rates based on cost-recovery and a broader vision of socio-economic development—and mutually invest in sustaining the region’s critical telecommunications infrastructure.

Source: Fiser.

Infrastructure Finance

Across Canada, public and private decisions to finance infrastructure projects will play a pivotal role in determining whether regions and communities are able to meet their infrastructure needs. In addition to the need for financial resources, it will be important to direct financing options to the right kinds of projects, particularly for communities in Northern regions. This means identifying and financing “infrastructure

²⁹ Fiser, *Mapping the Long-Term Options*, 44.

There remains an important social equity argument to be made for strong public leadership roles in infrastructure finance.

projects and plans with strong economic, social and environmental returns on investment” that are relevant and appropriate to Northern communities.³⁰

In 2012, the National Aboriginal Economic Development Board (NAEDB) found that financing options for infrastructure serving Canada’s on-reserve First Nations—many of which are remote—were not sufficiently flexible to meet the specific needs and situations of individual communities.³¹ Moreover, NAEDB noted that investment plans for First Nations infrastructure needed to be integrated into long-term comprehensive community-planning processes.³² The need to link financing options with planning processes thus raises a fundamental need for capacity development—resilience-building—at the local level to help community governments and services providers better understand their roles and responsibilities throughout infrastructure development life cycles.

A key component of infrastructure finance is the distribution of roles and responsibilities. The private sector has long been an important player in infrastructure development in Canada. Nevertheless, there remains an important social equity argument to be made for strong public leadership roles in infrastructure finance,³³ particularly in remote Northern regions where market failures related to sparse populations and other geographic challenges act as disincentives for private investment. Local and Aboriginal investors are also potentially important players in Northern infrastructure finance.

If Northern non-renewable resource sectors, such as mining and oil and gas, can achieve significant gains from anticipated productivity increases over the long term, their role in infrastructure investment may expand to benefit regions such as Nunavut and the Northwest Territories.

30 Lewis and Tomaszewska, “Canada’s Infrastructure Network Needs,” 6–7.

31 National Aboriginal Economic Development Board, *Recommendations on Financing*.

32 Ibid.

33 Grigg, *Infrastructure Finance*, 3.

Site-specific investment activities in the non-renewable resource sectors may also benefit neighbouring communities and broader regions by contributing to road systems, airports, ports, and regional energy grids.

Of course the devil is in the details, and the possibility of integrating community and industry infrastructure needs should be discussed openly and frankly in advance of new Northern industrial developments during planning and negotiation phases. While industry representatives are keen to have the public sector provide investment incentives, such as tax breaks, simplified regulations, grants, loans, and partnership opportunities, the Northern public sectors must consider the infrastructure needs of their constituents, and particularly the North's permanent residents.

The quality of community participation in Northern industrial planning depends largely on community capacity. A serious effort to support long-term planning at Northern community levels will require commitments on the part of federal and regional governments to support the implementation of these plans beyond the limited horizon of particular funded projects. Financing options must be linked with planning processes, as well as local research and development. In turn, this points to the imperative of capacity development to help community governments, developers, and services providers better understand their needs, roles, and responsibilities.

Priority 3: Good Governance to Steer Growth

Local community champions have many of the solutions to Northern problems in health, education, disaster risk reduction, and mixed economic development. For the North's champions, a more fundamental problem is capacity—there is simply too much to do and not enough people to do the work.

Because of the relative size of the Northern public service and the considerable and pressing demands on its time, public policy development in the North may be weaker than expected. Northern governments are as busy implementing commitments made 20 to

Community champions often use programs (and program funds) to address multiple concerns and deliver multiple impacts.

25 years ago—such as improving water, sewage, power, and transportation infrastructure; providing adequate, affordable, and suitable housing; delivering high-quality health care; and providing proper educational opportunities—as they are at addressing contemporary issues.

