



The Northern Attraction Series

Exploring the Need for a Northern
Newcomer Strategy

By Christina Zefi

PART 1/4

Commentary No. 24 | October 2018 | northernpolicy.ca

NORTHERN
POLICY INSTITUTE

INSTITUT DES POLITIQUES
DU NORD

Who We Are

Some of the key players in this model, and their roles, are as follows:

Board: The Board of Directors sets strategic direction for Northern Policy Institute. Directors serve on operational committees dealing with finance, fundraising and governance, and collectively the Board holds the CEO accountable for achieving our Strategic Plan goals. The Board's principal responsibility is to protect and promote the interests, reputation, and stature of Northern Policy Institute.

President & CEO: Recommends strategic direction, develops plans and processes, and secures and allocates resources to achieve it.

Advisory Council: A group of committed individuals interested in supporting, but not directing, the work of Northern Policy Institute. Leaders in their fields, they provide advice on potential researchers or points of contact in the wider community.

Research Advisory Board: A group of academic researchers who provide guidance and input on potential research directions, potential authors, and draft studies and commentaries. They are Northern Policy Institute's formal link to the academic community.

Peer Reviewers: Ensure specific papers are factual, relevant and publishable.

Authors and Research Fellows: Provide independent expertise on specific policy areas as and when needed.

Standing engagement tools (general public, government stakeholders, community stakeholders):

Ensure Northern Policy Institute remains responsive to the community and reflects THEIR priorities and concerns in project selection.

President & CEO

Charles Cirtwill

Board of Directors

John Beaucage
Pierre Bélanger
Terry Bursey
Jean Pierre Chabot
Dr. Harley d'Entremont
(Interim Chair)
Alex Freedman
Dr. George C. Macey
(Vice-Chair)

Diana Fuller Henninger
Dawn Madahbee Leach
Dr. Heather Murchison
Louise Paquette
Emilio Rigato
Dr. Brian Tucker (Secretary)

Advisory Council

Kim Jo Bliss
Don Drummond
John Fior
Ronald Garbutt
Jean Paul Gladu
Audrey Gilbeau
Peter Goring
Frank Kallonen

Seppo Paivalainen
Allyson Pele
Ogimaa Duke Peltier
Peter Politis
Tina Sartoretto
Bill Spinney
David Thompson

Research Advisory Board

Dr. John Allison
Dr. Hugo Asselin
Dr. Randy Battocchio (Chair)
Dr. Gayle Broad
George Burton
Dr. Robert Campbell
Dr. Iain Davidson-Hunt

Dr. Livio Di Matteo
Dr. Morley Gunderson
Leata Ann Rigg
S. Brenda Small
J.D. Snyder
Dr. Lindsay Tedds

This report was made possible through the support of our partner, Northern Ontario Heritage Fund Corporation. Northern Policy Institute expresses great appreciation for their generous support but emphasizes the following: The views expressed in this commentary are those of the author and do not necessarily reflect the opinions of the Institute, its Board of Directors or its supporters. Quotation with appropriate credit is permissible.

Author's calculations are based on data available at the time of publication and are therefore subject to change.

Edited by Barry Norris.

© 2018 Northern Policy Institute
Published by Northern Policy Institute
874 Tungsten St.
Thunder Bay, Ontario P7B 6T6

ISBN: 978-1-988472-96-6

Contents

Executive Summary	4
Introduction	4
Northern Ontario Population Trends, Past and Present	5
Migration Trends	6
The Dependency Ratio and the Implications of an Aging and Declining Population	9
Countering the Decline and Exploring the Benefits of Migration	10
Conclusion	11
References	12
Related Research	14

About the Author

Christina Zefi



Christina Zefi is a Research Analyst at Northern Policy Institute. She has a degree in Sociology and Criminology from the University of Toronto as well as a Graduate Certificate in Public Administration from Humber College. Her research interests include immigration reform and policy related to Indigenous Affairs, the environment, and mental health. Prior to her role at NPI, Christina worked at TD Canada Trust as a Financial Advisor.

Executive Summary

Northern Ontario, as a collection of regions with distinctive socio-economic characteristics, is experiencing a demographic shift and a population decline. Fueled by natural aging, low fertility rates, a rising life expectancy and an increase of out-migration, the 11 northern districts require a comprehensive, coordinated and inclusive newcomer attraction and retention strategy. Northern Policy Institute is finalizing this “Northern Newcomer Strategy”, which was designed in the North and developed through regional expertise.

Since 1996, 8 out of 11 Northern Ontario districts have experienced a population decline. This is exemplified in Rainy River and Cochrane which have dropped by 13.2 and 14.5 per cent, respectively. This decline is projected to continue into 2041 based on estimates prepared by the Ontario Ministry of Finance. For reference, Ontario as a whole has grown by 25.1 per cent.

When population decline is compared alongside fertility and provincial net migration rates, the data shows that these two forms of demographic growth are insufficient to address the unique challenges in Northern Ontario. To illustrate, in 2011 Northeastern Ontario's fertility rate was 1.60 and the Northwest was 1.77, both well below the generational replacement rate of 2.1. By 2041, the per centage of seniors in the Northwest will grow to 31.3 per cent, a reflection of Canada's increasing life expectancy.

The Demographic Dependency Ratio (DDR), the ratio of the working age population to seniors and youth, is a reflection of the economic health and social sustainability of a community. While a DDR of 0.5 to 0.75 is considered stable, data shows that nearly all Northern Ontario districts will exceed this sustainability threshold by 2036; Algoma and Parry Sound district are projected to sit at 0.89 and 1.03, respectively. Unsustainable DDRs will impact the region's economic capacity through a reduction in tax revenues coming in, a greater strain on existing public expenditures, a shortage of workers, and a negative impact on future growth, savings and consumption.

Provincial net migration, which is the difference between individuals migrating into and out of a region, has been negative for both the Northeast and Northwest since 2001. In both areas, it is those aged 20-29 who are leaving. Furthermore, while both regions have experienced some positive international migration, additional coordinated support from all levels of government is required.

