







Giwednong Aakomenjigewin Teg b ଧCନ୍ୟଙ୍ୟ ନମ୍ଦର ଏଠଂବ୍ରଧ୮ Institu dPolitik di Nor

Research Report No. 43 | October 2020

The Goldilocks Problem: Understanding Northwestern Ontario in the Development of Appropriate Employment and Training Management Models

NPI – Who We Are

President & CEO

Charles Cirtwill

Board of Directors

Pierre Bélanger (Chair) Dr. Brian Tucker (Treasurer) Suzanne Bélanger-Fontaine Dave Canfield Kevin Eshkawkogan Florence MacLean (Vice-Chair Northwest) Dwayne Nashkawa (Secretary) Alan Spacek Asima Vezina (Vice-Chair Northeast) Charles Cirtwill (President & CEO)

Advisory Council

Jean Pierre Chabot (Chair, NPI Advisory Council) Michael Atkins Kim Jo Bliss Adam Castonguay Katie Elliot Shane Fugere George Graham Peter Goring Cheryl Kennelly Winter Dawn Lipscombe Dr. George C. Macey Ogimaa Duke Peltier Danielle Perras Bill Spinney

Research Advisory Board

Dr. Heather Hall (Chair, NPI Research Advisory Board) Dr. Hugo Asselin Riley Burton George Burton Ken Carter Sophie Dallaire Carolyn Hepburn Dr. Peter Hollings Brittany Paat Dr. Barry Prentice Leata Rigg Dr. David Robinson Dr. Lindsay Tedds

Land acknowledgement

NPI would like to acknowledge the First Peoples on whose traditional territories we live and work. NPI is grateful for the opportunity to have our offices located on these lands and thank all the generations of people who have taken care of this land.

Our main offices:

- Thunder Bay on Robinson-Superior Treaty territory and the land is the traditional territory of the Anishnaabeg and Fort William First Nation
- Sudbury is on the Robinson-Huron Treaty territory and the land is the traditional territory of the Atikameksheng Anishnaabeg as well as Wahnapitae First Nation
- Both are home to many diverse First Nations, Inuit and Métis peoples.

We recognize and appreciate the historic connection that Indigenous people have to these territories. We recognize the contributions that they have made in shaping and strengthening these communities, the province and the country as a whole.

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 report 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.

© 2020 Northern Policy Institute Published by Northern Policy Institute 874 Tungsten St. Thunder Bay, Ontario P7B 6T6 ISBN: 978-1-989343-76-0

Project Partner: North Superior Workforce Planning Board

The North Superior Workforce Planning Board (NSWPB) is one of twenty-six Workforce Planning zones across Ontario, mandated through the Ministry of Labour, Training, and Skills Development to identify, assess and prioritize the skills and knowledge needs of community, employers and individual participants/learners in the local labour market through a collaborative, local labour market planning process.

Our vision is to ensure that our human resource pool will be strategically aligned, competitively positioned and progressively developed to meet future social and economic demands across Northwestern Ontario. Our mission is to connect community partners to improve the quality of life in our communities through workforce development.

The North Superior Workforce Planning Board (NSWPB) would like to acknowledge the Employment and Training Service Providers (EO and non-EO), Confederation College and Municipalities who contributed their resources to this report. NSWPB would also like to thank the network of organizations, Indigenous Skills and Employment Training (ISET) holders and communities who have been involved in the Service System Manager community conversations over the past 12 months. Your passion, commitment, vision and subject-matter expertise have greatly contributed to the discussions around ensuring that a Service System Manager in Northwestern Ontario will meet the unique needs of our region.

About the Author Rachel Rizzuto



Rachel Rizzuto is the Research Manager for Northern Policy Institute. Originally from the United States, Rachel attended the University of Guelph and the University of Waterloo, earning her B.A. (Honours) and M.A. (co-op) in Political Science, respectively. Throughout her academic and professional careers, Rachel has pursued the study of community and economic development, an enthusiasm borne out of travel throughout rural and urban China. Through her role at NPI, Rachel provides research expertise and passion for seeing northern communities thrive.







Table of Contents

A Note on COVID-19:	5
Executive Summary	6
Introduction	7
A New System	8
Digital Delivery	10
Downloads and uploads	11
Cell phone coverage	13
Digital literacy	14
Other networks operating in Northwestern Ontario	14
Conclusion	14
Geography and Climate: Impacts on Costs and Reliability?	15
Defining boundaries	16
Show me the money: service delivery costs	
Reliability	
Conclusion	
Variety is the spice of life: meaningful delivery and diverse needs	20
Northwestern Ontario characteristics: a quick rundown	21
Centralization versus decentralization	
Collaboration	27
Conclusion	27
Help Wanted: Barriers to Placing and Retaining People in Work	28
Childcare	29
Transportation: Getting from Point A to Point B	
Housing	
Other Factors	35
Conclusion	
Concluding Remarks: Where to go from here?	

A Note on COVID-19:

2020 was not what many people had anticipated. As the number of positive COVID-19 cases mushroomed in China and spread rapidly across the world, Northern Ontario, too, was caught in it. As of September 25, 2020, there were 156 positive cases in Northwestern Ontario – 50 in the Northwestern Health Unit and 106 in the Thunder Bay District Health Unit (NWHU 2020; TBDHU 2020).

In addition to the physical and mental toll of COVID-19, there have been significant economic impacts. One of the most obvious was job loss, which according to the Conference Board of Canada, was 3 million (CBOC 2020). Furthermore, demographic groups, in particular women, were disproportionately affected. Dubbed the "she-cession", COVID-19 has not only seriously impacted sectors where women tend to be employed such as retail or social services, but "restrictions and on schools" and paid child care facilities have shifted additional hours of unpaid family care onto parents, and this work has largely been taken up by mothers" (OCC 2020). Indeed, while the overall recovery of jobs is trending upwards (albeit slowly), women are experiencing much slower reemployment compared to men (CBOC 2020; OCC 2020).

However, what has been the reality closer to home? When comparing the percentage of businesses rating the strategic risk that COVID-19 poses to the longterm prospects of their business from April to August in Thunder Bay, there have been some positive changes. In April, the majority of businesses indicated a highly negative and medium negative impact (could put them out of business and significantly impact their financials, respectively). In August, while most businesses indicated more of a negative strategic risk compared to positive, the percentages were down. For example, in August, only 22 percent of businesses stated that COVID-19 posed a highly negative strategic risk compared to 32 percent in April (Kvas 2020). While this is but one example of how COVID-19 has impacted us locally, it does speak to the overall trend of a slow recovery.

Moving forward, the labour market will continue to recover, but we ought to be prepared for a world of work that may not be the same as before. Those who can work from home may continue to do so. Appropriate measures and management may be implemented to mitigate employee burnout (Volini et al 2020). Engaging in virtual events and workshops as opposed to large in person events.

As this paper will explore, COVID-19 is but one change to the workforce landscape. With the introduction of a new employment services system, understanding Northwestern Ontario's people, infrastructure, geography, economy, and more is important now more than ever.



Executive Summary

In order to appropriately prepare Northwestern Ontario for the rollout of the Service System Managers system, which was first announced in 2019, North Superior Workforce Planning Board commissioned Northern Policy Institute to undertake a White Paper. Specifically, this paper assesses four key themes:

- Digital delivery in the new system
- Geographic distance and climate impacts on service delivery
- Diversity of service population/needs
- System level supports

In the assessment, there were several key conclusions, including the need to further strengthen the ICT infrastructure, there are a multitude of factors that influence service cost and reliability, and placing and retaining individuals in jobs is not solely dependent on the supply of system supports such as childcare, transportation and housing.

