



NORTHERN
POLICY INSTITUTE

INSTITUT DES POLITIQUES
DU NORD

Report No. 3 | April 2015

A New Northern Lens

Looking out is as important
as looking in

By David MacKinnon
with valuable contributions from James Cuddy

northernpolicy.ca

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Published by Northern Policy Institute
874 Tungsten St.
Thunder Bay, Ontario P7B 6T6

ISBN: 978-1-988472-39-3

Telephone: (807) 343-8956
E-mail: northernpolicy@northernpolicy.ca
Website: www.northernpolicy.ca

This report was made possible through the support of our partners Lakehead University, Laurentian University and Northern Ontario Heritage Fund Corporation. Northern Policy Institute expresses great appreciation for their generous support but emphasizes the following:

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About Northern Policy Institute

Northern Policy Institute is Northern Ontario's independent think tank. We perform research, collect and disseminate evidence, and identify policy opportunities to support the growth of sustainable Northern Communities. Our operations are located in Thunder Bay and Sudbury. We seek to enhance Northern Ontario's capacity to take the lead position on socio-economic policy that impacts Northern Ontario, Ontario, and Canada as a whole.

Vision

A growing, sustainable, and self-sufficient Northern Ontario. One with the ability to not only identify opportunities but to pursue them, either on its own or through intelligent partnerships. A Northern Ontario that contributes both to its own success and to the success of others.

Mission

Northern Policy Institute is an independent policy institute. We exist for the purposes of:

- The development and promotion of proactive, evidence based and purpose driven policy options that deepen understanding about the unique challenges of Northern Ontario and ensure the sustainable development and long-term economic prosperity of Northern Ontario;
- The research and analysis of:
 - » Existing and emerging policies relevant to Northern Ontario;
 - » Economic, technological and social trends which affect Northern Ontario;
- The formulation and advocacy of policies that benefit all Northern Ontario communities that include Aboriginal, Francophone, remote/rural communities, and urban centres; and,
- Other complementary purposes not inconsistent with these objectives.

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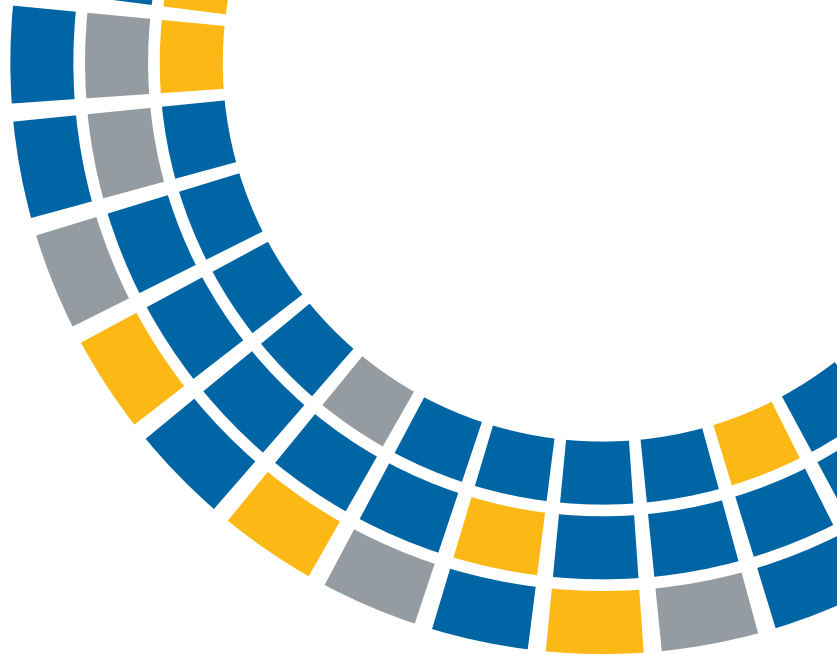
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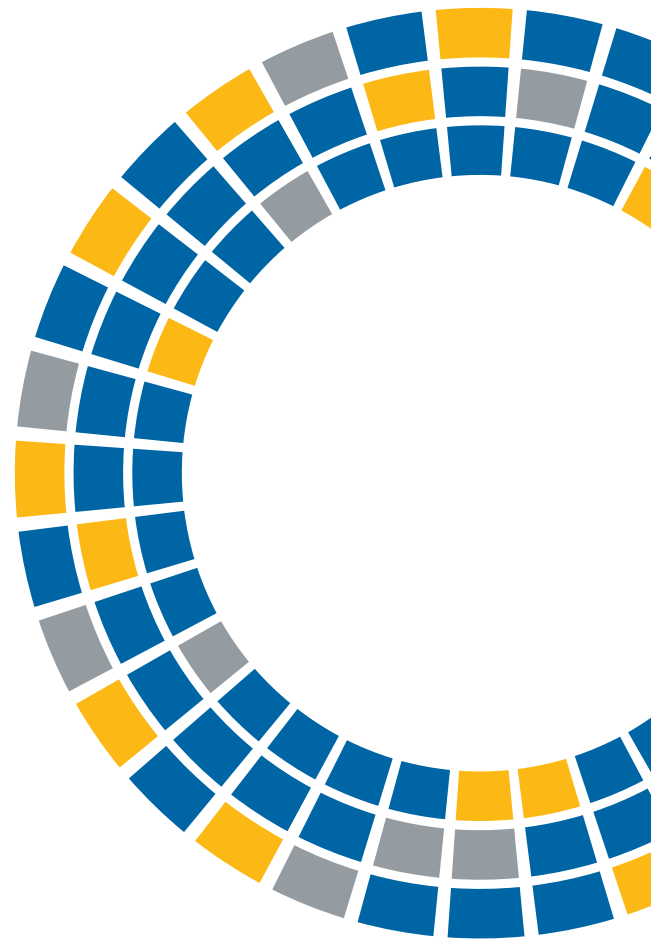
About the Author

David MacKinnon

Mr. MacKinnon is a frequent commentator on Canadian fiscal issues. He has spoken to audiences across Ontario and his work has appeared in the Globe and Mail, the Toronto Star, the National Post and many local newspapers across Canada. He has also been a guest on The Agenda on TVO, the BNN and other national public affairs programs.

Mr. MacKinnon is a native of Prince Edward Island. He was awarded a Bachelor of Arts degree (honours economics) from Dalhousie University and an MBA from York University. He was also awarded a Centennial Fellowship by the Canadian Imperial Bank of Commerce and York University to study at York, Harvard and Oxford Universities as well as the European Institute of Business Studies.

Mr. MacKinnon served as Director, Planning and Economics and Executive Director, Development Strategy in the Nova Scotia Department of Development from 1977 to 1981. He later served in several senior capacities in the Ontario Ministry of Finance, the Bank of Montreal and as CEO of the Ontario Hospital Association from 1996 to 2003. He was also CEO of the Ontario Development Corporation, Ontario's major economic development agency, from 1986 to 1993.



Executive Summary

It is time for a major course change in Northern Ontario. The experiences of other northern regions can help illuminate the path forward. Greater understanding of the local impact of global forces will help as well. All Canadians will benefit from a stronger Northern Ontario that has learned as much as it can from the experiences of other people and other regions. This commentary outlines a ten step program to inform the way forward for our region:

First, we must work together and work well with others.