In short, Northern Ontario needs to attract and retain migrants who are ready and willing to work while simultaneously integrating the existing Indigenous and non-Indigenous population into the workforce. Migrants will reduce the DDR, are typically younger than the

destination population, and will benefit the workforce in terms of supporting high-skilled innovation as well as low-skilled, consistently vacant, employment positions. As well, the societal fabric of Northern Ontario will continue to grow richer.

*“Northern Ontario needs to **attract and retain migrants** who are ready and willing to work while simultaneously integrating the existing Indigenous and non-Indigenous population into the workforce”*

Introduction

Northern Ontario's population is facing a large demographic shift. Baby boomers, born in the two decades after the Second World War, are entering retirement and, as a result, the region is becoming disproportionately older because later generations are smaller in size. Other trends contributing to the demographic shift include a fertility rate that is lower than the replacement rate, rising average life expectancy, and an increase in out-migration by youth and the working-age population. These changes will affect Northern Ontario negatively in a number of ways. However, not all is lost. One solution is to encourage newcomers – immigrants and secondary migrants – to live and work in the region, and the sooner the better.

Given this need, Northern Policy Institute (NPI) is developing a Northern Newcomer Strategy, which will be the culmination of a series of commentaries that touch upon the legislative, regulatory, administrative, policy, and broader operating environment of newcomer attraction and settlement services in Northern Ontario. The purpose of this first commentary in the series is to demonstrate the need for a Northern Newcomer Strategy, beginning with an analysis of Northern Ontario's population and migration trends, including the region's dependency ratio and the implications of an aging and declining population, and illustrating the valuable benefits that the attraction of newcomers could bring.

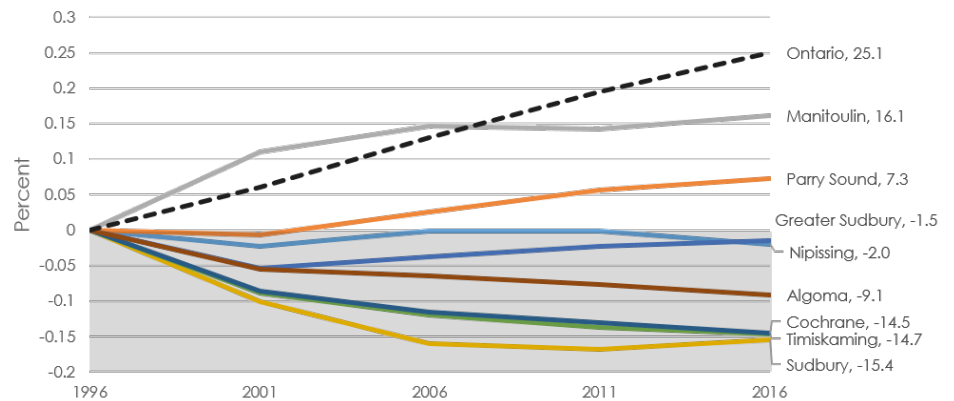
Northern Ontario Population Trends, Past and Present

In 2016, according to the census that year, Northern Ontario's population stood at 780,140, which is intriguing given its large geographical size (Statistics Canada 2017a). Indeed, with such an expansive landscape, Northern Ontario is arguably a collection of regions with varying socio-economic characteristics. To better understand the dynamics of its population, however, this analysis uses Statistics Canada's geographic breakdown of Northern Ontario into two regions: Northeast and Northwest. The Northeast consists of eight census districts:¹ Cochrane, Timiskaming, Algoma, Parry Sound, Manitoulin, Sudbury, Greater Sudbury, and Nipissing. The Northwest is made up of three census districts: Thunder Bay, Kenora, and Rainy River. Together, the eleven districts make up over half of the area of the province.

In analysing trends across these districts, one thing is clear: Northern Ontario faces a number of challenges related to population growth. Specifically, the North has a low birth rate, an aging and declining population, and low in-migration rates that have caused the population to remain stagnant. To illustrate, in 2011 Northeastern Ontario's fertility rate was 1.60, while the rate for the Northwest stood at 1.77 – well below the generational replacement rate of 2.1 (Moazzami 2015, 10). The region's aging population is illustrated by the increase in life expectancy for Canada as a whole from 71.13 in 1960 to 81.24 in 2012 (Moazzami 2015, 11).

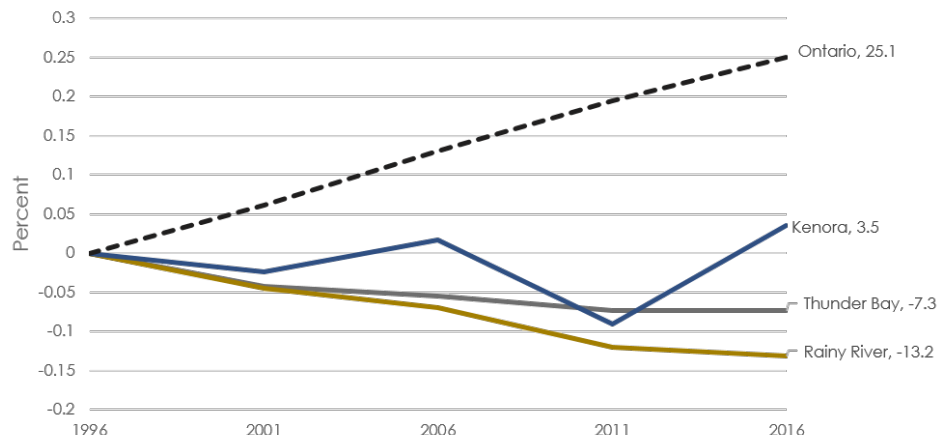
In terms of the larger population picture, as shown in Figures 1 and 2, all of Northern Ontario's districts except for Manitoulin, Parry Sound, and Kenora have experienced a large population decline over the past two decades even as the province as a whole has seen a 25.1 per cent growth in population. Moreover, this trend of population loss for Northern Ontario is projected to continue,² with the region's population expected to decline by 2 per cent from 797,000 in 2016 to 782,000 by 2041. Within the region, however, the Northeast is expected to see a 3.3 per cent decline, while the Northwest's population is projected to increase by 1.1 per cent. Northern Ontario's population is also expected to experience a large shift in its age structure, with the share of seniors in the population there becoming the highest in Canada by 2041; in the Northeast, seniors are projected to make up 31.3 per cent of the population by that time (Ontario 2017).