Finally, recommended next steps were provided, which include:

- Ask employment and training service providers what their current assets are and whether they partner with other community organizations. It is important to get a sense of how services are delivered in the region and if there are ways we can maximize these resources.
- 2. Tap into the Northeastern discussions about the Service System Managers model. While there are obvious differences, there are commonalities too. We can't possibly know everything and looking for practices that can be applied here can be beneficial.
- 3. Where possible, connect with one or more of the prototype regions to get a sense of how they are navigating the new system. Whether that is the North Superior Workforce Planning Board as the main contact point or another organization.









Introduction

In Northern Ontario we often talk about those pesky 'one-size fits all' policies and programs. And for good reason too. The reality of an individual living in Pickle Lake can differ from someone who lives in Thunder Bay. Accounting for these differences is important in policy creation and implementation.

And the province of Ontario thought so too.

On February 12, 2019, the (then) Ministry of Training, Colleges and Universities announced that the provincial government sought to transform employment services, which included the creation of Service System Managers. The Service System Managers would oversee employment services in a given catchment area as the aim was to create a local system that can better respond to the needs of communities (Ontario 2019).

In response to the announced changes, North Superior Workforce Planning Board set up and executed a series of community consultations in Thunder Bay, Fort Frances and Sioux Lookout. During the November 2019 engagement in Sioux Lookout, four key themes emerged:

- Digital delivery in the new system: The overall unreliable – to complete lack of – access to quality internet service (WIFI or cell) makes relying on remote delivery of service/supports an unviable solution. This is further complicated by a lack of digital proficiency and/or overall culture of reluctance in engaging with online approaches;
- Geographic distance impacts on service model: The vast geography (and at times climate) at play in this catchment...makes delivery costly and unreliable unless physically located within a given community;
- Diversity of service populations/needs: The breadth of unique, local-level needs across the catchment makes it difficult to imagine how one centralized entity is going to be able to do meaningful delivery models for all communities; and
- System level supports: In many regions, placing and retaining people in work is often less about the talent or availability of work, and more a lack of access to things such as housing, transportation, and childcare.

However, from the discussions, it became clear that if there is to be a unified Northwestern Ontario voice, looking at the four above themes from an evidencebased research approach is required. Specifically, testing the validity of the themes and to what extent. As such, Northern Policy Institute (NPI) was suggested as an organization to do this work given their mandate. Further, this information can also be used to help determine the type of Service System Managers model that would best fit Northwestern Ontario.

The following White Paper will be broken up into several sections, the first of which is an outline about the employment transformation in Ontario, followed by sections dedicated to each of the four themes. Finally, recommended next steps will be provided.



A New System

In 2016, the Auditor General of Ontario's report stated that certain programs under Employment Ontario were not as effective and efficient as they could be (Auditor General, 2016). Further, a 2018 Auditor General report found that Ontario Works oversight by the Ministry, as well as the service managers, were ineffective (Auditor General, 2018).

As such, in early 2019, the Ontario Government announced that there would be a transformation in the employment system, and that there would be several changes (Ontario 2019).

- An updated webpage that allows job seekers to look over labour market information for 500 different jobs;
- Employers and jobseekers are more able to easily access and utilize the Job Bank website;
- Merging systems: Employment Ontario will incorporate Ontario Works and the Ontario Disability Support program into their system, while discussions take place with First Nations Ontario Works about employment services;
- Creation of local service delivery models, with Service System Managers coordinating employment services in a given catchment area; and,
- More effective connections between other services offered by government and employment services.

Now, on the fourth point, instead of rolling out models across Ontario right away, the provincial government decided to test it in three prototype areas: Muskoka-Kawarthas, Hamilton-Niagara, and Peel.¹ Each of these prototypes are set up in a different way in terms of how their Service System Managers operates (e.g. one is using a consortium method). In total, there will be 15 catchment areas in Ontario and theoretically, one Service System Manager per catchment area. In the catchment area for Northern Ontario, there would be two: Northeast and Northwest. Northwestern Ontario will be the largest by size as it includes the districts of Thunder Bay, Kenora and Rainy River. That's a total land area of 526,478 km² - or 60 percent of Northern Ontario (and the North already makes up 90 percent of the province's land area).







Northern Policy Institute / Institut des politiques du Nord

The Goldilocks Problem: Understanding Northwestern Ontario in the Development of Appropriate Employment and Training Management Models October 2020



Map 1: Communities in Northern Ontario

Source: Northern Policy Institute Infrastructure Map, 2020.

One of the key things to note with the Service System Managers is what coordinating services in their catchment area means. So, previously the Ministry held contracts with various organizations across the province² and therefore determined who was a part of the employment services delivery network. Those responsibilities would lie with the Service System Managers. Further, all Service System Managers would operate in a funding-based system, where most funding is dedicated for stream C clients, which are individuals that have a "[h]igh risk of long-term unemployment" (Ontario 2019b). Indeed, this can help to avoid what is known as 'creaming', which is when service revolves more around clients that have greater chances at obtaining a job versus individuals that have barriers that make obtaining a job harder (Ference & Company 2016).

² In early 2018, it was noted that there were 167 service providers that delivered Employment Ontario programming across Ontario (321 sites in total).

Digital Delivery

For some time now, Canada and the world has been going digital. People can buy and sell goods and services online via gigantic platforms such as Amazon or Kijiji. Students can take online courses and graduate. Banking can be performed online – in fact, the Canadian Bankers Associated reported that most Canadians conduct their banking online or via phone (Watson 2019). The one caveat, of course, is it depends on where you live.

In this section, the paper will focus on the statement:

The overall unreliable – to complete lack of – access to quality internet service (WIFI or cell) makes relying on remote delivery of service/supports an unviable solution. This is further complicated by a lack of digital proficiency and/or overall culture of reluctance in engaging with online approaches.



Downloads and uploads

One of the basic building blocks of Information and Communications Technology infrastructure is download and upload speed. According to the Canadian Radiotelevision and Telecommunications Commission (CRTC), they have targeted for 90 percent of households and businesses in Canada to have access to a minimum 50/10 mbps³ by 2021 – 50 mbps download and 10 mbps upload (Canada 2019). According to a 2019 report by CRTC, 84 per cent of Canadians had access to 50/10 in 2017, but in rural and First Nations communities, it was 37.2 and 27.7 per cent, respectively (Canada 2020). For Ontario, the overall percentage of households that had 50/10 mbps unlimited in 2017 was nearly 90 percent, however, for rural and First Nations communities, the percentages dropped significantly – around 27 and 15 per cent, respectively (ibid 2019).

Let's take a look at Northwestern Ontario.

Based on figure 1, we see that the population in rural areas are the ones that disproportionately cannot access 50/10 mbps.

Figure 1: Northwestern Ontario population lacking 50/10 mbps



Source: Cartovista and CRTC. 2018. "Fixed Internet Access and Transport Maps." https://crtc.gc.ca/cartovista/fixedbroadbandandtransport_en/.

Breaking this down further, figure 2 highlights that access is further restricted as only 36 percent of dwellings only have fixed wireless. The rest of the dwellings have multiple other connections.