Second, the future of the north will be shaped to a significant degree by global forces and experiences. We should spend as much time looking out as we do looking in.

Third, debate on economic and financial issues in Northern Ontario is inhibited by a serious lack of statistical data for the region. The province of Ontario and Statistics Canada should produce for Northern Ontario a set of economic accounts and other information comparable to the information currently provided for Ontario as a whole.

Fourth, we can't simply blame our slower growth on challenges in forestry and mining; we must fully understand all of the factors affecting our economy if we are going to successfully address them.

Fifth, Northern Ontario has more in common with other northern jurisdictions in Canada and elsewhere than it does with Southern Ontario. Benchmarking and comparisons should reflect this, but generally do not.

Sixth, Northern Ontario, is the second largest northern region in the world in terms of population. Its future is a matter of national and global significance.

Seventh, while the primary industries are critically important for Northern Ontario, they are not as large as many would assume (6.5% of total employment). For this reason, economic strategy based exclusively on primary industries will not be sufficient for the future.

Eighth, Ontario could take an important step by developing good linkages with the northern regions of other countries and devoting increased attention to the Arctic Council and other similar organizations.

Ninth, we can be even more innovative with the natural resources we do have. The future benefits from active management of the forests for environmental goals and tourism is at least equal in importance to traditional forestry industries.

Tenth, mining, production of mining equipment, and mining finance form a cluster of economic activity

that is far more important than most realize. The province's performance in each of these relative to other jurisdictions should be continually assessed and corrected where necessary.

We need a new northern lens through which to see our future. One that is outwardly looking and focused on other northern regions. A lens that is aggressively competitive, innovative and evidence driven. It is time to learn from our own successes and the successes of other northern communities.

The false comparisons with southern Ontario must stop. We need to move beyond qualitative assessments of our economic and social performance to clear and appropriate quantitative measures. Everyone should know what is actually happening in our region. Ours is a diverse economy with many comparative advantages. Working together we can seize those opportunities and maximize our growth.

Introduction

Northern Ontario¹ has always been in an unusual position within Canada and even the province. For decades there have been rumblings that Northern Ontario should be self-governing because its climate, physical geography, size and industrial structure are all very different from Southern Ontario.

Many northerners have felt alienated, believing that southerners reap disproportionate benefits from the northern resource base and that their issues are not well understood. This discontent is captured in a recent poll suggesting that 56 percent of Northern Ontarians feel that provincial governments have done a poor or very poor job of managing the affairs of the North, while 15 percent feel they have done a good or very good job and the remaining 27 percent of respondents were neutral (Oraclepoll Research, 2014).

Much of this is an inevitable consequence of geography. The vast majority of people living in Southern Ontario do not know the north well and have only travelled in it to a limited extent, if at all. Very few have seen the Hudson Bay lowlands, an area larger than Southern Ontario.

Unfortunately, the relationship between the north and south has been the only lens through which many northern problems and issues have been viewed.

This paper proposes that another lens – the experiences of northern regions elsewhere in Canada and in other countries – is needed and can shed new insight into the economic prospects of the north and help manage the relationship between Northern and Southern Ontario.

A first glance through this global lens shows that Northern Ontario is vitally important to the province and Canada as a whole and is a region of global significance. It has the second largest population of all northern regions, behind Siberia. Its population is eight times the population of the three northern territories combined.

Northern Ontario is the geographic bridge between eastern and western Canada and its geography is so large that management of its forests, mines and environment are of global significance.

Application of this lens also suggests that Northern Ontario cannot simply be seen as an extension of the south. The northern regions of the world's northern jurisdictions, including Ontario, appear to have more in common with each other – in geography, demographics, climate and economic structure – than with the southern parts of their respective regions.

There are several other reasons for examining Northern Ontario through the lens of other global experiences. They include:

- Climate change, as a global phenomenon, is one of the most important issues facing Northern Ontario – it knows no boundaries.
- Issues connected with Aboriginal peoples are evident in all northern regions except Iceland.
- Economic performance in the northern regions of other provinces and countries varies widely and many of the comparisons do not work to the advantage of Northern Ontario – as such, there is much we can learn from others.
- Political leaders, including Leona Aglukkaq, Canada's Minister of the Environment, feel that greater international cooperation on northern issues is important. Ms. Aglukkaq made this argument even while acknowledging that there is extensive collaboration among northern jurisdictions (McCarthy, 2014).

This paper begins with an introduction. The second section is a statistical analysis of Northern Ontario's population and economic performance in relation to the other northern jurisdictions. The third section is a survey of selected sectors and issues in other northern jurisdictions, particularly those outside Canada, that are of special significance to the north. This analysis is limited to Aboriginal issues, goods-producing sectors and tourism.

The final section is a series of recommendations and comments for how northerners and policy-makers should view and understand Northern Ontario moving forward. These recommendations are derived from the experiences of other northern jurisdictions, principally those outside Canada.

Much remains to be done in terms of other social issues and service sectors such as finance, the retail sector and public administration. The differing situations of women in northern jurisdictions, particularly relating to economic opportunity or the lack of it, is important and should be studied in detail.

While the paper focuses on northern regions, it is clear that influences from other countries around the globe will be important as well. China's economic resurgence and India's technological capabilities will have at least as much influence on life in Northern Ontario as local and provincial policies aimed toward the north.

Due to the importance of these issues, this paper should be regarded as an introduction, designed to demonstrate the relevance of other jurisdictions to Northern Ontario.

¹ The region of Northern Ontario, as defined here, encompasses all of Ontario north of Parry Sound and from the Quebec border to the border of Manitoba. This definition of Northern Ontario is used by the Ontario Government, the Northern Minister's Forum, and international organizations and researchers from other countries.

Statistical Comparisons

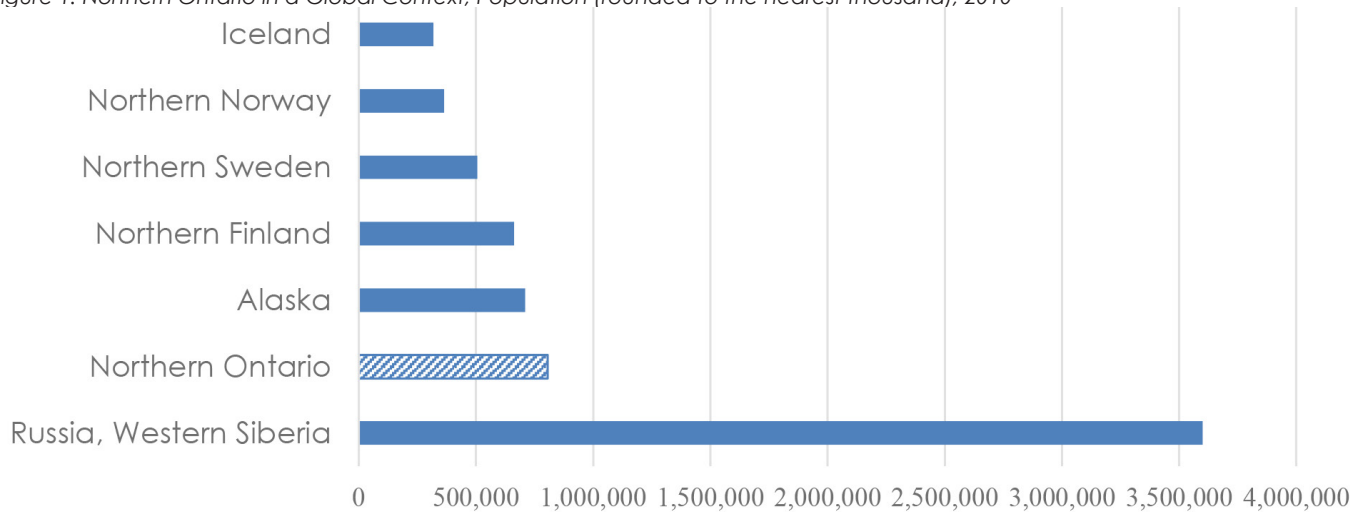
Statistical comparisons involving Northern Ontario are difficult for several reasons. First, it is a sub-region of a province, not a standalone jurisdiction. As such, data is much more accessible for Nova Scotia than for Northern Ontario, even though they have similar populations. Second, the comparison deals