Figure 1: Population Change by District, Northeastern Ontario, 1996–2016



Source: Statistics Canada, Census, various years.

Figure 2: Population Change by District, Northwestern Ontario, 1996–2016



Source: Statistics Canada, Census, various years.

¹ Statistics Canada refers to the census districts described in this paper as census divisions.

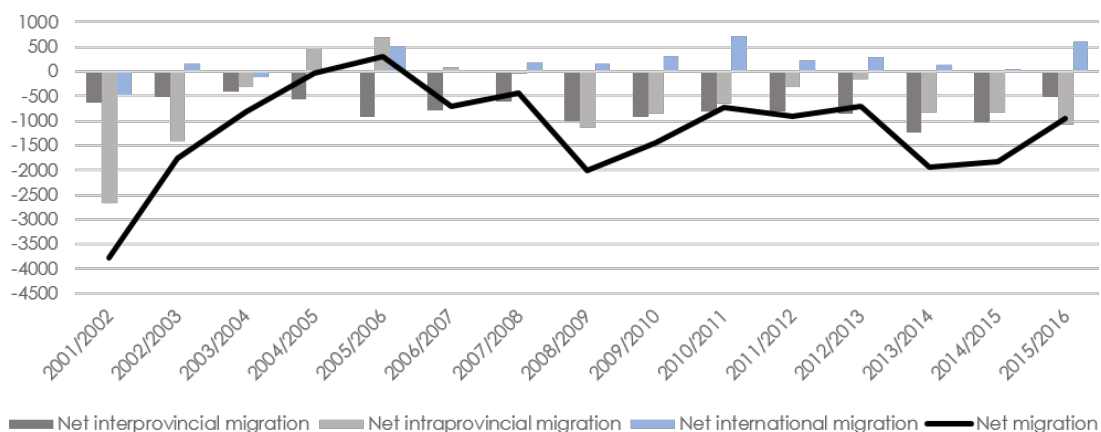
² It is noteworthy that the projection tool includes all those residing in Ontario, including the Indigenous population, which is expected to grow exponentially in Northern Ontario districts such as Kenora and Greater Sudbury (Ontario Ministry of Finance, 2017; Moazzami and Cuddy 2017a, 6; Cuddy and Moazzami 2017b, 15).

Migration Trends

Statistics Canada (2016) defines interprovincial migration as the movement of persons within Canada from a city, town, township, village, or reserve within one province or territory to another province or territory, and intraprovincial migration as persons moving from one location to another but remaining in the same province. Net migration, therefore, is the difference between in-migration (from whatever source) and out-migration in a specified area.

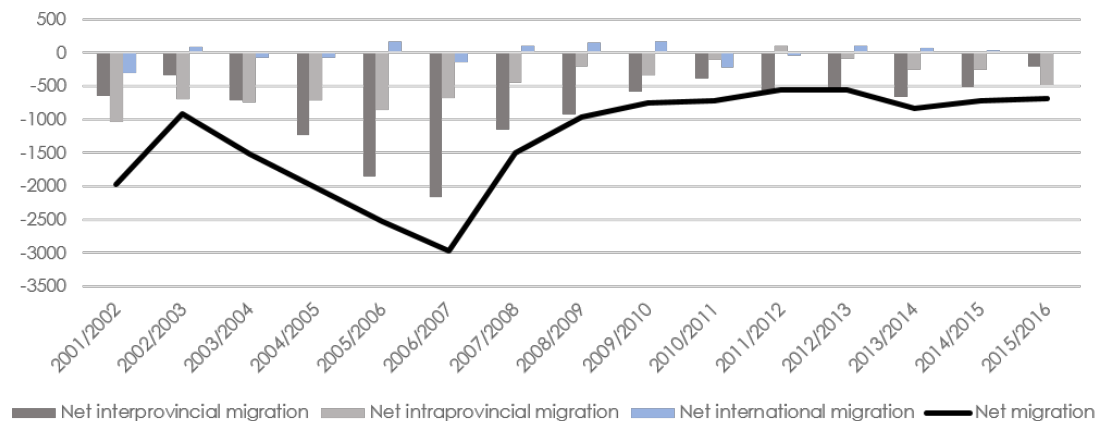
When examining net migration for Northern Ontario since 2001, it is evident that more people are leaving than are coming into the region (see Figures 3 and 4). At the same time, although both intraprovincial and interprovincial migration are negative for the whole region, international migration has been positive. Information on where these international migrants are from is unavailable, but their choice to migrate to Northern Ontario is a welcome sign. To build on this trend, the region should continue to showcase employment opportunities, economic and social supports, and a sense of community, since these are among the things newcomers tend to look for when deciding to migrate to Canada (El-Asaal and Goucher 2017, 26). Accordingly, a Northern Newcomer Strategy would help to promote this trend by giving communities the tools and resources they need to further grow their population.

Figure 3: Net Migration, Northeastern Ontario, 2001–2016



Source: Author's calculations, based on Statistics Canada (2017b).

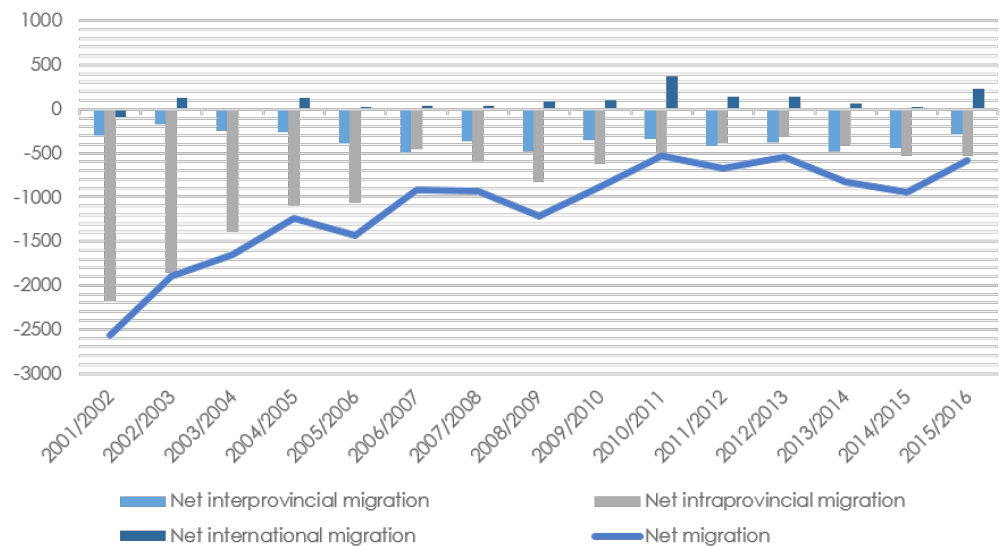
Figure 4: Net Migration, Northwestern Ontario, 2001–2016



Source: Author's calculations, based on Statistics Canada (2017b).