Figure 2: Total Dwellings by Connection Available

Total Dwellings without 50/10 mbps Internet

No 50/10 speed but other connections available alongside fixed wireless



Source: Cartovista and CRTC. 2018. "Fixed Internet Access and Transport Maps." https://crtc.gc.ca/cartovista/fixedbroadbandandtransport_en/. See Rosairo 2020 for original graph.



Further, around 114 communities in Northwestern Ontario have no access to High Capacity Transport (Cartovista and CRTC 2018). Essentially, "[c]ommunities without high-capacity transport are defined as small population centres with a population of fewer than 30,000 residents, located at least 2 km away from a transport point of presence with a minimum capacity of 1 Gbps" (Canada 2019b).⁴ As well, there are several communities in Ontario that are satellite-dependent – all of which are located in Northwestern Ontario (Canada 2014).



Figure 3: Unserved and Underserved Population in Northern Ontario

Source: Cartovista. "Broadband Internet Coverage." https://crtc.gc.ca/cartovista/internetcanada-en/.



⁴ Gbps means gigabits per second.

Based on the above data and figures, there is a clear digital divide in the region. According to the Organization for Economic Corporation and Development, this term is defined as "the gap between individuals, households, businesses and geographic areas at different socioeconomic levels with regard to both their opportunities to access information and communication technologies... and to their use of the Internet for a wide variety of activities" (OECD 2006).

Going back to the CRTC target for 2021, the Canadian government also targeted that all households will have 50/10 mbps access by 2030 (Shekar 2019). Is targeting for minimum speeds good enough? While not necessarily terrible, it is still much slower than some urban areas that have 1500/940 mbps. As such, in a report to the Northern Development Ministers' Forum, it suggests speeds of at least 250/50 Mbps by 2030 are more accurate to narrow the digital divide (Northern Development Ministers' Forum 2019).

In addition to these targets, further initiatives have been launched such as Ontario's Broadband and Cellular Action Plan. It outlines that starting this year and for the next five years, millions will be invested in new projects and current infrastructure in order to expand access for communities that are considered unserved or underserved (Ontario 2019c). Similarly, there is the Northern Ontario Residential Broadband project, which is run by the Centre of Excellence in Next Generation Networks. While these initiatives are positive steps forward, the results will not be felt right now. For a Service System Managers system that would want to use digital infrastructure to provide online training and the like, speeds will be an issue for a portion of the population in Northern Ontario.

Cell phone coverage

For first time travelers in Northern Ontario, losing cell phone coverage may cause a moment of panic (if the signs stating 'no gas for 200 km' didn't do that already). When taking a look at the areas of coverage for major mobile providers such as Rogers, Telus and Bell, it appears that the most of the provincial King's highway is covered, save for a few areas depending on the network. An example of the Rogers network is below.

Figure 4: Rogers Network Coverage Map, Rogers Network and Extended Coverage



Source: Rogers. "Our network coverage map." https://www.rogers.com/ consumer/wireless/network-coverage-map.

Based on the above, one would think that the Far North communities are completely left out in the cellular wilderness. However, there are smaller providers in Northwestern Ontario, such as Keewaytinook Mobile. For this provider, 15 First Nations communities are covered under their 3G data network, and another handful are on their 2G network (KMobile 2017). Furthermore, two surveys were conducted in 2011 and 2014 about the experiences of individuals with KMobile. In both instances, respondents stated that overall, the network is good and provides the service they need, however over half of respondents indicated that the range needs to be improved (Beaton et al, 2015).



Digital literacy

Digital literacy can be defined as "the ability to locate, organize, understand, evaluate and create information using digital technology for a knowledge-based society" (ICTC 2012, 2). Now, when measuring digital literacy in Canada, OECD's PIAAC (Programme for the International Assessment of Adult Competencies) survey can shed some light. Based on the survey, most adults tend to have experience (albeit at varying levels) with digital technology (OECD, n.d.). Only a small percentage of adults had no computer experience - 4.5 per cent (ibid n.d.). Further, the survey found that the more education an individual has, the higher their score was for "problemsolving in technology rich environments" (ibid n.d.). In other words, they were more tech-savvy. For younger individuals, Media Smarts surveyed over 5,000 K-12 students in 2013 and found that the majority have basic digital literacy skills (Hadziristic 2017, 7).

When it comes to Northern Ontario, it was found that the North had the lowest scores for problem-solving skills in technology-rich environments (Hadziristic 2017, 44). A contributor to that could be the digital divide, which has excluded specific groups such as low-income households and Indigenous peoples (ibid 2017; CIRA n.d.).

However, research has shown that the depth of digital literacy skills in Indigenous communities are not shallow by any means. Returning to the KMobile survey, many respondents indicated that they were comfortable using cellular devices (Beaton et al 2015). Other studies further confirm the comfort and use of ICT tools, and have also found that the digital divide is not as wide between Indigenous groups and the general population (Hadziristic 2017, 45).

Based on the above, it is suggested that while there are digital literacy skills in Northern Ontario, the depth of such may not be extensive. Further, some groups are disproportionately affected by the digital divide, which can play a factor into familiarity and use of technology. Unfortunately, the literature does not appear to be robust on this issue in relation to Northern Ontario and thus a more resolute conclusion cannot be reached at this time.



Other networks operating in Northwestern Ontario

In addition to the KMobile example, there are other networks that operate in Northern Ontario that provide digital connectivity or services digitally. A few examples can be found below:

- **Contact North:** Contact North is an organization that operates in many small rural and remote communities to provide services such as online programs and courses, and videoconferencing.
- Keewaytinook Internet High School: Over 20 years ago, Keewaytinook Okimakanak (Northern Chiefs Tribal Council) recommended the creation of a high school that would allow individuals to be educated in their own communities, instead of traveling to receive their education elsewhere. Currently, there are 14 First Nations communities in Northwestern Ontario that are tapped into this network.
- Western James Bay Telecom Network: The network was implemented in 2010 and currently serves the communities of Attawapiskat, Kashechewan, Fort Albany and Moosonee. Further, fibre-optic connection is available, with local businesses and key institutions tapping into it.

Conclusion

Throughout the analysis of ICT infrastructure in Northwestern Ontario, one thing is clear: Yes, there is infrastructure however a digital divide continues to exist. Gaps include coverage in broadband and cellular service, download and upload speeds, and levels of digital literacy. While there are initiatives that aim to improve the infrastructure, the ability to tap into those improvements may not happen right away. As such, it is important to leverage our current networks where possible. For example, utilizing the available videoconferencing services to provide workshops and presentations to individuals that are unable to travel.

Further, given the low levels of digital literacy, continuing efforts on this front is a must as services are – and will continue to be – digital. For example, in Sweden, public employment services started a campaign that aimed to educate jobseekers and employers about how to connect into services offered by the Swedish Public Employment Service instead of having to physically travel to an unemployment office. The services can be tapped into using the Internet or cell phones (OECD 2018). As well, future research ought to be conducted not just for Northern Ontario in terms of assessing digital literacy skills, but for sub-regions of Northern Ontario as well. Doing so will help to provide a more detailed picture that in turn can aid decision makers in the creation and/or maintenance of programs.

Geography and Climate: Impacts on Costs and Reliability?

As stated earlier, Northwestern Ontario's total land area is 526,478 km², which is a little under half of the entire province (Statistics Canada 2017). Now, there is no denying that the Northwest is huge, however we must remember two things: population density per km² is low, and that physical infrastructure (road, airport, rail, etc) is not to the same extent as it is in Southern Ontario. Take one of the other prototype regions, for example. The Hamilton-Niagara Peninsula's population density is 197.7 and has a labour force population⁵ of over 700,000 people. The Northwest is the opposite – population density is 0.4 and the labour force population is just over 100,000 (Statistics Canada 2017b).