with different countries with different data points for statistical studies as well as institutions and cultures that vary greatly.

ArcticStat Socioeconomic Circumpolar Database (2014) reports that from 2008 to 2010, the populations of the northern regions of Norway, Finland and Sweden were stable. It also reports that the western regions of Siberia have experienced sharp declines in recent decades.

Northern Ontario is the second largest northern jurisdiction in the world in population terms

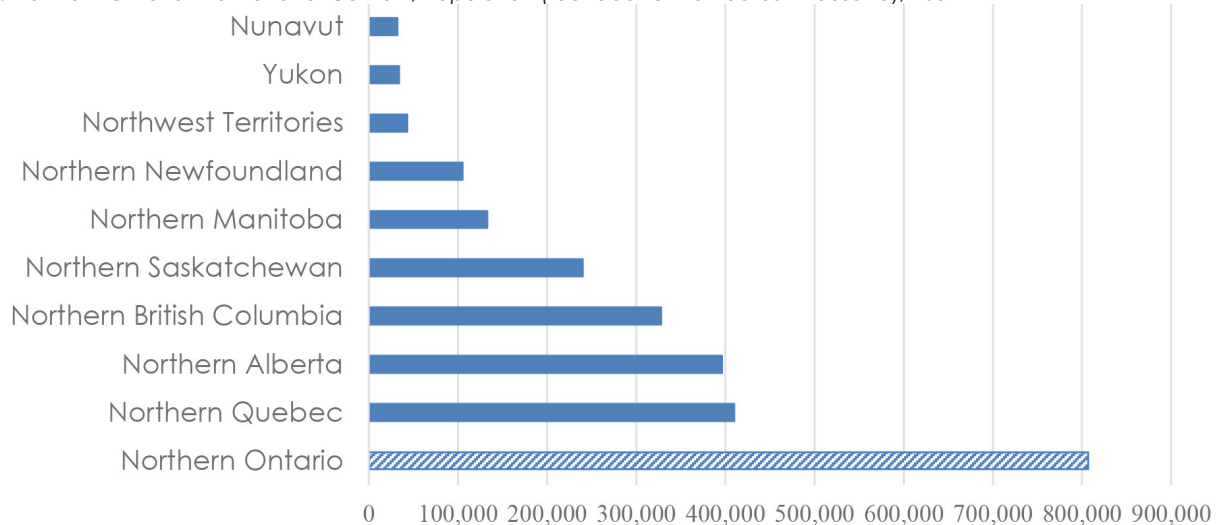
Figure 1. Northern Ontario in a Global Context, Population (rounded to the nearest thousand), 2010



Source: Barents Euro-Arctic Council (2015); U.S. Census Bureau (2014); Ministry of Finance (2011); Statistics Iceland (2014)

Northern Ontario is also very large in relation to the northern regions of other provinces

Figure 2. Northern Ontario in a National Context, Population (rounded to the nearest thousand), 2009



Source: Palladini (2011)

The population of Northern Ontario has been shrinking

Table 1. Comparative Population Growth, 1999 to 2012

Global Jurisdictions	1999	2012	% Change
Alaska	622,000	730,000	17
Iceland	279,000	318,000	14
Northern Ontario	834,000	803,000	-3.7
Canadian Regions	1999	2009	% Change
Northern AB	327,000	396,000	21.1
Nunavut	27,000	32,000	18.5
Yukon	31,000	34,000	9.7
Northwest Territories	41,000	43,000	4.9
Northern Saskatchewan	237,000	240,000	1.3
Northern Manitoba	132,000	133,000	0.8
Northern Ontario	834,000	807,000	-3.2
Northern Quebec	429,000	410,000	-4.4
Northern British Columbia	350,000	328,000	-6.3
Northern Newfoundland	115,000	105,000	-8.7

Source: Statistics Canada, CANSIM table 051-0001, Estimates of Population; Palladini (2011)

Northern Ontario's population is expected to be stable or decline slightly in the future

Table 2. Projected Population Growth, 2012 to 2036

Northern Regions and Jurisdictions	2012	2036	% Change
	Absolute Population Growth		
Iceland (medium projection)	319,975	393,291	22.9
Yukon (M3 projection)	36,200	44,200	22.1
Alaska (baseline projection)	732,298	891,446	21.7
Northwest Territories (M3 Projection)	43,600	52,400	20.2
Nunavut (M3 projection)	34,700	39,700	14.4
Norway (Tromso, 2010-2030)	156,000	166,000	6.4
Northwest Ontario	241,000	250,500	3.9
Norway (Nordland, 2010-2030)	238,000	245,000	2.9
Northern Ontario	803,200	807,100	0.5
Northeast Ontario	562,200	556,600	-1.0
	Relative Population Growth		
NE Ontario as % of Ontario	6.2	3.2	-
NW Ontario as % of Ontario	2.6	1.4	-

Source: Ministry of Finance (2013); Statistics Canada (2010); U.S. Census Bureau (2014); Statistics Iceland (2014), Statistics Norway (2014).

Data limitations and institutional differences in countries make comparisons of sector employment patterns in different countries very difficult. However, Iceland's public expenditure and employment patterns show both important similarities and important differences.

Alaska is not a good comparator for Northern Ontario because of the scale of its dependence on the US federal government. The US government employs a remarkable 35% of all employed people in the state and runs a massive fiscal deficit with it. As Goldsmith (2008) states: "About one third of the jobs and income

in Alaska can be traced, directly or indirectly, to all types of federal spending. The \$9.25 billion in federal spending in Alaska in 2006 consisted of more than \$3 billion for defence and \$6.25 billion for activities not related to defence" (p. 2). These expenditures are remarkable for a population of 700,000.