The Unique Dimensions of Northern Policy Development

Policy development in the North has unique qualities, especially when compared with expectations of crisp program logic and program funding formulae. These qualities are seldom sufficiently recognized at federal and even provincial/territorial government levels. As we explain in our 2014 report on Northern governance, coping with the “politics of smallness” and the realities of Northern Canadian life poses its own set of challenges.³⁴

Foremost among them is the reality that, at local levels of Northern policy implementation, community champions often use programs (and program funds) to address multiple concerns and deliver multiple impacts. For instance, a Northern food security program may direct subsidies to hunters who then share game with their communities—but a spinoff benefit is that local champions integrate the products of these hunting activities into health programming that helps diabetics eat more healthy country foods. Moreover, the same hunting activities may take vulnerable youth out on the land, providing an opportunity to reconnect with nature, exercise, develop leadership and teamwork, value the teachings of Elders, and learn about the traditional economy. The policy programs sponsoring such a community initiative are often too narrowly defined to appreciate the value it creates and the issues it addresses.

34 Coates and others, *The Role of the Public Sector in Northern Governance*.

Discussions with Northern leaders and policy workers suggest that only recently have federal departments begun to appreciate the multiple outputs that local champions can create from program investments. To help Northerners capitalize on this value, program funders must be flexible, inclusive, and adaptive.

Given the major transitions under way in the Canadian North, it is not surprising that certain issues of governance remain unresolved, particularly with respect to inter-jurisdictional conflicts when multiple federal, provincial/territorial, regional, and Aboriginal government proponents have to work together. Despite their primordial heritage, Aboriginal governments are among the newest of the various contending jurisdictions, and their true powers and capabilities remain to be seen.

Addressing Human Resources Needs in the Northern Public Sector

Collaboration across governments, including Aboriginal governments and emerging non-government actors such as Aboriginal development corporations, is changing the structure of Northern governance. Northern regions, such as Nunavut, derive between 30 and 40 per cent of their employment from the public service, even though there are significant mining exploration agreements and active mining development projects. Public sector employment opportunities provide many of the more stable and higher-paying career paths available to Northern and Aboriginal workers.

However, Northern public sectors are facing deepening human resources challenges. In the Northwest Territories, the drawing down of powers by Aboriginal governments will result in some territorial employees shifting to Aboriginal governments, finding alternate employment within the territorial governments, or leaving the civil service. Aboriginal land claims beneficiaries will be keen to staff public sector positions with Indigenous personnel; however, their challenge will be to foster sufficient skills development and workforce readiness. Where such transitions

Basic monitoring alongside more investment in Northern research capacities is recommended.

have happened more significantly, as in Nunavut, the human resources challenges are considerable and have yet to be resolved in a way that satisfies government mandates to hire and promote local public servants.

To help offset some of the hiring challenges and skills shortages, Northern governments and the private sector should establish systems for greater collaboration on human resources management. This could include, for example, attention to spousal hiring opportunities, which are crucial in keeping employees in the North. At present, there is too little attention given to the private sector as an employer of choice and even less to encouraging cooperation between public and private employers.

Supporting Evidence-Based Northern Policy-Making

A real opportunity now exists to help Northern champions develop more rigorous ways to capture multiple impacts and scale successful approaches. We know through our case study research what many of the characteristics of successful programs look like, as well as what the outcomes should be; but there currently is not enough program funding or investment available to support the kinds of rigorous comparative research needed to empirically account for the multiple impacts of successful Northern programs. Current quantitative data, based largely on Statistics Canada surveys, are not sufficient; and the research capacities of Northern governments, including many federal departments, are also not at the level required.

That is why we recommend more investment in basic monitoring alongside more investment in Northern research capacities. Future program assessments and research on outcomes must be sufficiently reliable and sensitive to the special characteristics of Northern policy implementation and collaborative governance. Greater investment in Northern research capacity, and in regional and Aboriginal bureaus of statistics, would strengthen the corps of Northern research professionals and policy analysts who are both well equipped to deliver sophisticated policy research and sensitive to Northern needs and cultural contexts.