Given the vastness of the Northwestern region, questions were raised about the impact of distance and climate on cost and reliability of service delivery. Given that, for this section, the paper will focus on the statement:

The vast geography (and at times climate) at play in this catchment...makes delivery costly and unreliable unless physically located within a given community.



Defining boundaries

Before determining geography in relation to service delivery, it is important to first understand where residents live and their relationship to more populated centres. When we take a look at the three Northwest districts, we see in the below figures that Thunder Bay is the only district where most people in live an urban area. Additionally, all three districts primarily have weak MIZ (census metropolitan influenced zone), which means that between zero to five per cent of the employed labour force commutes to a given CMA or CA (Statistics Canada 2018c). For Thunder Bay, this could simply be a reflection of the fact that most people are in the urban area.



Figure 5: Urban and Rural Populations, Thunder Bay District, 2001 & 2016

Source: Dr. Bakhtiar Moazzami, Human Capital Series 2019: Thunder Bay.



Figure 6: Urban and Rural Populations, Kenora District, 2011 & 2016

Kenora

Source: Dr. Bakhtiar Moazzami, Human Capital Series 2019: Kenora.





Figure 7: Urban and Rural Populations, Rainy River District, 2001 & 2016

Rainy River District, 2001-2016

Source: Dr. Bakhtiar Moazzami, Human Capital Series 2019: Rainy River.

In addition to the data on where most people live, if the data is broken down by distinct demographic groups, namely Francophone, Indigenous, and immigrant, we see the same patterns hold in each district. For Thunder Bay, the majority of the groups are found in the urban area, while the other two districts have all three groups found in the rural area (Moazzami 2019; 2019b; 2019c).

Now, beyond population distribution, what about differences in rural and urban areas such as education, income or social mobility? In a 2019 report by Ontario 360, they categorized areas of the province based using Statistic Canada's Statistical Area Classification Codes, which we also see in the above graphs with the MIZ. Ontario 360 defines anything urban if it falls within the first three categories (see Appendix A). Based on Ontario 360's analysis, rural areas tend to fall behind compared to urban areas on various fronts such as education, employment and household income, health outcomes, employment, and income mobility (Ahmed 2019). However, there were several interesting things to note in the analysis.

- While health outcomes were worse in rural areas, wait times were better/comparable to urban areas.
- Women in rural areas saw a significant increase in employment income compared to men between 2000 and 2015.
- While Kenora district has a higher income elasticity compared to the rest of the province, data shows that the probability of a child born into the bottomquintile household will most likely stay there as an adult.
- On the whole, other CMAs in Ontario besides Toronto and Ottawa have experienced positive employment growth since 2008 (in Northwestern Ontario, this would Thunder Bay). On the other hand, the rest of rural Ontario has seen a decline.

Now, an important part of this conversation is also the mindset around boundaries. When one sees that much of the populations in Rainy River and Kenora are located in rural areas, one may think of the costs to deliver services must be high. However, this thinking can be a product of urban bias. Often rural areas are thought of as uneconomic (OECD 2008, 4). Three things in this regard. One, when it comes to urban bias in service delivery, it is due to the application of urban programs in rural areas. Second, "spending and investment are not the same" (ibid 2008, 4). Through the investment in rural services and programs, one is investing in the knowledge capital of that population, which has numerous benefits. Finally, services are not just available in urban areas – as we will see with the location of licensed childcare providers later on in the paper.

Overall, defining boundaries in terms of what is urban versus rural, or the proximity of clients to services is key. Doing so can play a huge role in calculating costs. A great example of this is a study by Dr. Bakhtiar Moazzami in which he analyzed remoteness and First Nations education funding. He notes that INAC (Indigenous and Northern Affairs Canada) ranks First Nations schools as either remote, rural or urban. This classification "takes into account the distance from the nearest service center, which is defined as the nearest community where a First Nations school can access government services, banks and suppliers" (Moazzami 2018). What this model does not include, however, is moving costs for teachers, proximity to other community resources like libraries, proximity of other First Nations schools, and so on.

Show me the money: service delivery costs

As shown in the above case, when it comes to calculating costs of service delivery, the formula can depend on a multitude of factors beyond just distance. For example there are several factors that impact service delivery costs, depending on the area in question (e.g. dense or less dense population-wise, centralized cluster of service providers) (Ference & Company 2016; OECD n.d-2; Federation of Canadian Municipalities n.d.):

- Population totals;
- Population density;
- Diminishing subsidies for rural areas;
- Number of service providers;
- Service delivery channel (e.g. in person or via teleconference);
- Transportation available to client;
- Client population characteristics (e.g. mental or physical disabilities; cultural group);
- Awareness of services; and
- Climate change.

While little literature exists on exact service delivery costs in Northern Ontario, the 2016 Ontario Auditor General's report can offer a bit of insight. In this report, it was stated that in 2015/16, "the average funding per site per client serviced (excluding those doing independent research and job searching) was \$1,828 and ranged from \$387 to \$5,162" (Ontario 2016). Out of all of Ontario, Northern Ontario was associated with the highest client costs per site while the rest of Ontario had relatively similar rates (ibid 2016).

A similar cost situation can be seen in British Columbia. In a 2016 report by Ference and Company, they examined the average variable service delivery costs and the funding for client supports and services per client. Their results revealed that the average expenditure for all clients was \$1,901 per client and that expenditures tended to be higher for clients that have multiple barriers (e.g. a tier 4 average cost per client was \$2,294)⁶ (Ference & Company 2016, 102).

Table 1: Variable Service Fee and Financial Supports and Purchased Services Expenditures per Client, April 2012 to September 2015, Selected Client Types

Client Characteristics	Client (total #)	Per Client Total Cost
Tier 0	32,634	\$920
Tier 1	6,512	\$390
Tier 2	72,030	\$2,172
Tier 3	76,174	\$2,130
Tier 4	22,325	\$2,294
Rural	29,715	\$2,186
Indigenous	20,819	\$1,741
Francophone	2,001	\$1,757
Immigrant	15,284	\$1,766
Multi-barriered	37,227	\$2,139

Source: Ference & Company 2016, 103. Table adapted from source. Notes: Tier 0 refers to those clients that self-serve/"non-case managed". Rural specifies those who do not have easy access to an employment service center location.

⁶ A Tier 4 client is considered an individual with "little to no employment readiness". On the other hand, a Tier 1 client is considered an individual that has a high level of employment readiness.

Reliability

When it comes to reliability of service, one of the first things that may come to mind is whether someone can physically access it. As will be discussed later, transportation infrastructure is an influencing factor in the dynamics of Northern Ontario. Now, when looking at transportation infrastructure in relation to weather, there are clear connections that can have an impact on reliability. In the 2017 Draft 2041 Northern Ontario Multimodal Transportation Strategy, it was stated throughout the document that climate will have an effect on Northern Ontario's transportation infrastructure. Specifically, it is expected to affect a range of transportation modes and through changing weather occurrences, the likelihood of route closures, dangerous driving conditions in the winter, flooding, etc increases (Ontario 2017, 71, 84).