Norway, Sweden and Finland, all of which could be considered as entirely northern jurisdictions, have the largest public sectors in the OECD. Large public sectors appear to be a common feature of all northern regional economies.²

Northern Ontario has been growing more slowly than other northern regions in Canada

Table 3. Economic Activity (GDP) in Canada's Northern Regions, 1999 to 2009

Regions	1999	2009	% Change
	2002 dollars, millions		
Northwest Territories	2,080	3,094	48.8
Nunavut	751	1,067	42.1
Northern Newfoundland	2,549	3,574	40.2
Yukon	1,107	1,492	34.8
Northern Alberta	16,488	20,230	22.7
Northern Saskatchewan	6,688	7,586	13.4
Northern British Columbia	11,309	11,717	3.6
Northern Manitoba	2,389	2,391	0.1
Northern Quebec	11,417	11,001	-3.6
Northern Ontario	24,216	22,670	-6.4

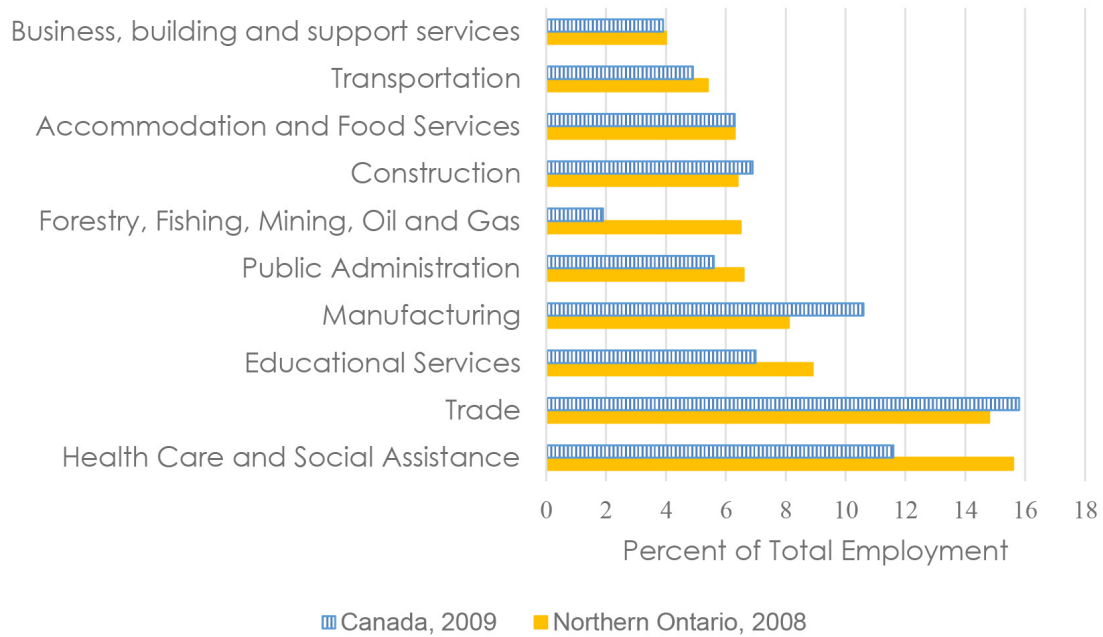
Source: Palladini (2011)

2 Sources: Statistics Canada, CANSIM Table 282-0008, Labour Force Survey estimates (LFS); Statistics Canada, Census of Canada, 2006; Southcott (2008); State of Alaska (2014); OECD (2014).

Northern Ontario, like most other northern jurisdictions, has a large proportion of employment in the public sector

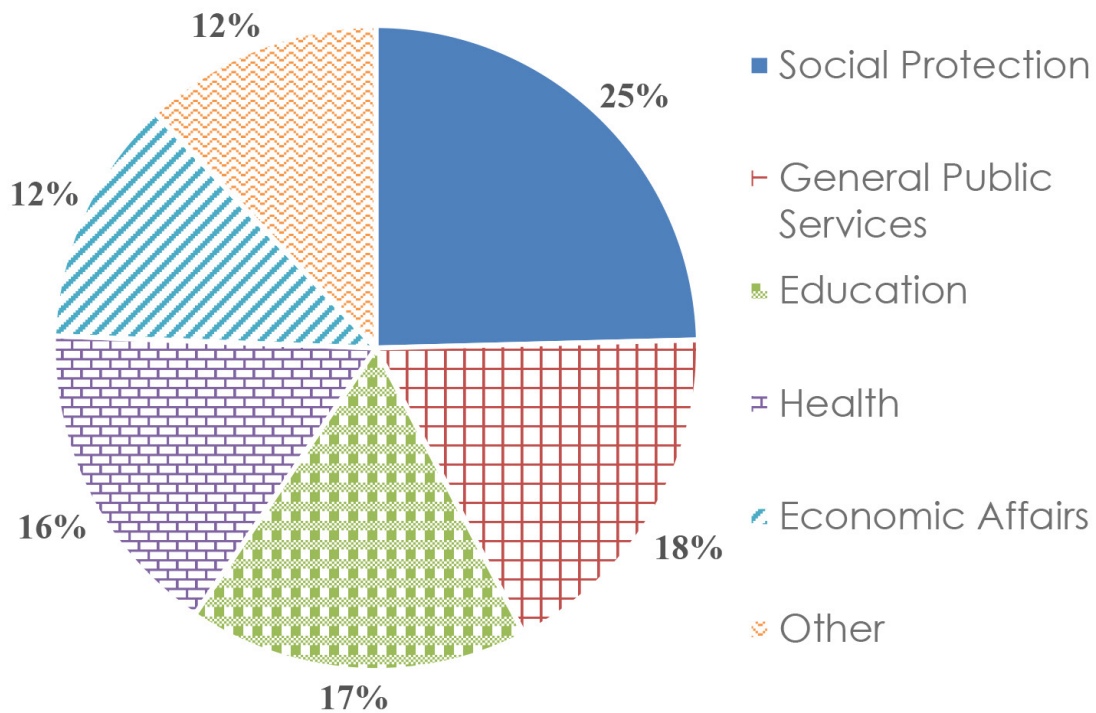
It can readily be seen that three of Northern Ontario's five largest industries are in the public sector and that each of these is substantially larger than the corresponding share of employment by sector for Canada as a whole.

Figure 3. Employment by Industry, 10 largest industries in Northern Ontario, 2008-2009



Source: Palladini (2011)

Figure 4. Distribution of Government Expenditures in Iceland, 2011



Source: OECD (2013)

Policy Issues

Specific policy areas and issues are important as well as overall performance. Other northern jurisdictions may manage social and economic issues in ways that have lessons for Northern Ontario. This section reviews policy issues relating to Aboriginal people, forestry and the environment, mining, manufacturing, tourism and agriculture.

Aboriginal People

The issues relating to aboriginal people in other northern jurisdictions are in many respects similar to our own despite very different political and historical situations. Aside from other Canadian provinces and territories, the areas with the largest aboriginal populations are Siberia, Alaska and Scandinavia.

Siberia has an aboriginal population of 650,000 comprised of many different ethnic groups with distinct cultural identities. Their issues were described by Poelzer and Fondahl (1997) as follows:

For decades, indigenous peoples of the Russian North have suffered the same host of problems which plague indigenous people worldwide: high infant mortality rates, low life expectancy, high homicide rates, suicide and substance abuse problems and erosion of linguistic and cultural traditions. Among the 26 northern aboriginal peoples officially recognized by the soviet state, seven groups decreased in absolute numbers between 1970 and 1989....