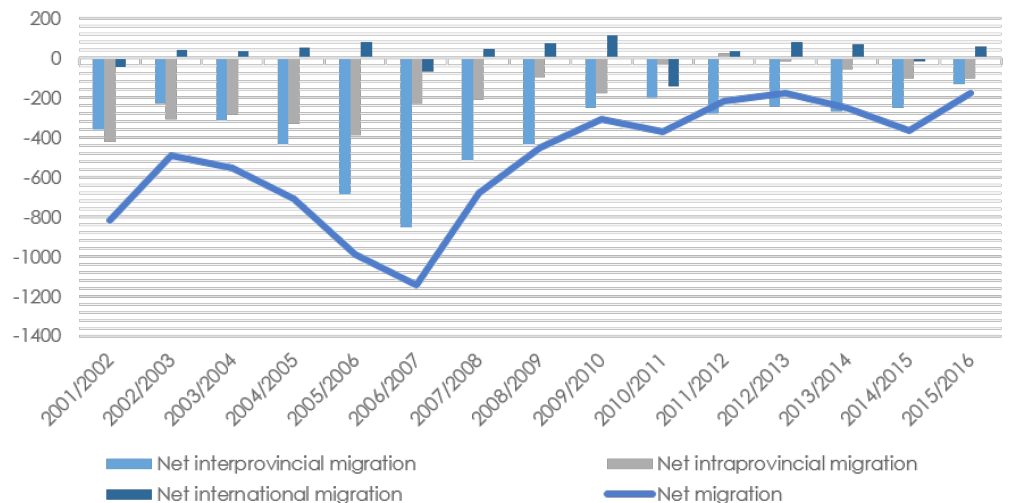
To delve deeper into migration trends, it is useful to break down net migration into two age groups: those ages 20 to 29 and those 30 to 64. Doing so reveals any difference in out-migration rates between the two groups; if net migration is negative for both groups, this illustrates that Northern Ontario's demographic shift is headed towards an aging and declining population. As Figures 5 and 6 show, the 20 to 29 age group in both the Northeast and the Northwest is migrating out of the region, perhaps attributable to the desire to seek post-secondary educational and job opportunities elsewhere. Interestingly, in the Northeast, net intraprovincial migration is higher than net interprovincial migration, while in the Northwest it is the reverse. It would be valuable to know where Northwestern Ontario's young people are going and why, and specifically if they are leaving to find opportunities in other rural or more urban areas, but such data are unavailable. The trend for those ages 30 to 64 also varies between the Northeast and the Northwest, with the Northeast having had a positive net migration over the 2002–13 period, mostly due to intraprovincial migration, although this has turned negative in recent years (Figure 7); the Northwest, in contrast, has consistently seen negative net migration since the beginning of the century (Figure 8).

Figure 5: Net Migration, 20–29 Age Group, Northeastern Ontario, 2001–2016



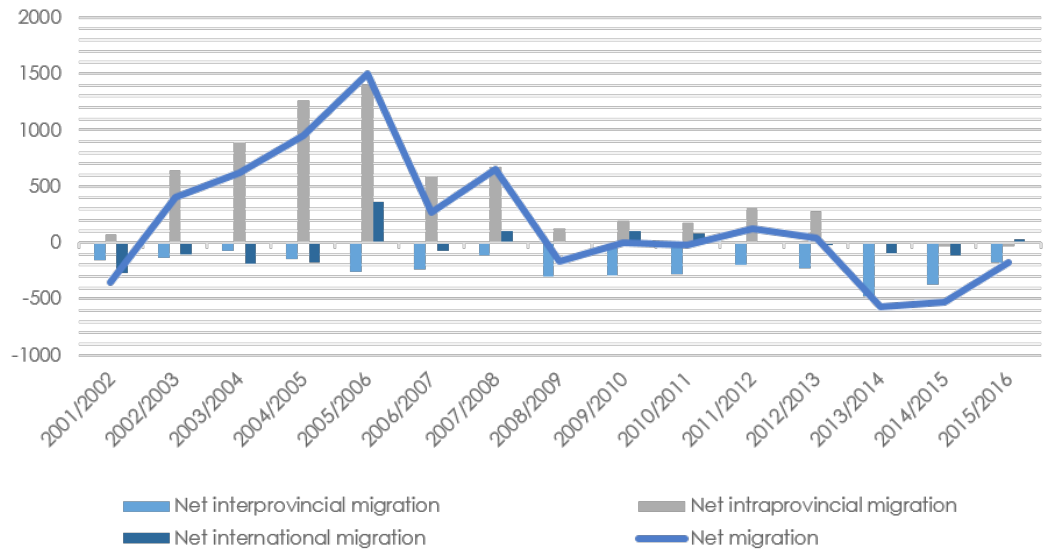
Source: Author's calculations, based on Statistics Canada (2017b).