Furthermore, the lifespan of winter roads in Northern Ontario is shortening due to change in weather (Prentice 2017, 2). Since winter roads are a connection between remote communities and the all-season road network, weather poses an issue. However, it should be noted that separate consultations are occurring between the provincial government and First Nations Ontario Works in terms of employment services for First Nations communities.

Based on the impacts weather can have, it is clear that travel for clients to access employment services in person may be hindered. The same goes for programs that deliver services outside of their home site. Additionally, depending on where one lives, there may be great distances to travel and route closures, which can be a significant setback. Finally, the lack of transportation modes for people outside of major centres can be an issue (Ontario 2017, 55).

Given the above, one of the sub-points in the Draft strategy was to "deliver services remotely through telecommunications or locally when possible, to decrease the need for people to travel" (ibid 2017, 74). And this brings us to the second factor in reliability – delivery channel. As shown, weather can impact in-person services, however digital is another option to consider. Digital delivery can certainly eliminate the hurdle of geography, however, as outlined earlier, accessibility may vary. If an individual's speed is slow, it may make training online difficult, for example.

A third factor that comes up in relation to service delivery reliability is consistency. Going back to the BC model evaluation, it was found that overall, there was some success when it came to delivering consistent access to services. However, key informants identified an issue with contractors interpreting policy and delivery approaches differently. Even interpretation among Ministry Contract and Partnership Agents varied. Furthermore, there were some issues with regard to subjectivity in needs assessments and lack of frameworks in which to assess client tiers and needs, for example (Ference & Company 2016, 76). As this paper will explore later, the structure of the Service System Managers model for Northwestern Ontario ought to be considered carefully in order to ensure consistency is carried out across such long distances.

Conclusion

In this section, the paper has analyzed several factors of service delivery cost and reliability in relation to geography and climate. Based on the analysis, it can be concluded that geography and climate can play roles, however they are not the only influencing factors. As well, the extent to which individual factors play is hard to pin down given the range of circumstances communities and individuals in Northern Ontario face. Furthermore, before considering costs, reliability, different channels, etc, understanding where people live and their commuting volume ought to be defined at the outset when determining what is rural and what is urban. Or if the terms 'rural' and 'urban' should even be used. Perhaps 'fully connected', 'semi-connected' and 'little connection' could be utilized to define community locations (see Melillo 2018).

Finally, there are two points that need to be considered in the context of above:

- **Optimal delivery channel:** is it both in-person and online? Is it only online or only in person? Do certain delivery approaches cost more than the next? Benefits and drawbacks?
- **Benchmarking:** Comparing delivery costs and approaches to places such as Toronto is not appropriate for Northwestern Ontario. Looking to comparable geographies can give a good sense of what works well and can be applied here.



Variety is the spice of life: meaningful delivery and diverse needs

In the submissions by entities to be one of the initial prototype sites for the province, there were five models that emerged:

- Service System Manager is only a contract holder and not a delivery agent;
- Service System Manager is the sole delivery agent and there is one delivery model;
- Service System Manager is the majority delivery agent where their sites have one delivery model, but the remaining sites can choose;
- Service System Manager is the minority delivery agent where their sites have one delivery model, but the remaining sites can choose; and
- Service System Manager is the minority delivery agent and there is no fixed model, all sites can operate as they see fit.

There are various benefits and drawbacks to these models in the Northwestern Ontario context as well as more generally, to be sure. However, for this section of the paper, the primary focus will be on the following statement:

The breadth of unique, local-level needs across the catchment makes it difficult to imagine how one centralized entity is going to be able to do meaningful delivery models for all communities.



Northwestern Ontario characteristics: a quick rundown

When Nova Scotia integrated Employment Support and Income Assistance into a single program in 2001, changes were guided by a set of rationale, including the need to increase flexibility of service delivery in order to meet client needs (Goss Gilroy Inc, 2007). For Northwestern Ontario, what are our guidelines for appropriate service delivery? To answer this, the first step is understanding the characteristics of clients and the Northwestern Ontario population at large. To start, the figure below reveals that across Northwestern Ontario, the sex of assisted clients is primarily male and that most clients are between the ages of 35 to 44, followed by those aged 15-24. This breakdown is line with the province overall.



Figure 8: Assisted Clients in Two Northwestern Ontario Planning Boards Assisted Clients 2015/16, NWO Planning Boards

Source: Author's calculations, Employment Ontario Geo Hub, Ministry of Labour, Training and Skills Development. Note: Data is based on reported information to Local Boards and Local Employment Planning Councils in 2016. Webpage was last updated in November 2019.







Figure 9: Assisted Clients, Ontario

Source: Author's calculations, Employment Ontario Geo Hub, Ministry of Labour, Training and Skills Development. Note: Data originally published in 2014, but update frequency is annually. Last webpage update was in November 2019.

Below are selected reasons as to why a client's Employment Service plan was closed. As shown, all of the districts experienced higher levels of clients that have completed the program or found work related to their goal.

Figure 10: Sampling of Closure Reasons, 2015/16



Sample of Closure Reasons, NWO Districts 2015/16

Source: Employment Ontario Geo Hub, Ministry of Labour, Training and Skills Development.



The outcomes across all three districts are telling too. When looking at the employment status⁷ of clients at the exit of Employment Service, most clients are employed full-time. Coming in second are clients who indicated part-time employment, however Rainy River district had slightly more clients that were unemployed at the exit.

District	Employed Full-Time	Employed Part-Time	Unable to Work	Unemployed
Rainy River	251	69	16	91
Kenora	281	74	30	48
Thunder Bay	816	314	107	200

Table 2: Clients Outcomes at Exit, 2015/16

Source: Employment Ontario Geo Hub, Ministry of Labour, Training and Skills Development.

Further information was gathered on clients at the exit of the program in relation to education. Fewer clients indicated that they were pursuing further education compared to those who were in full-time or part-time employment at the exit of using Employment Services. Education pathways that were indicated include post-secondary education, Ontario Secondary School Diploma or equivalent and academic upgrading (Employment Ontario Geo Hub 2017).

Finally, when it comes to clients that were in other programs at the exit of the Employment Services, in all three districts there were clients that were a part of "other EO training programs" and "EO literacy programs". For programs such as ESL/FSL and MCI Bridge Projects, there were zero clients. In the district of Thunder Bay, over 50 clients indicated that they were in federal training programs, however it was zero in the other two districts.

When looking at the wider population of Northwestern Ontario, that can provide insight into the makeup of communities and provide greater context for needs in the region. While below is a snapshot of a few defining

English only

District

features, greater in-depth profiles for each of the districts exist (see Human Capital Series 2019 by Dr. Moazzami).

In terms of population, more than 52 percent of people live in the cities of Kenora or Thunder Bay. Roughly 30 percent of the population (around 72,300 people) are spread across 100 communities, each with a population of less than 5,000 (Statistics Canada 2016). Additionally, Northwestern Ontario is home to 81 First Nations communities that are located both in the Far North and connected North (access to year-round road). Finally, when looking at total population projections, all districts are experiencing an aging population, however Kenora's total population is projected to grow. As well, in all three districts, the Indigenous working age population is projected to rise. As such, ensuring appropriate education and training pathways are maintained is critical (Moazzami 2019, 2019b, 2019c).

In terms of language, a greater proportion of the population speaks English only, however there are more bilingual individuals than there are those who speak only French.