The 1960s and early 1970s witnessed the closure of so-called futureless indigenous villages, forced relocation of native populations into larger, often multi-ethnic settlements (where leadership was often non-native), an increase in the removal of children from their families for residential school based education, and heightened state interference in traditional economic activities.... Such challenges to cultural persistence contributed to acute social pathologies, evidenced by an indigenous life expectancy 20 years short of the relatively low Russian average.

There is some evidence of positive changes, including broader participation in international organizations by Siberian indigenous people and increased focus on aboriginal issues by the Russian Federation, but many of the legacy problems, including environmental degradation in northern regions, remain.

About 80,000 Samis, the aboriginal people of Scandinavia, live in Norway, Sweden, Finland, and around the Kola Inlet in western Siberia, with more than half living in Norway.

Much of the Sami history is familiar – children have been separated from their families to attend residential boarding schools and native languages have sometimes been forbidden. However, there is evidence of major improvements in recent decades.

In Norway, the Sami Parliament has significant authority even though Sami people are largely integrated into the economic life of their country. Although few Sami people live in traditional ways today, there remains much interest in the Sami culture. Sweden and Finland also have elected Sami agencies or parliaments.³

The Sami experience merits close study in Northern Ontario. The Sami have shared in the economic prosperity of Scandinavia in recent years but may have lost some of their identity and language in the process, despite major efforts at preservation. There is much Northern Ontario might learn from Scandinavia in terms of Aboriginal development.

In regards to the prevalence of the many social problems evident in other global aboriginal populations, they are either much less evident for the Sami people or are not present at all. Per Sjolander (2011) notes that:

In comparison with the other indigenous people of the circumpolar north, the health and living conditions of the Sami people are exceptionally good. For instance, there are no evidences of low life expectancy, of significantly elevated incidences of common diseases, or of increased prevalence of alcohol and substance abuse.... the health conditions of the Sami population appears to be similar to the general Swedish population.

This pattern is evident across Scandinavia. Life expectancy of the Sami people as a whole, for example, is similar to the life expectancy of other citizens. In global terms, this convergence is very rare (Sjolander, 2011). In Canada, life expectancy for Aboriginal people is significantly lower than for the population as a whole (Health Canada, 2011).

Current data suggests that life expectancy and incomes for indigenous Alaskans are lower than for other Alaskans, while the prevalence of fetal alcohol syndrome and unemployment are much higher (State of Alaska, 2014; US Census Bureau, 2014). Additionally, suicide rates for indigenous people in Alaska in 2005 were more than double those of the state population as a whole (Alaska Department of Health and Social Services, 2012). These statistics shed light on some of the general living and social conditions prevalent for indigenous people in Alaska.

3 The facts presented in this paragraph are retrieved from: Benko (2011); Borgos (n.d.); and Northern Norway (n.d.).

Twenty years ago, the Alaska Natives Commission (1994), mandated by the US Congress, described issues relating to aboriginal people as follows:

Whatever words are chosen to depict the situation of Alaska's native people, there can be little doubt that an entire population is at risk. At risk of becoming permanently imprisoned in America's underclass, mired in both the physical and spiritual poverty that accompany such social standing. At risk of leading lives, generation to generation, characterized by violence, alcohol abuse and cycles of personal and social destruction.... and at risk, inevitably, of permanently losing the capacity to self-govern.

This state of affairs does not seem to be attributable to a lack of attention by policymakers. Many initiatives exist.

There are several conclusions to be drawn from this brief summary from other jurisdictions. First, getting Aboriginal issues right is a challenge in Northern Ontario and in all northern jurisdictions with aboriginal populations. This is a global issue. Second, the fact that the challenges are global in nature suggests that the search for solutions to endemic problems and for new opportunities should draw on as much experience as possible and be as broad as possible. That means the search must include the experiences of other countries. Third, judging from the track record, Northern Ontario does not have much to learn from the Alaskan and Siberian experiences but we should not ignore them. Instead, Northern Ontario should study closely the experiences of the Sami people in Scandinavia and establish the close linkages necessary to do so. Lastly, the fact that Aboriginal issues and economic development issues are related in all regions needs to be emphasized at all times and in all circumstances in Northern Ontario.

Forestry and Management of the Environment

There are similar perspectives on forestry and the northern environment in northern jurisdictions. The two are closely linked in Northern Ontario because the dominant features of the northern landscape in the region are the forests.

The fragility and the importance of the northern environment is a focus of governments in all the world's northern regions, who all understand the importance of climate change in the north. Governments in Canada, the United States and Scandinavia anticipate massive changes over the next hundred years.

One recent American study estimates that the boreal forest in Alberta will move north by 100 miles in this century (Koven, 2013). Specific figures are not available for any particular Northern Ontario location but the movement of the forest to the north in most northern regions of Ontario appears to be on a similar scale.

While most of the changes will be very negative, some new opportunities may exist as some species move north, more land suitable for agriculture opens up, and the composition of the forests change.

Iceland may be in an unusual position. Its Prime Minister recently said that "great opportunities are opening up in the north in regard to shipping routes, in regard to oil and gas production and other raw materials and not least in regard to food production," (Terradaily, 2014) which he attributes to climate change.

The United States government provided a particularly useful summary of the impact of climate change on Alaska, focussing on the impact of thawing permafrost on transportation, forests, ecosystems, the economy and aboriginal peoples (United States Environmental Protection Agency, 2013).

This recognition, including recognition of the unique nature, scale and significance of the Hudson Bay lowlands, reinforces the activities underway in the Ministry of Northern Development and Mines and the Ministry of Natural Resources and Forestry to manage the northern environment and to deal with resource management issues of particular significance for Aboriginal people.

Dealing with climate change in general is at the top of the priority list or near it for all of the world's northern jurisdictions. The forest, as noted, is of particular importance in relation to economic development in Northern Ontario. In its report, entitled *The Canadian Forest Sector: Past, Present and Future*, the Canadian Standing Senate Committee on Agriculture and Forestry described an industry facing multiple crises separate from climate change.



The report presented data showing long term declines in sales of virtually all Canadian lumber products including newsprint, pulp, softwood lumber and hardwood lumber. It concluded that “even before the economic crisis, the forestry industry was seen (by lenders) as an industry in crisis” (Parliament of Canada, 2009, p. 18).

The outlook for other global regions is different. The Food and Agriculture Organization (FAO, 2010) indicates that the overall future for the forest sector in the sub-region (northern Europe) is good.

Perhaps the most comprehensive overall assessments of global forest trends are FAO's Global Forest Resources Assessment reports. Most recently, it concluded that traditional forest industries are facing a challenging future and may not have the same economic significance in the future as in the past (FAO, 2010).

There are also management risks to the forestry community associated with climate change, aside from the general problems noted earlier. The Northern Development Minister's Forum (2010), reflecting on experiences in all northern regions of Canada, describe these risks as including:

- increased costs of managing the forest;
- reductions in the quantity and quality of wood fibre supply (with Northwestern Ontario being particularly vulnerable);
- changes in species composition that make adaptation difficult; and
- increased demand for green products, which again make adaptation challenging.