Figure 6: Net Migration, 20–29 Age Group, Northwestern Ontario, 2001–2016



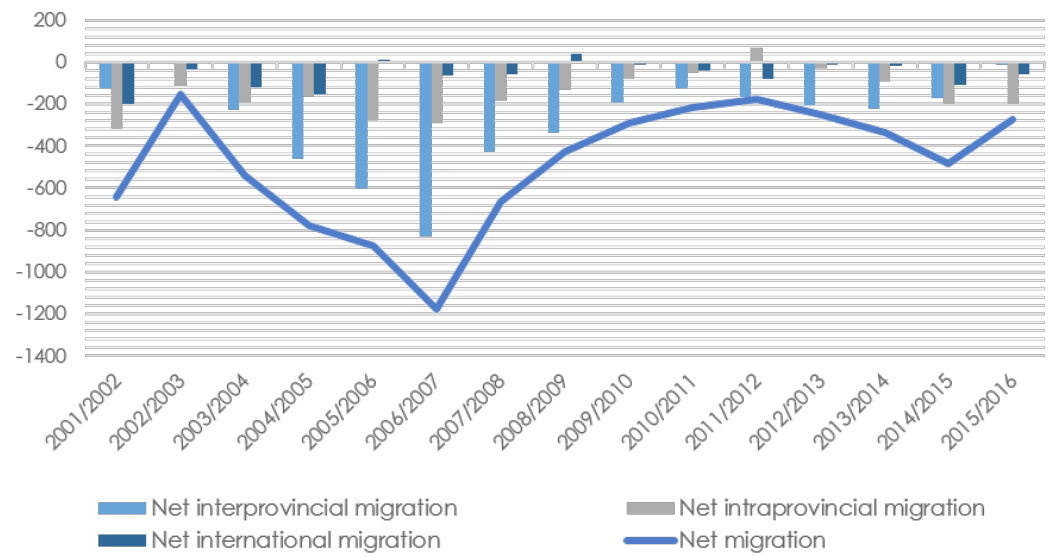
Source: Author's calculations, based on Statistics Canada (2017b).

Figure 7: Net Migration, 30–64 Age Group, Northeastern Ontario, 2001–2016



Source: Author's calculations, based on Statistics Canada (2017b).

Figure 8: Net Migration, 30–64 Age Group, Northwestern Ontario, 2001–2016



Source: Author's calculations, based on Statistics Canada (2017b).



The Dependency Ratio and the Implications of an Aging and Declining Population

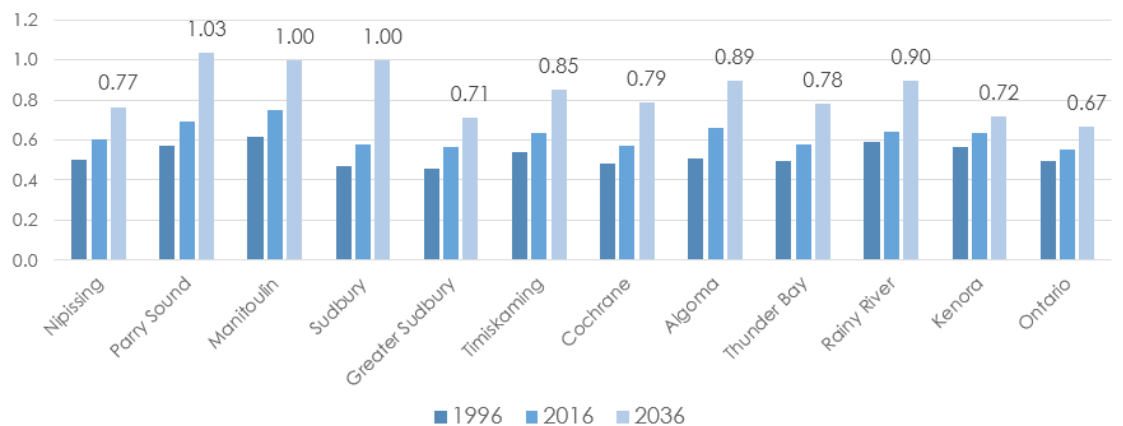
What are the implications of these trends for Northern Ontario? The literature suggests that an aging and declining population poses many challenges and risks for a region's economy and labour force (El-Assal and Goucher 2017; Khoo and McDonald 2002; Moazzami 2015; Tyers and Shi 2007). One significant effect is that, as the population ages, the number of dependents increases while the number of people working and supporting the economy declines; the ratio of these two numbers is the dependency ratio (see Cirtwill 2015).

The effects of an aging population can be further analysed by looking at two specific age groups, those ages 60 to 79 and those ages 80 and over, both of which have slightly different needs (Bloom, Canning, and Fink 2011, 589; Ingham et al. 2009). Those in the former age group offer less labour capital, require more health care, and rely on the pension system for a significant part of their income. Those in the latter group might require full-time health care assistance and an increase in financial support, which puts a strain on government services, as well as on familial and personal resources (Bloom, Canning, and Fink 2011, 589). Accordingly, expenditures such as public pensions and health and long-term care will amplify, adding to the burden of maintaining a sound balance between future public expenditures and tax revenues (Bloom, Canning, and Fink 2011, 594).

Many services in Northern Ontario, such as health care and pensions, are dependent on tax bases and are tax financed. If the number of dependents exceeds the number of people working, delivering tax-dependent services to a rapidly declining population becomes very challenging (El-Assal and Goucher 2017; Tyers and Shi 2007). If the number of people willing and able to work continues to decline, businesses in Northern Ontario will face an increasing shortage of workers, resulting in slow growth, low demand for goods and services, and a disincentive for private investment – all of which could force businesses to close and move elsewhere (El-Assal and Goucher 2017). Labour shortages, in summary, will negatively affect future growth, savings, and consumption in Northern Ontario, and ultimately the ability of its communities to sustain themselves.

In successful and sustainable communities,³ the dependency ratio is somewhere between .5 and .75, which translates into two working persons per one dependent (Cirtwill 2015). In communities that are unsustainable, the dependency ratio is two dependents (or more) for every working person (Cirtwill 2015). As Figure 9 shows, by 2036, the dependency ratio is projected to be too high in nine of Northern Ontario's eleven districts for their economies to be sustainable, with the highest ratios expected to be in Parry Sound, Manitoulin, and Sudbury. Only the Greater Sudbury and Kenora districts are projected to have a dependency ratio within the range noted above, and then only just. Comparatively, the province as a whole is expected to have a dependency ratio of .67 in 2036.