English and French

Neither English nor

				THEILCH
Thunder Bay	91.16	0.01	8.67	0.11
Rainy River	96.09	0.08	3.79	0.00
Kenora	95.08	0.07	4.60	0.25

French only

Table 3: Knowledge of Official Languages (%), NWO Districts, 2016

Source: Author's calculations, Target Group Profile by Knowledge of Official Languages, Statistics Canada 2016 Census.

There is the recognition such as in health care delivery that services ought to be provided to individuals in a culturally appropriate manner – e.g. the language they are most comfortable. In that regard, when looking at the language spoken most often at home, the overwhelming majority of the population speaks English across all three districts, however, almost 10 percent of Kenora's population speaks an Indigenous language (Statistics Canada 2017c; 2017d).

When it comes to post-secondary education, the levels of the labour force (aged 25-64) that have these credentials vary across the districts, with Kenora showing lower levels compared to the other two. These levels are important to consider as multiple studies have emphasized that the nature and needs of the economy is shifting. It has been estimated that in the next ten years or so (by 2031), 80 percent of the labour force needs to have some form of post-secondary education, whether that be university, college, or an apprenticeship (Moazzami 2019). Further, it is estimated that the percentage of new jobs that will require post-secondary education by 2031 will also be 80 percent (ibid 2019).



Figure 11: Thunder Bay, Post-Secondary Credentials of Labour Force (%)

Source: Human Capital Series: Thunder Bay (2019c).





Post-Secondary Credentials of Labour Force (25-64)

Source: Human Capital Series: Rainy River (2019b).





Figure 13: Kenora, Post-Secondary Credentials of Labour Force (%)

Source: Human Capital Series: Kenora (2019).

Another item to consider for communities is the composition of the labour force and economy. On the labour force side, all three districts have around 90 percent of individuals in the labour force that are employed, Kenora being the lowest at 88 percent (Statistics Canada 2017c; 2017d). In terms of industrial and occupational makeup of the labour force aged 15-64, when looking at employment in industry, there has been a shift over time from goods-producing industries to service-producing across all three districts. When it comes to composition, for the most part, all three districts have similar top 3 industries in the goods and service-producing sectors.

Table 4: Top 3 Goods and Service-Producing Sectors, NWO 2016

Thunder Bay	Rainy River	Kenora	
Goods-Producing Sectors			
Construction	Construction	Construction	
Manufacturing	Manufacturing	Mining	
Mining	Agriculture, Fishing and Hunting	Manufacturing	
Service-Producing Sectors			
Health Care and Social Services	Health Care and Social Services	Health Care and Social Services	
Trade	Trade	Trade	
Other Services	Educational Services	Public Administration	

Source: Modified table from Moazzami 2019, 2019b, and 2019c.

As for occupations, all three districts in 2016 shared the same top three occupations: sales and service occupations; trades, transport and equipment operators, and related occupations; and occupations in social science, education, government service, and religion (Moazzami 2019, 2019b, 2019c).

Overall, while there are multiple similarities between the districts, the information about client characteristics and wider population characteristics also reveal that there are some differences as well. Capitalizing on like items can lead to knowledge and resource sharing, as well as the ability to perhaps deliver like-services across the wider region. That is not to say, however, that a single model is needed for the Northwest. As noted previously in this paper, where the population lives differs, as well as ability to access high speed internet, are factors into what is appropriate local delivery.

Additionally, while analyzing population and client characteristics, and other influencing factors when seeking insight into potential model structure, there is something to be said about going straight to the source. How do current clients in the Northwest view their access to services? What, if anything, would make the system work for them? Indeed, a potential drawback to such a top-down approach can be the lack of connection with the people who are or will be affected.

Centralization versus decentralization

As noted earlier, the submissions to the Service System Managers program varied and the structures of the prototypes chosen are different. Some were decentralized while others were centralized. Some were a mix. This leads us to the question: What are the benefits and drawbacks?

For a decentralized approach, there are certainly arguments that can be made about increased flexibility. This can allow organizations to be innovative and "focus their resources where they believe it will do [the] most good" (Eidelman et al 2020; Ference & Company 2016). The potential drawback with this approach goes back to what was mentioned earlier – the interpretation of policies by different service providers can affect consistency of access. This also can affect validity in reporting on client progress and outcomes. Indeed, while a Service System Manager may understand the parameters needed for reporting on certain indicators, ensuring others understand and follow those parameters is another thing.

Centralization, on the other hand, would not have that issue. A single entity could coordinate service providers to ensure that similar standards are practiced and reporting validity could be less of an issue, theoretically (Eidelman et al 2020). Further, centralization allows for economies of scale (ibid 2020). For a region with low population density and levels, this could certainly be an advantage. However, the one drawback to such a model is the potential that a single entity cannot know every local detail. While the characteristics earlier showed that there are similarities, there could be other influencing factors that are learned on the ground. One example is relationships between communities and established networks between organizations that are built over years. If a single entity, especially one that is not from the Northwest (e.g. a private company from Toronto), this could pose an issue.

At a past OECD conference on service delivery in rural regions, conference participants agreed that one of the items that are required in an effective service delivery governance framework was the understanding that:

"No single institution public or private has the knowledge necessary to decide what services would work better for the region. This knowledge is often a mix of centrally owned strategic notions and local key information. In this framework, facilitating information sharing and mutual trust is critical to combine national and subnational as well as public and private instruments to respond to the service needs of different areas" (OECD 2008).

Based on this, as well as the mix of similarities and differences across the Northwest, communities in the Northwest may want to consider a mixed approach to a Service System Managers model in order to ensure meaningful delivery.



Collaboration

Of course, no matter what structure is chosen, collaboration is a key element in service delivery (Kernaghan 2011; Ference & Company 2016; OCWI 2017; Goss Gilroy Inc 2007). Collaboration can manifest itself in different ways, such as providing wraparound supports for clients, as well as between communities, external organizations and internal departments (OCWI 2017, Ference & Company 2016; Goss Gilroy Inc 2007). Specific examples from the literature include⁸:

- Co-location of a BC employment service office with a settlement service provider in order to communicate to newcomers what employment services are available;
- Regional group of employment service centers meeting every month or so to work on developing initiatives like workshops;
- Joint marketing; and
- Relationships with employers in Nova Scotia help to direct clients seeking work experience.

Granted, collaboration is easier said than done. As such, there are several key questions and comments we must consider.

- What do our networks look like?
- Are we well connected within just one sector or are there cross-sectoral networks that have been developed?
- Do organizations in our region have strong relationships with clients and other organizations that can be leveraged? Relationships with some communities and organizations may take time to develop.

While there may not be a single organization that checks all the boxes, the questions are meant to guide individuals in terms of understanding where the gaps and opportunities are. The purpose of this paper is to simply provide a breakdown of Northwestern Ontario on various points rather than offer a concrete model suggestion. Using the information above, as well as the other sections in this paper, can be used to inform further discussions that are more targeted. However, based on this section, a mixed model may be considered more appropriate for this area given the range of similarities and differences across the districts. Furthermore, as stated by the OECD, it is difficult for a single entity to govern service delivery appropriately.

Before pursuing such a consideration, there are questions that need to be asked about our current networks and assets. As well, asking clients or organizations that collect that data can help to guide future Service System Managers model discussions. The data that is publicly available may not be entirely reflective of the current situation.





Conclusion

⁸ Ference & Company 2016; Goss Gilroy Inc 2007.