The Forum's 2010 report on climate change and best management practices in the boreal forest describes these issues in detail and highlights the actions taken by other jurisdictions in Canada on these key forestry issues as well as those taken by Ontario.

There may, however, be important opportunities that extend from these forestry issues as well. As *The Economist* (2014) noted in an article about rainforest in equatorial regions, the central problem facing forestry and environment policy makers is that “trees are usually worth more dead than alive.” This is likely to change as more and more policy makers and the public recognize that forests are vitally important storehouses of carbon. Trees will become more valuable alive than dead, particularly if carbon sequestration through reforestation becomes more widespread.

While carbon sequestration through reforestation is challenging, there is growing pressure for more of it and other activities to reduce the impact of climate change. China, for example, recently announced that a nationwide cap-and-trade program will be

implemented as early as 2016 (West, 2014).

There is widespread recognition in northern regions of the need for fundamental change in forest management as a result of climate change in other countries and jurisdictions (FAO, 2010). The Ontario Ministry of Natural Resources (2008) has a particularly interesting perspective on forest management opportunities related to climate change. It notes that:

Sustainable forest management that maintains forest carbon stocks and provides a sustained yield of wood products provides the best long term mitigation strategy for forests. Wood products from forests store carbon (as do the trees), but we can also reduce greenhouse gas emissions from fossil fuels by using wood as an alternative energy source....

Solid wood products have considerably lower energy intensity than building materials such as steel, aluminum, brick and concrete, therefore using wood in place of other such materials reduces emissions of greenhouse gases and is an indirect way that forests can contribute to mitigating climate change. (p. i)

It may be possible to develop business plans that generate revenue from using the standing forest to generate carbon offsets. Preliminary work on this possibility has been done in Manitoba and it should be fully explored in Ontario (Wells, Childs, Smith, Siegers, & Badiou, 2014).

Activities in all northern jurisdictions suggest that a different perspective towards the forests in Northern Ontario may be appropriate. The forests could be more important for mitigating global warming, tourism and environmental stewardship than as a source of fibre. The unsettling trends in markets for forest products that generate fibre can be expected to continue while pressure to deal with climate change will grow (Keenan, Parkinson & Jang, 2014).

There is not unanimity on this point. Some observers in other countries feel that large scale increases in forest cover could make global warming even more severe (Unger, 2014). However, this appears to be a minority view.

Mining

Mining and Northern Ontario are almost synonymous, at least from an historical perspective. Less well known is the vital role the northern mining industry plays in supporting Toronto's position as a global financial center and the global capital of mining finance. The Toronto Stock Exchange currently accounts for around 90% of world mining financings and 73% of the total equity raised.

Mining is a vital contributor to Ontario's wealth in other ways as well. For example, one base metal mine in Ontario which directly employs 480 people creates nearly 5 times as many indirect and induced jobs in supply and service and retail sectors (Ontario Mining Association, 2012).

The Ring of Fire development is an important harbinger of the future in Ontario's mining sector, although its impact may not be felt for several years. Northern Policy Institute recently released a report describing many of the issues and questions that need to be addressed before development of the Ring of Fire can proceed (Mulder, 2014).

Mining is proportionately as important in Alaska as in Ontario. Norway, Finland, Sweden and Greenland also have strong mining industries and they are strong competitors: "mining investment is going from strength to strength in these jurisdictions, helped by the favourable legal frameworks (in these countries)... with demand for iron ore and other minerals continuing to increase, mining interest in the Nordic countries shows no signs of slowing down" (Speight & Shabazz, 2013).

Data from other jurisdictions suggests that there are shadows on Ontario's mining landscape. Every year, the Fraser Institute conducts an extensive and much watched survey of global mining executives. In the latest survey, Ontario ranked 28th among the friendliest mining jurisdictions of the world in the survey (Wilson, McMahon, & Cervantes, 2013). By most standards, Ontario was well down the list of Canadian jurisdictions and was also eclipsed by the Scandinavian countries in many key indicators. Ontario's relative underperformance in the survey is not a crisis but it is significant enough to be unsettling.

This relative underperformance is not necessarily a matter of excessive land use regulation and excessively tough environmental standards. The Scandinavian countries are very highly ranked despite their strong regulatory institutions and policies. The problem may

be the administration, interpretation and enforcement of existing regulations. In this key indicator, Ontario is eclipsed by several other provinces but it does well in relation to many other jurisdictions around the world.

Ontario cannot afford missteps in mining because of problems elsewhere in its economy and because of the scale and strategic significance of the industry. The province should strive to perform at least as well as leading Canadian provinces and Scandinavia. A top five overall position in the Fraser Institute survey within five years would be a reasonable goal. If achieved, the competitive positions of both Northern Ontario and Toronto would be significantly enhanced.

Manufacturing

Manufacturing in most northern jurisdictions shares one fundamental characteristic; it is, in general, closely linked to the primary sectors that are important to all northern economic regions.

Iceland and Alaska are good examples of this characteristic. Manufacturing in Iceland accounted for 11% of all economic output in 2005. Principal products include fishing equipment and woolen goods. More recently, aluminum smelting has become a major part of the Icelandic economy driven by low cost hydroelectric power, and a small but thriving IT sector has emerged (Sigurjónsson, 2011).

In Alaska, manufacturing accounted for 4% of total state economic output. Most of this was concentrated in seafood preparation and packaging (National

Association of Manufacturers, 2010). In Canada's northern regions, manufacturing accounts for about 8% of all output (Palladini, 2011).

Manufacturing in Norway, Sweden and Finland can be viewed from two different perspectives. The first is to view all three countries as northern jurisdictions, not just their northern territories. This may be appropriate given their latitudes and geographic separation from the rest of Europe. Viewed from this perspective, all three countries have broken from the model prevalent in other northern jurisdictions and are successful global manufacturing competitors by most standards.

Finland's industrial success merits, even with current serious problems, particularly close study by all who are interested in Northern Ontario's future.⁴ The same is true with Sweden. One analysis of Sweden's

"Mining and Northern Ontario are almost synonymous, at least from a historical perspective. Less well known is the vital role the northern mining industry plays in supporting Toronto's position as a global financial center and the global capital of mining finance."

⁴ For a more detailed statistical analysis on Finland see the "Country Statistical Profile for Finland" on the OECD iLibrary.

industrial achievements over many years suggests that its success is due to “an international attitude in a small open economy (that) fosters transformation and adaptation of human skills to new circumstances” (Schön, 2008).

If one considers only the northern regions of these countries, then they conform much more closely to the models found in other northern jurisdictions – relatively small manufacturing sectors that are closely linked to primary industries.

The most important component of Northern Ontario's manufacturing sector is mining equipment, including mining equipment manufacturing, customization of wheeled and tracked vehicles and equipment repair and rebuild. It is beyond the scope of this paper to examine the industry in detail, but a few trends stand out (Doyletech Corporation, 2010):

- the sector is domestically oriented;
- productivity is high;
- small scale is an issue; and
- to grow, the industry will have to globalize.