Figure 9: Dependency Ratio by District, Northern Ontario, 1996–2036



Note: Calculations of dependency ratios assume 100 per cent labour force participation among the working-age cohort, those ages 15–64, and thus overestimate labour force participation rates, meaning the dependency ratios could be higher.

Sources: Statistics Canada, Census, various years; population projection for 2036 were derived from the Ontario Ministry of Finance's population projection tool.

³ Sustainability may be defined as the ability of an economy to support a certain level of economic production, whatever that might be for that economy (Thwink, n.d.).

A high dependency ratio is not unique to Northern Ontario – indeed, old-age dependency is expected to increase in every region of the world by 2050 (United Nations 2015). In fact, the world's share of those ages 60 and over and 80 and over is already greater than at any time in history, and is accelerating (Bloom, Canning, and Fink 2011, 585). The United Nations (UN) expects the population of those ages 60 and over to grow from 901 million to 1.4 billion (56 per cent) between 2015 and 2030, and to reach close to 2.1 billion by 2050 (United Nations 2015, 2). Northern Ontario, however, has certain advantages as a region of a developed country during the global aging phenomenon. Studies reveal, for example, that out-migration by young people between the ages of 15 and 24 is actually highest in the developing countries (United Nations 2014, 2016). Given the expected increase in dependency ratios worldwide and the likely associated economic effects, it is not unreasonable to believe that the number of young people migrating to developed regions seeking better opportunities will increase. Here, then, is an opportunity for Northern Ontario to attract newcomers proactively.

Countering the Decline and Exploring the Benefits of Migration

There are several ways to counter demographic decline. One way is to increase the fertility rate and the labour force participation rate of the people who already live in Northern Ontario – in particular, the Indigenous population, which is projected to increase in districts such as Greater Sudbury, Kenora, and Thunder Bay (Cuddy and Moazzami 2016, 6; 2017a, 6; 2017b, 15). Another strategy is to attract migrants who are ready and willing to work as soon as they arrive in Canada. Additionally, it will be key for employers and communities to enhance their welcome of immigrants to the region and to consider ways to retain them once they settle. To note, these solutions are not mutually exclusive, as attracting migrants is a short- to medium-term solution, while increasing the existing fertility rate is a long-term solution. Further integrating the existing working-age Northern Ontario population into the labour force could be regarded as both a short- and long-term solution.

Immigration can have a positive effect on both population and labour force growth. Studies suggest that migrants tend to reduce the non-working-age dependency ratio, are typically younger than the destination population, and increase investment in the region in which they settle (Simon, Belyakov, and Feichtinger 2012; Tyers and Shi 2007). Another benefit is that many immigrants are highly educated professionals who find employment in well-paying jobs (Gold 2009). To further support this, Hunt and Gauthier-Loiselle (2010, 32) state that immigrants are overrepresented among members of the “National Academy of Sciences and the National Academy of Engineering, [are] among authors of highly-cited science and engineering journal articles, and [are] among founders of biotech companies undergoing initial public offerings.” Individuals with these skills offer valuable economic benefits to any community. Less-skilled migrants also contribute to the economic well-being of a community by performing a wide array of essential jobs that the non-immigrant population increasingly prefers to avoid, such as food service, domestic service, meat packing, farm work, construction, light manufacturing, and hospitality (Gold 2009).

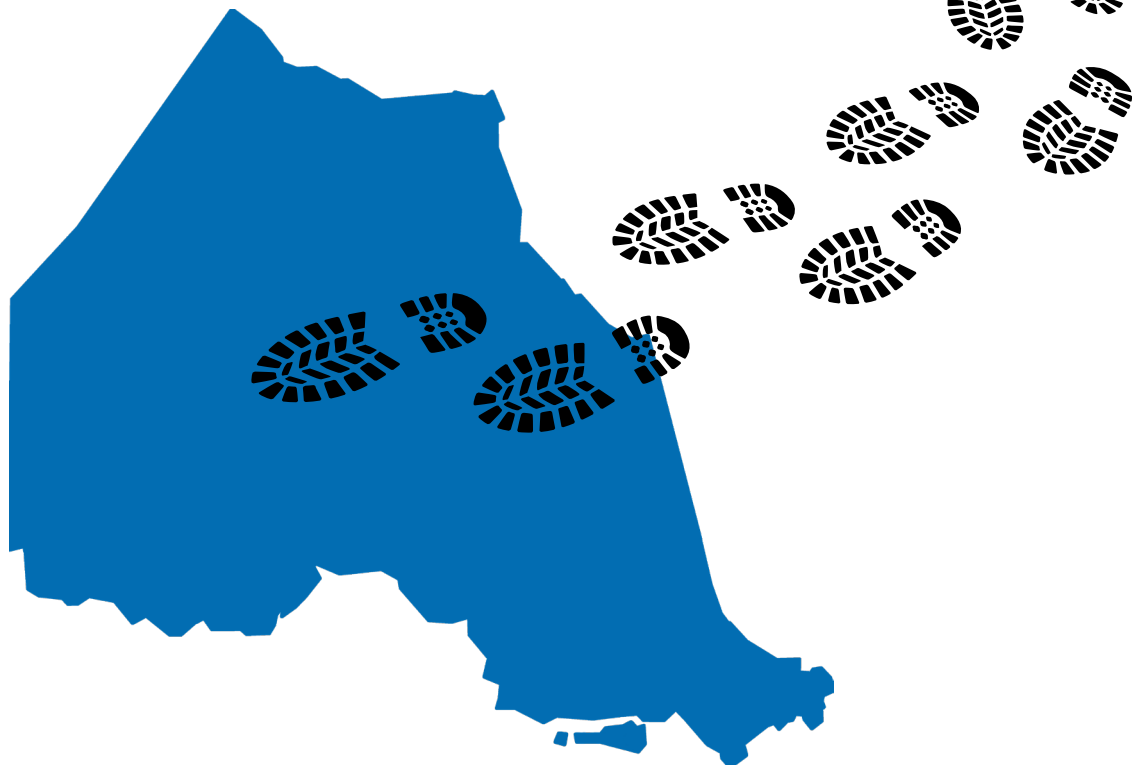
*“Studies suggest that migrants tend to **reduce the non-working-age dependency ratio**, are typically younger than the destination population, and increase investment **in the region in which they settle**”*

In addition to these benefits, an emerging body of literature suggests that immigration has a positive effect on innovation and productivity (Chellaraj, Maskus, and Mattoo 2008; Hunt and Gauthier-Loiselle 2010; Jahn and Steinhardt 2016; Jensen 2014; Peri 2012a, 2012b). For example, research suggests that, in the United States, international students are concentrated in science and engineering programs, and these graduates applied for patents twice as much as American graduates from other programs (Chellaraj, Maskus, and Mattoo 2008; Hunt and Gauthier-Loiselle 2010). Measuring the number of patents is a popular method of capturing innovation because it provides insight into technological progress, a driver of productivity and economic growth (Hunt and Gauthier-Loiselle 2010). Innovation could also help to open up investment opportunities.