Help Wanted: Barriers to Placing and Retaining People in Work

Connecting jobseekers to employers and vice versa is not always a walk in the park. Take the International and Community Matchmaker project⁹, for example. The Matchmakers did a lot of job readiness prep (e.g. resume polishing) for jobseekers, and showed employers where various resources can be found.¹⁰ Indeed, there can be multiple factors and steps on both the employer and jobseeker side in order to make that final job connection.

In the Sioux Lookout discussions, there was discussion over what influences the placement and retention of individuals in jobs. Specifically, it was stated:

In many regions, placing and retaining people in work is often less about the talent or availability of work, and more a lack of access to things such as housing, transportation, and childcare.



⁹ The International and Community Matchmaker (ICM) project ran in Northwestern Ontario from 2018 to 2019. At the time of writing, ICM is underway in Northeastern Ontario. The purpose of the project is to connect international and secondary migrant jobseekers and employers. ¹⁰ Based on upcoming publication by NPI.

Childcare

Breaking down the number of licensed childcare facilities in Northwestern Ontario, it can be seen that there are 91 active facilities, however, only one provides services in French while the other offers both official languages. They are located in Thunder Bay and Longlac, respectively. As for the breakdown by district, Thunder Bay has the most facilities. The cities of Thunder Bay, Fort Frances and Kenora have the most facilities in each district. It should also be noted that all facilities are connected to major roadways.

District	Total facilities	Number of communities with at least one facility
Kenora	28	9
Rainy River	14	5
Thunder Bay	49	11

Source: Ontario Government Open Data Catalogue

Finally, there are more than double the number of facilities offering at least a full-day option compared to those that are only able to offer part-day and/or after/before school options. See figures 14 and 15 below for more details.

Figure 14: At Least Full Day Childcare Service, NWO, 2020



Program Options with at least full day service provided, 3 NWO DSSABs

Source: Ontario Government Open Data Catalogue, 2020. Note: DSSAB stands for District Social Services Administration Board.

Figure 15: Programs without a Full Day Option, NWO, 2020

Program Options: Non-Full Day, 3 NWO DSSABs



Source: Ontario Government Open Data Catalogue, 2020

Now, while we can see that there are options, there are other factors that can affect access to childcare centers beyond just physical access. According to a report by the Canadian Centre for Policy Alternatives (2017), affordability can be an issue for low- and middleincome families. For example, in their 2016 report, their calculations showed that even after the application of a provincial subsidy to a low-income family, eligible families would still have to pay an additional \$500 monthly per child (Macdonald and Friendly 2017).

When looking specifically at rural areas in Northern Ontario, it was found that the median monthly fees for an infant would be \$868 dollars while toddlers and preschoolers had median monthly fees of \$825. Annually, that would be \$10,416 for infants and \$9,900 for toddlers and preschoolers (ibid 2017). Fortunately, there are tools out there for families that can help calculate childcare costs. For example, the Thunder Bay District Social Services Administration Board provides a free "child care calculator" (Thunder Bay DSSAB n.d.). When it comes to work, there can be effects from not being able to find appropriate childcare. In a recent Statistics Canada survey, it was found that of those who had difficulty finding child care¹¹ (which was considerably less than those who didn't have trouble), around 9 percent (1 in 10 families) reported that they had to change their work schedule (Statistics Canada 2019). Other reasons include working fewer hours (7 percent), postponing return to work (6 percent), and postponing or discontinuing training or education (2.5 percent) (ibid 2019).

Overall, there are childcare options in Northwestern Ontario, however affordability can be an issue and that when it comes to work, there are noted difficulties.





¹¹ Data is for household populations with children aged 0-5.

Transportation: Getting from Point A to Point B

According to OCWI (2017), one of the major challenges facing jobseekers, among other factors, is transportation – whether it be in terms of distance, cost and/or availability. In terms of distance, it is no secret that Northern Ontario is huge, especially Northwestern Ontario, however are people driving long distances to work?

According to Statistics Canada, most people in all three districts tend to drive by themselves and it takes them less than 15 minutes to commute to work. Furthermore, in terms of distance, most people tend to drive between zero to 10 km to work and once again, driving alone is the most popular mode of transport. Public transportation was very low in both instances and unsurprisingly, active transportation (e.g. biking) was higher in instances of work being between zero to five km away from home (Statistics Canada 2016b; 2016c). Based on this, most people tend to work close to their homes and therefore the long distances between communities may not be as much of an issue here.

In terms of cost, that can depend. According to Noga (2020), when looking at various types of transportation costs (gas, insurance, etc) across the Big 5 cities in Northern Ontario¹², northern communities tended to have much higher gasoline costs compared to Southern Ontario.¹³ For example, the annual costs for fuel were estimated to be \$1,262 in Timmins – Thunder Bay was a close second at \$1,227. However, license plate stickers, annual insurance premiums, and the price of a monthly bus pass were all lower than the other southern cities in the study. When combining gas with these three other costs, total annual costs were somewhat lower than Southern Ontario. Of course, there are items not included such as maintenance or purchase of one's car (Noga 2020).

In terms of availability, that can look differently to different people. For example, Esses and Carter (2019) found that for immigrants, youth, and professionals, the lack of public transportation infrastructure negatively affected their retention in small and rural areas. In other words, they will not live and work in communities for longer periods of time. As well, for immigrants, obtaining a loan to purchase a vehicle may be difficult for those without a banking history in Canada (ibid 2019). Since "[m]ost small and rural communities have an automobile dominated culture", scenarios like this can pose issues (Bonin 2015).

Overall, we see that transportation as a barrier to obtaining and retaining jobs can depend on the group as well as what transportation is available. Distance does not appear to be a significant factor when commuting to work. Further, while total costs are lower, this does not mean all groups have the same access to certain transportation modes due to costs.



¹² Thunder Bay, Sudbury, Timmins, North Bay and Sault Ste Marie.

¹³ The southern cities selected in the study were Toronto, Ottawa, Barrie, London, and Niagara Falls.

Housing

Along with transportation, housing was also noted as a need among jobseekers. Although it is not the sole factor determining one's employment success, it is one of the foundational pillars (Thomas 2017). For example, while housing does not necessarily lead to higher income, affordable housing is a "'critical component of strategies' facilitating transitions from lower to higher income. Particularly, if individuals need a 'safe and supportive environment to encourage transitions'..." (ibid 2017). Furthermore, the location of where one lives also can impact the development of one's human capital (ibid 2017).

Given the above, what is the situation in Northern Ontario?

In terms of affordability, Northern Ontario ranks very well, both in terms of renting and homeownership (Bevilacqua, forthcoming). For example, when looking at the median home price across the 11 northern districts, all are below the provincial average of \$349,900 (ibid). Compared to the Northeast, Kenora, Rainy River and Thunder Bay boasted lower median home prices (ibid). Furthermore, the percentage of owner and tenant households that are spending more than 30 per cent of their income on shelter costs¹⁴ was considerably lower than those who spend less than 30 percent of their income (figure 16). However, when separating both groups, there is a significant difference (figure 17).



Owner and Tenant Households, NWO and Province

Figure 16: Owner and Tenant Households Spending More or Less than 30% of Income on Shelter Costs, 2016

Source: Statistics Canada, 2016 Census Profiles. Note: does not include farms and dwellings on reserve.



¹⁴ According to Statistics Canada, 'shelter costs' for owner households can include property taxes, mortgage payments, condo fees, utilities, and other municipal services. For renters, it can include utilities and other municipal services (Statistics Canada 2019b).