The mining sector is almost certainly the best bet for Northern Ontario to grow in manufacturing. This will allow the region to break with the pattern seen in all northern regions of northern countries where the small scale of manufacturing relative to the size of regional economies is evident.

Tourism

This paper is largely limited to the exploration of goods-producing sectors to demonstrate the relevance of developments in these sectors to Northern Ontario. However, tourism is a hybrid: it is a service sector, but it is, in a significant way, also an export sector.

Tourism is a growth industry in much of the developed world including other northern regions. Over the past five years visitor volume increased by 7 percent in Alaska and by 14 percent in Norway. Over the same period, the number of visitors coming to Iceland increased by a remarkable 34 percent even though visitor volume in two of these years declined slightly due to the financial collapse experienced by Iceland that affected all parts of its economy.⁵

Comparable data on the number of people visiting Northern Ontario is, in many respects, lacking because Northern Ontario is a sub-region of a province and not a standalone jurisdiction.

However, performance in the industry is deficient relative to these jurisdictions. A recent tourism report produced by the Government of Ontario (2012) notes the following:

- interest in travelling to Northern Ontario has stagnated;
- there is no evidence of image improvement to encourage people to visit Northern Ontario; and
- there is little awareness of Northern Ontario's differentiating features.

Overall, the stronger tourism industry performance in some other jurisdictions, relative to Northern Ontario's performance, suggests that a full review of tourism in all other northern jurisdictions is warranted. Iceland should be the starting point for this review.

While Iceland has unique features such as the Blue Lagoon, active volcanoes and great scenic beauty, it also overcame serious obstacles: a cool, cloudy climate, arctic darkness for much of the year, financial catastrophe and isolation.

Iceland's competitive fundamentals seem to be no better than Northern Ontario in terms of natural advantages and disadvantages. Anecdotally,⁶ Iceland's tourism industry may be appealing for reasons revolving around infrastructure, transportation and connectivity:

- Its infrastructure is excellent in all parts of the country.
- Transportation is highly developed with excellent bus service.
- There are no issues with internet access, with connectivity on public transit.
- All possible steps have been taken to increase visits by cruise ships.
- Each village is a tourist center itself, with linked attractions and facilities. These villages have their own distinct themes such as waterfalls and glaciers.

As noted, tourism is a growth industry, often in places and regions where growth would not seem likely. Given Northern Ontario's weak performance in this sector, the experiences of other regions, particularly Iceland and the other Scandinavian countries, should be reviewed in detail. This is likely an essential precursor to more extensive and more creative efforts to encourage the tourism industry in Northern Ontario.

5 The facts presented in this paragraph are retrieved from: Innovation Norway (2013); McDowell Group (2014); and Icelandic Tourist Board (2013).

6 The following reasons are merely observations from two Canadian tourists who visited Iceland in the Spring of 2014 and who agreed to serve as interview subjects for this paper.

Agriculture

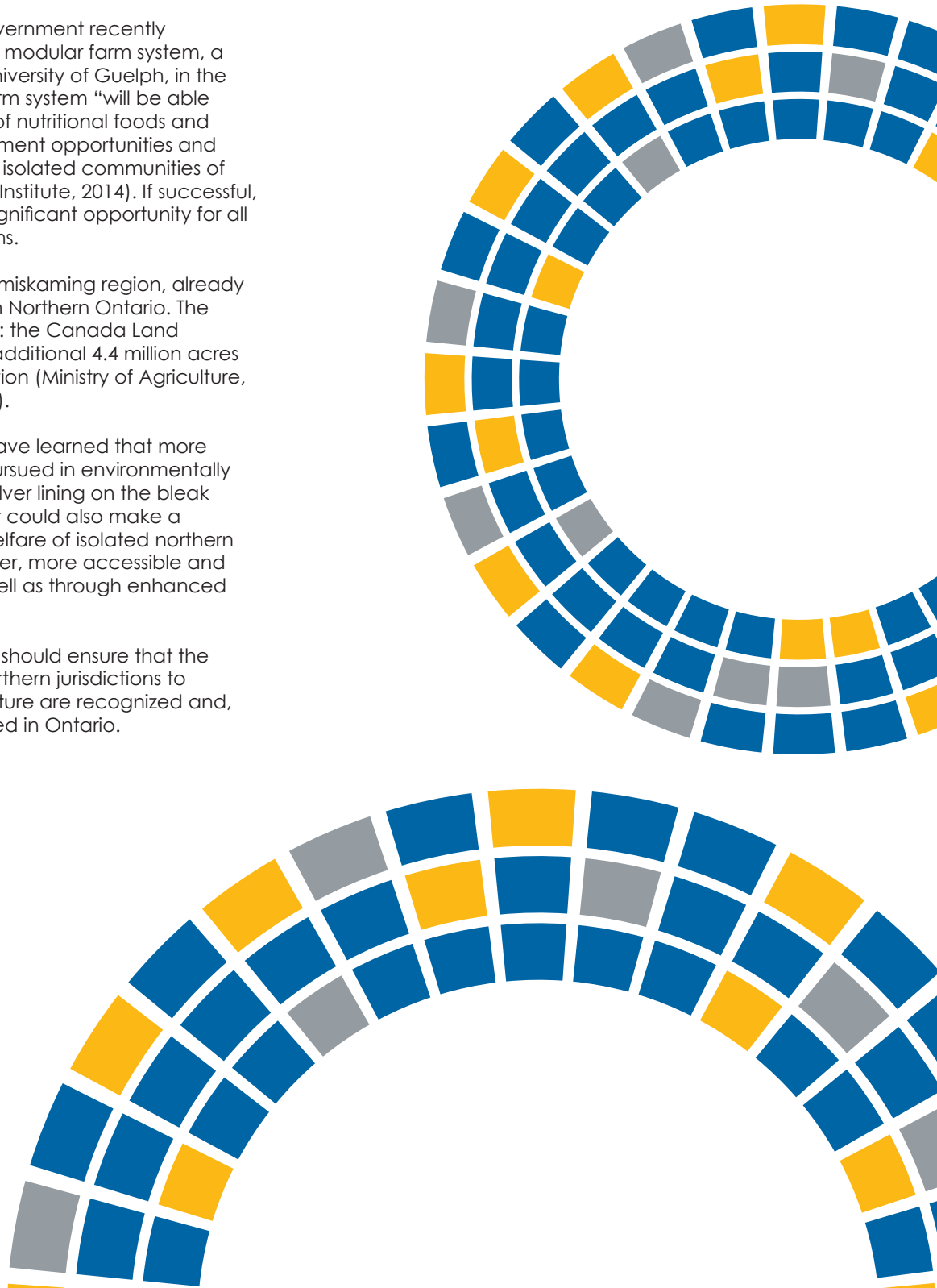
Agriculture is not top of mind for most people when they think of Northern Ontario. However, the Ontario Ministry of Agriculture, Food and Rural Affairs (2014) notes that global warming has already had a significant impact. It states, for example, that annual crop heat units in Earlton have grown from 1800 to 2300 over the past thirty years.