Conclusion

After analysing several key demographic trends in Northern Ontario, one thing is clear: there are gaps that need to be filled. The population is aging and has been steadily declining since 1996, and net migration trends reveal there is more out-migration among both the young and those of working age, which means that the number of people leaving exceeds the number of people coming into Northern Ontario. This particular migration trend is troubling because the out-migration of people willing and able to work to support the dependent population is increasing the region's dependency ratio.

Increasing fertility and labour force participation rates among those already in Northern Ontario could help counter this demographic decline. Another solution is to attract newcomers. It is important to remember that an aging population is not unique to Northern Ontario. As other parts of the world experience population aging, younger people are likely to migrate elsewhere to seek economic advancement and financial stability. Such a shift presents opportunities for Northern Ontario. For example, a Northern Newcomer Strategy could include proactive policies and programs to attract young migrants. Indeed, while attracting newcomers is a short- to medium-term solution, it could have significant socio-economic benefits for Ontario's northern regions.



References

- Bloom, David, David Canning, and Günther Fink. 2011. "Implications of Population Aging for Economic Growth." NBER Working Paper 16705. Cambridge, MA: National Bureau of Economic Research. doi:10.3386/w16705.
- Chellaraj, Gnanaraj, Keith E. Maskus, and Aaditya Mattoo. 2008. "The Contribution of International Graduate Students to US Innovation." *Review of International Economics* 16 (3): 444–62. doi:10.1111/j.1467-9396.2007.00714.x.
- Cirtwill, Charles. 2015. "Does Northern Ontario Need More People?" Northern Policy Institute, December 7. Available online at <http://www.northernpolicy.ca/article/does-northern-ontario-need-more-people---1974.asp>.
- Cuddy, James, and Bakhtiar Moazzami. 2016. "Northern Projections: Human Capital Series — Thunder Bay District." Research Paper 12. Thunder Bay, ON: Northern Policy Institute. Available online at http://www.northernpolicy.ca/upload/documents/publications/reports-new/hcs_thunder-bay-en.pdf.
- . 2017a. "Northern Projections: Human Capital Series — Greater Sudbury." Research Paper 14. Thunder Bay, ON: Northern Policy Institute. Available online at http://www.northernpolicy.ca/upload/documents/publications/reports-new/hcs_greater-sudbury-en.pdf.
- . 2017b. "Northern Projections: Human Capital Series — Kenora District." Research Paper 21. Thunder Bay, ON: Northern Policy Institute. Available online at http://www.northernpolicy.ca/upload/documents/publications/reports-new/hcs_kenora-en.pdf.
- El-Assal, Kareem, and Sam Goucher. 2017. *Immigration to Atlantic Canada: Toward a Prosperous Future*. Ottawa: Conference Board of Canada. Available online at <https://www.conferenceboard.ca/e-library/abstract.aspx?did=9138>.
- Gold, Steven J. 2009. "Immigration Benefits America." *Society* 46 (5): 408–11. doi:10.1007/s12115-009-9235-4.
- Hunt, Jennifer, and Marjolaine Gauthier-Loiselle. 2008. "How Much Does Immigration Boost Innovation?" *American Economic Journal: Macroeconomics* 2 (2): 31–56. doi:10.3386/w14312.
- Ingham Barbara, Carmichael Fiona, and Chirijevskis Andrejs. 2009. "Implications of an increasing old-age dependency ratio: The UK and Latvian Experiences Compared." *Pensions* 14 (4): 221–230. doi:10.1057/pm.2009.16.
- Jahn, Vera, and Max Friedrich Steinhardt. 2016. "Innovation and Immigration — Insights from a Placement Policy." *Economics Letters* 146: 116–19. doi:10.1016/j.econlet.2016.07.033.
- Jensen, Paul H. 2014. "Policy Forum: Immigration and the Economy — Understanding the Impact of Migration on Innovation." *Australian Economic Review* 47 (2): 240–50.
- Khoo, Siew-Ean, and Peter McDonald. 2002. "Adjusting for Change of Status in International Migration: Demographic Implications." *International Migration* 40 (4): 103–24. doi:10.1111/1468-2435.00207.
- Moazzami, Bakhtiar. 2015. "It's What You Know (and Where You Can Go): Human Capital and Agglomeration Effects on Demographic Trends in Northern Ontario." Thunder Bay, ON: Northern Policy Institute. Available online at http://www.northernpolicy.ca/upload/documents/publications/reports-new/moazzami_what-you-know-en.pdf.
- Ontario. 2017. Ministry of Finance. "Ontario Population Projections Update, 2016–2041." Toronto. Available online at <https://www.fin.gov.on.ca/en/economy/demographics/projections/>, accessed October 5, 2017.
- Peri, Giovanni. 2012a. "The Effect of Immigration on Productivity: Evidence from US States." *Review of Economics and Statistics* 94 (1): 348–58. doi:10.3386/w15507.
- . 2012b. "Immigration, Labor Markets, and Productivity." *Cato Journal* 32 (1): 35–53.
- Simon, C., A.O. Belyakov, and G. Feichtinger. 2012. "Minimizing the Dependency Ratio in a Population with Below-Replacement Fertility through Immigration." *Theoretical Population Biology* 82 (3): 158–69. doi:10.1016/j.tpb.2012.06.009.