Fostering Collaborative Northern Governance

Federal and regional governments have an ongoing responsibility to ensure that the local champions who administer and deliver workforce readiness, adult education, and related skills development programs have sufficient resources and strategic information to provide the planning support that Northern communities need in anticipation of major projects. At a national level, this means working collectively across key federal departments and with provincial/territorial governments, with industry sector organizations, and with national Aboriginal organizations. At a regional level, this means working with regional associations, communities, and major project proponents well in advance of project initiation to ensure that Northerners have enough lead time to meaningfully benefit from major projects in their regions.

The federal Canadian Northern Economic Development Agency's recent Community Readiness Initiative (CRI) introduced in 2013 provides a promising model of collaborative governance and program delivery that could be extended at regional and community levels.³⁵ It will be imperative as CRI projects go forward to assess the effectiveness of this approach, both before and after participating communities from the territories become involved in major projects. For that, sustained and adequate resources will be required over a longer-term planning horizon.

Better Northern governance also requires better development of communities' capacities to work with government planners and policy-makers. Beyond supplying relevant research, regional institutions and centres of excellence (such as Yukon College's Cold Climate Innovation Centre, the Northwest Territories' Aurora College, Nunavut Arctic College, and the Nunatsiavut Research Centre in Newfoundland and Labrador) could also help guide small remote Northern communities in integrating their planning into the knowledge-sharing and policy networks needed for effective regional planning, innovation, and participation in major economic development or infrastructure projects.

35 Canadian Northern Economic Development Agency, *Community Readiness Initiative*.

CHAPTER 5

Conclusion—Planning for Growth

Chapter Summary

- Planning for Northern growth must begin by looking at the specifics of different communities' potentials, challenges, and needs. Efforts should start by ensuring communities' readiness to participate in economic development opportunities.
- Other critical elements to a growth framework include ensuring that Canada offers a competitive and enticing fiscal environment for businesses in the North; addressing regulatory complexities and duplications; and identifying and financing infrastructure projects with strong economic, social, and environmental returns on investment.
- Much can be learned from the planning and growth initiatives of other circumpolar countries.
- The Centre for the North welcomes current and new partners to join in defining further policy approaches—ones based on the priorities outlined in this report and new approaches as well.

As this overview of the Centre for the North’s five-year findings shows, many distinct issues must be addressed with respect to Northern development—and these issues are complexly interrelated. Tackling health and wellness for Aboriginal youth, for instance, entails addressing challenges ranging from social services, education, civic engagement, and cultural preservation to housing and employment opportunities. The complex governance regimes in the North serve as checks and balances to development as major resource projects go through stringent regulatory reviews and are subject to partnership negotiations with Aboriginal land-owners.

Notwithstanding the diversity and complexity of the issues, however, our overall findings can be summed up in one fundamental challenge: How can all partners in Northern development successfully plan for growth while ensuring that Northerners remain resilient in the face of change?

Clearly, the North’s natural resource endowments and global demand ensure that growth will happen. Our economic forecasts show that the mining and resource development outlook in the North remains good despite a sluggish world economy and difficulties securing project financing. We also know that the majority of Northerners welcome resource development projects when they are implemented in a respectful and sustainable manner. Major projects have positive impacts on the Northern economies as auxiliary industries, such as services and construction, benefit from the increased level of activity.

The question hence is not *if* but *how* the North will grow. Will it grow in a way that serves short-term economic interests above all, or will it grow in a way that builds sustainable prosperity both for Canada and for the North’s present and future inhabitants?

Planning for growth will share common features across diverse contexts.

These are not problems that can be solved either in the abstract or around conference tables in Ottawa. Planning for growth must begin by looking at the specifics of different communities' potentials, challenges, and needs. One such example of starting with local specifics can be seen in the federal government's Community Readiness Initiative, introduced in 2013, which provides a promising model of collaborative governance and program delivery at the local level between communities involved in resource development activities and industry. Another example is the community resilience project in Whati, Northwest Territories, which shows how communities can successfully participate in and co-manage responsible resource development projects.