Additionally, the federal government recently announced a new scalable modular farm system, a facility developed by the University of Guelph, in the Northwest Territories. The farm system "will be able to grow a full complement of nutritional foods and provide economic development opportunities and food security in remote and isolated communities of the NWT" (Aurora Research Institute, 2014). If successful, this project would present significant opportunity for all of Canada's northern regions.

Agriculture, largely in the Temiskaming region, already has a significant presence in Northern Ontario. The potential for more is present: the Canada Land Inventory has identified an additional 4.4 million acres as being suitable for cultivation (Ministry of Agriculture, Food and Rural Affairs, 2014).

Most northern jurisdictions have learned that more agricultural production, if pursued in environmentally sensitive ways, could be a silver lining on the bleak cloud of climate warming. It could also make a major contribution to the welfare of isolated northern communities through cheaper, more accessible and healthier food options, as well as through enhanced employment opportunities.

Leaders in Northern Ontario should ensure that the extensive efforts of other northern jurisdictions to encourage northern agriculture are recognized and, where appropriate, emulated in Ontario.



Recommendations

The research supporting this paper suggests that a new perspective from which citizens and policy-makers view Northern Ontario is warranted and necessary for the region's future prosperity.

The region's current performance is deficient relative to others but technology is reducing the geographical barriers that have been so challenging for so long. Fortunately, however, there are many lessons to be learned from others to help improve the region's economic performance and offset problems stemming from geography.

Looking out should be as important as looking in. Competing more effectively with other northern regions and playing a role in Ontario, Canada, and the world that corresponds to the size of Northern Ontario on the national and global stages should be the goals.

The following 10 recommendations and comments are proposed as the new lens from which we should view and understand Northern Ontario, its challenges and its opportunities.

First, the northern jurisdictions from which we probably have the most to learn – Iceland, Norway, Sweden and Finland – are all relatively cohesive societies. Their citizens seem to work together and also work well with others. From this perspective, the tensions that are sometimes apparent between Northeastern Ontario and Northwestern Ontario have no place and every effort should be made to reduce them. This is also true with respect to the alienation on fiscal issues that some in Northern Ontario may feel toward the south since these feelings are entirely ill-informed. No evidence-based study exists that would illuminate this problem. Failure to collaborate and feelings of alienation are distractions from the central task of competing more successfully with other northern Canadian and foreign regions.

Second, while much good work has been done on other jurisdictions by some individuals, debate on economic issues in Northern Ontario has been an insular one – it has not drawn sufficiently on the experiences of others. This is particularly apparent in some key government studies where other national experiences are seldom mentioned, if they are mentioned at all. The future of the region will be shaped to a significant degree by global forces and experiences. It should spend as much time looking out

as it does looking in. It is likely that China's resurgence and India's technological prowess will have at least as much impact on life in Northern Ontario as local issues.

Third, debate on economic and financial issues in Northern Ontario is inhibited by a serious lack of statistical data for the region. To correct this, the provincial government should contract Statistics Canada to produce for Northern Ontario a set of economic accounts and other information comparable to the information currently provided for Ontario and each of the other provinces. It would be hard to overestimate the importance of this matter. In his pioneering work, *Capital in the Twenty-First Century*, Thomas Piketty (2014) notes that "national (or regional) accounts represent the only consistent, systematic

attempt to analyze a country's (or a region's) economic activity.... national (or regional) accounts are an indispensable tool" (p. 58-59).

Fourth, there is reason to be concerned about Northern Ontario's economic future. For many years, it has grown more slowly than the northern regions of all other provinces. While slower relative growth is linked to the nature of the resource base elsewhere (Alberta, Norway and Alaska have oil, while Iceland has remarkable hydro-electric capacity), it is unlikely to be attributable entirely to this factor.

Fifth, Northern Ontario has more in common with other northern jurisdictions in Canada and elsewhere than it does with Southern Ontario. Benchmarking and comparisons should reflect this but generally do not. Comparisons between Northern and Southern Ontario, in

particular, are virtually meaningless because of the disparity in population between these regions and the fundamental differences in geography and industrial structure between them.

Sixth, Northern Ontario, is the second largest northern region in the world in terms of population. It has eight times the population of the three territories taken together. Its future is a matter of national and global significance, not only in human terms but in relation to the environment. Northern Ontario merits a much higher profile on the national and global stages for these reasons. Major efforts are needed to ensure more focused attention to the region but future policies need to be market-based solutions rather than subsidy regimes of the type that have done so much damage to Atlantic Canada, Manitoba and to a lesser extent Quebec (McMahon, 2000; West, 2013).

"It is time for a major course change in Northern Ontario. The experiences of other northern regions can help illuminate the path forward. Greater understanding of the local impact of global forces will help as well."

Seventh, while the primary industries are critically important for Northern Ontario, they are not as large as many would assume (6.5% of total employment). For this reason, economic strategy based exclusively on primary industries will not be sufficient for the future. This has been the experience of many other northern jurisdictions. The decline in global commodity prices evident in recent months illustrates, as few recent developments have, the importance of viewing the resource economy as a bridge to a broader, more stable economy rather than an end state in itself. It is no accident that most of the world's richest countries are resource poor, a fact that Northerners need to ponder very carefully.

Eighth, Ontario could take an important step by developing good linkages with the northern regions of other countries and devoting increased attention to the Arctic Council and other similar organizations. It may be appropriate to establish a consular office in Scandinavia, or contract with the Department of Foreign Affairs, to ensure that Ontario learns everything it can from Scandinavian experiences. They seem especially relevant to life in Northern Ontario. Aboriginal organizations and others should pay particular attention to the aboriginal people of Scandinavia and their experiences. As noted, the Sami people appear to be the only aboriginal group in the north, and perhaps the globe, where the social and economic conditions of an aboriginal people are similar to those of the non-aboriginal population.

Ninth, business and government organizations should expand their forestry activities to develop the business models to benefit from carbon capture by the forests, something other jurisdictions are starting to do. Experience elsewhere suggests that policy-makers should view the future benefits from active management of the forests for environmental goals and tourism as at least equal in importance to traditional forestry industries.

Tenth, mining, production of mining equipment, and mining finance form a cluster of economic activity that is far more important than most realize, especially in light of the problems being experienced in Ontario's traditional manufacturing base. In particular, the province's performance in each of these relative to other jurisdictions should be continually assessed, perhaps by building on the Fraser Institute survey with its global coverage.

In summary, it is time for a major course change in Northern Ontario. The experiences of other northern regions can help illuminate the path forward. Greater understanding of the local impact of global forces will help as well. All Canadians will benefit from a stronger Northern Ontario that has learned as much as it can from the experiences of other people and other regions.

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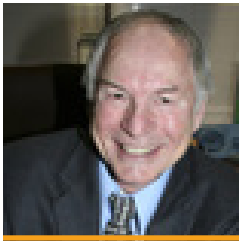
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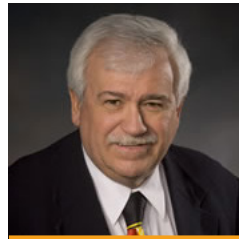
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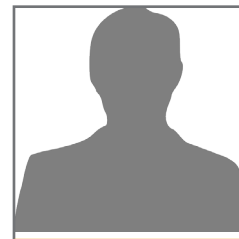
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