Statistics Canada. 1996, 2001, 2006, 2011, 2016. Census of Population.

———. 2016. "Mobility 5 – Components of Migration (In and Out)." Ottawa. Available online at <http://www12.statcan.gc.ca/nhs-enm/2011/ref/dict/pop086-eng.cfm>.

———. 2017a. Northeast [Economic Region], Ontario and Northwest [Economic Region], Ontario (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed September 15, 2018).

———. 2017b. "Components of Population Growth by Economic Region, Age Group and Sex, Annual, based on the Standard Geographical Classification (SGC) 2011." Table 17-10-0082-01. Ottawa: available online at <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710008201>.

Thwink. n.d. "Economic Sustainability." Thwink.org. Available online at <http://www.thwink.org/sustain/glossary/EconomicSustainability.htm>, accessed September 15, 2017.

Tyers, Rod, and Qun Shi. 2007. "Demographic Change and Policy Responses: Implications for the Global Economy." *World Economy* 30 (4): 537–66. doi:10.1111/j.1467-9701.2007.01004.x.

United Nations. 2014. "Youth Migration: Facts and Figures." New York: United Nations, Department of Economic and Social Affairs, Population Division. Available online at http://www.globalmigrationgroup.org/system/files/4_Chapter_1.pdf.

———. 2015. *World Population Ageing*. New York: United Nations, Department of Economic and Social Affairs, Population Division. Available online at http://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2015_Report.pdf.

———. 2016. "Youth Issues Briefs 2016: Youth and Migration." New York: United Nations, Department of Economic and Social Affairs, Population Division. Available online at <http://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-migration.pdf>.

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, Sudbury and Sault Ste. Marie. 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.

Related Research

From Laggard to Leader (Almost): Northeast showing potential for growth

James Cuddy

It's what you know (and where you can go): Human capital and agglomeration effects on demographic trends in Northern Ontario

Dr. Bakhtiar Moazzami

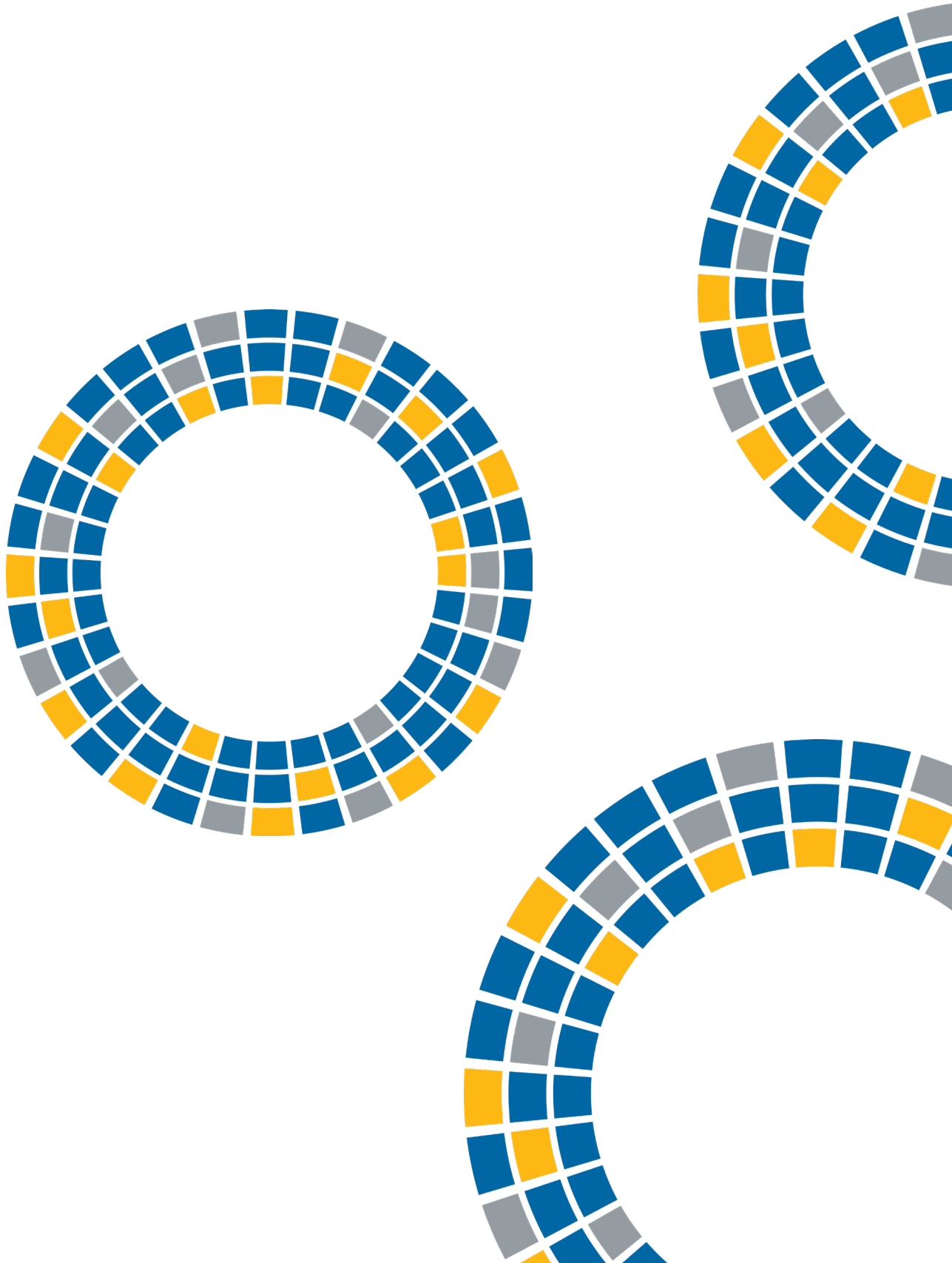
Northern Projections: Human Capital Series

James Cuddy and Dr. Bakhtiar Moazzami

To stay connected or get involved, please contact us at:

1 (807) 343-8956 info@northernpolicy.ca www.northernpolicy.ca





NORTHERN
POLICY INSTITUTE

INSTITUT DES POLITIQUES
DU NORD

northernpolicy.ca