Examining the efforts of regions already experiencing fast growth can also serve to highlight lessons learned by government, industry, and community champions, as well as good practices to adopt and pitfalls to avoid. In Quebec, for instance, the provincial government's Plan Nord is a blueprint for realizing the natural resource wealth and socio-economic potential of territories north of the 49th parallel. While intended to create employment and increase overall provincial prosperity, this blueprint must also reflect the needs and interests of Northern Quebec's Aboriginal peoples, as well as environmental concerns. And in the Northwest Territories, the shared interest of industry, government, and Aboriginal groups in growth and prosperity is being addressed in part through a planned fibre optic network along the Mackenzie Valley and a recently proposed transportation corridor initiative, both of which are potential game changers for the territorial economy.

Planning for growth will share common features across diverse contexts. Such features include the need for partnerships, for industry/community consultations, and for a strong public service to deliver both planning and execution. For policy-makers, choosing the best sequence of events when formulating and implementing policy is itself a daunting task, given the high demand for all types of socio-economic services.

Much can be learned from our neighbours in the circumpolar region.

Based on our five years of research and dialogue, we recommend that efforts to plan for Northern growth start by ensuring the readiness of communities to successfully partake in economic development opportunities. This includes focusing on the potential of youth and attracting, developing, and retaining skilled workers across sectors. It requires securing long-term funding and fostering the cooperation of community members with territorial/provincial/federal governments and agencies. And it also requires full consideration and integration of the Northern mixed economy.

Another critical element for a growth framework is ensuring that Canada offers a competitive and enticing fiscal environment for businesses choosing to operate in the North, and that remaining regulatory complexities and duplications are addressed.

Finally, transportation infrastructure gaps must be addressed, since the current state of inadequate regional and community infrastructure threatens long-term economic growth. Fixing it will be costly, which means that open and creative approaches to infrastructure financing will be required. Across Canada, public and private decisions and partnerships to finance infrastructure projects will play a pivotal role in determining whether regions and communities are able to meet their infrastructure needs. In addition to the need for financial resources, it will be important to direct financing options to the right kinds of projects. Above all, this means identifying and financing infrastructure projects and plans with strong economic, social, and environmental returns on investment.

Canada is not alone in facing these issues and long-term opportunities. Indeed, much can be learned from our neighbours in the circumpolar region. Alaska, for instance, is a Northern leader in terms of information technology and connectivity across its vast expanses. Greenland is slowly and successfully dealing with youth issues, and has one of the most successful universities in the Arctic region. Across the Nordic countries, small and medium-sized Arctic businesses are growing on the basis of traditional and contemporary industries, such as reindeer herding, fishing, and tourism. Collaboration with circumpolar nations and

Indigenous organizations will provide inspiration to our own efforts at planning for growth, and will ensure that economic development across the Arctic happens in a sustainable and responsible manner.

Next Steps

We know that our partners and stakeholders across the North want to build on the momentum of the Centre for the North's first five years. For our part, we will continue to emphasize impact. That means a grounded and action-oriented approach to research and outreach, one that continues to embrace the North's diversity, provides tools for better decision-making, and highlights innovative, successful ideas and tangible solutions.

Our vision for the Centre for the North focuses on key themes that the membership would like to see explored in greater depth; these would likely include some of the challenges that we have discussed in this policy review. We believe that much more needs to be understood and done in terms of successfully planning for growth. However, the floor is entirely open to new ideas and approaches. We understand well that priorities shift and new ones emerge, often influenced by factors outside anyone's control. This is why we want to pursue a flexible research and outreach agenda based on our members' needs and wishes—one that will convene the best minds on relevant issues and produce the evidence needed for truly informed decision-making.

We invite you to join the Centre for the North and help influence the dialogue and future direction of our work. As part of The Conference Board of Canada, you will have access to the foremost analyses in economic trends, public policy issues, and organizational performance. To those who have been part of the journey up until now, we thank you for your support and insights. To those who are about to join us, we welcome your expertise.

APPENDIX A

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