Figure 17: Percentage of Homeowners and Tenant Households Spending More than 30% of Income on Shelter Costs

Owner and Tenant Households, 30% plus of Income on Shelter Costs

% of owner households spending 30% or more of its income on shelter costs
% of tenant households spending 30% or more of its income on shelter costs

Source: Statistics Canada, 2016 Census Profiles. Note: does not include farms and dwellings on reserve.

Indeed, while the North overall is affordable, it depends on the group. Suttor (2012) goes on to add that for rental households, costs can be a particular squeeze on low-income households and those on social assistance.

Now, in terms of supply, that can depend as well. According to Suttor (2012), the availability of private rental apartment buildings is low outside of the Big 5 (ibid 2012). While this means the supply is low in other communities, we can still take a look at the vacancy rates in larger centers in Northern Ontario. Vacancy rate refers to "the percentage of all available units in a rental property...that are vacant or unoccupied at a particular time (Chen 2019).

Since the data is available only at the CMA/CA level, that limits our ability to see vacancy rates in smaller communities such as Fort Frances or Dryden. As such, the figure below shows the vacancy rates for Thunder Bay and Kenora against five northern cities that classify at the CMA/CA level. Based on this, we see that Northern Ontario's vacancy rates are above that of Ontario and remain relatively steady except for Elliot Lake. For Northwestern Ontario, Thunder Bay and Kenora are fairly middle of the pack.







Figure 18: Vacancy Rental Rates, 2015-2019

Source: Canada Mortgage and Housing Corporation, "Rental Market Statistics Summary by Metropolitan Areas, Census Agglomerations and Cities".

When comparing these seven communities to those across Ontario, five Northern Ontario communities are near the top of the list in terms of high vacancy rates – with Timmins being number two (CMHC n.d.).

Now, there are other factors that could affect Northern Ontario's housing supply. The first is that there is a declining interest by landlords to provide rental units to low-income individuals and families in addition to rent supplement agreements. Second, resource towns that experience a group of workers that come to work end up squeezing and increasing cost of rent (Suttor 2012). Finally, maintenance and construction could play a role. Of the housing supply in Northern Ontario, all census divisions rank above the Ontario average when it comes to dwellings that need major repairs (Noga 2018). By major repairs, this can include "defective plumbing or electrical wiring...and structural repairs to walls, floors or ceilings" (ibid 2018). Noga (2018) goes on to say that this housing inadequacy has connections to mental and physical issues. While the current supply is aging and needs repairs, the construction season in Northern Ontario is also shorter and more expensive than more urban areas of the province (Ontario 2019e).

Overall, we see that while housing affordability may not be an issue at the aggregate level, there are still groups that face greater affordability issues. In terms of supply, while larger centers options available, that may not be the case with smaller towns. Further, there are several trends influencing housing supply.





Other Factors

Now the above analysis has shown that system level supports such as childcare, transportation and housing have a relationship with employment, however the degree of availability, accessibility, cost, etc of the supports can vary. But are these the only factors that can affect an individual obtaining and retaining employment?

According to OCWI (2017), there are four categories of jobseeker needs, as identified by service providers. Below are the categories with some examples included both from OCWI and other items identified in the literature (OCWI 2017; Ference & Company 2016; Workforce WindsorEssex 2016; Metcalf Foundation 2019). As we can see, logistical is only but one part of the pie for jobseekers.

- Human Capital: digital literacy, skills that align with current job openings
- Personal: Mental health supports, culturally appropriate and competent approaches and programs, settlement services pre-arrival, language skills
- Logistical: Transportation, housing, childcare, internet access
- Labour Market Access: Employer perceptions, difficulty recognizing foreign credentials, lack of extensive work experience (e.g. graduates)

Given the above, one thing is clear: wrap-around supports are necessary as individuals may not just be facing a single barrier, but multiple. And not just for those seeking employment, but during employment as well (Metcalf Foundation et al 2019). Unfortunately, however, Ontario's workforce system has gaps on several fronts, including that of adequate wraparound services (ibid 2019). One of the ways that could be considered moving forward in a Service System Managers model is the role employers play in retention - increasing their awareness alongside supporting their capabilities of working with individuals who are multi-barriered. Additionally, service delivery flexibility is encouraged for clients, both who are aware and unaware of services available to them (ibid 2019).

In addition to the above, there are three other variables that are at play. The first is awareness of job opportunities. According to the EmployerOne surveys conducted by the labour market planning boards in Northwestern Ontario, word-of-mouth and other informal recruitment methods was commonly used by employers (NTAB 2017; NSWPB 2018). As such, available job opportunities are not always communicated to the eligible pool of talent.

Second, there can be an issue of talent availability when it comes to placing and retaining people in work. For the Thunder Bay planning board area, 54 percent of employers stated that applicants did not have the appropriate auglifications (NSWPB 2018). For the Kenora and Rainy River areas, 67 percent of employers did not have the required skills (NTAB 2017). As such, focusing on the linkage between education and the labour market is critical to ensure that students are properly prepared with the right skills. Furthermore, the emphasis on postsecondary credentials will become increasingly important in the future labour market. According to Moazzami (2019), by 2031, 80 per cent of new jobs will require postsecondary education. Talent will thus continue to be an issue for the labour market – ensuring pathways for individuals are appropriate is a critical point.

And, of course, tied into this is the supply of the workforce more generally. As stated earlier, all three Northwestern Ontario districts are experiencing an aging population and workers retiring out of the labour force. As well, from 2001 to 2015, Northwestern Ontario experienced low levels of immigration as well as intra and inter-provincial out-migration (Moazzami 2019). Only in 2016/17 has there been an increase in net interprovincial migration into Northwestern Ontario (ibid 2019). Nevertheless, projections show that if major improvements do not occur, the ratio of dependents to working age people (i.e. demographic dependency ratio or DDR) will increase, which can have negative effects on the sustainability of economies (Zefi 2018). By 2036, all three districts' DDR will increase to 0.78 (Thunder Bay), 0.90 (Rainy River), and 0.72 (Kenora). Generally, sustainable economies and communities are somewhere between 0.5 and 0.75 (ibid 2018).

Now, in order for Northwestern Ontario to maintain its current DDR, we'll need 2,310 immigrants annually, but if we want to maintain our DDR growth rate along with the province, we'll need 352 immigrants annually (Cirtwill 2018). These calculations assume full employment of the Indigenous population. As such, even if our domestic labour force is included, we'll still have gaps in labour supply and that can impact the filling of jobs.





Figure 19: DDR Targets for Northwestern Ontario

Required Annual Net Migration - Northwest

Source: Cirtwill, 2018. Author's calculations based on Ontario Ministry of Finance population projections – Spring 2018. Original DDR projections developed in collaboration with North Superior Workforce Planning Board, Thunder Bay Region's Local Employment Planning Council . Note: Target 1 – maintain current DDR, Target 2 – fall to provincial average DDR

Of course, in addition to projecting future population gaps and needs, we need to think about nature of the future labour market too in terms of available jobs. According to Ross (2020), there are several occupations that are expected to experience future growth and/or higher retirement rates between 2016 and 2026. Below are a few examples from the study on the City of Thunder Bay.

- Optometrists, chiropractors, and other health diagnosing and treating professionals;
- Retail and wholesale trade managers;
- Plumbers, pipefitters, and gas fitters;
- Computer and information systems professionals; and
- Pharmacists, dieticians and nutritionists.

From these projections, it is important to understand that some jobs may not have as much demand as others. Once again, ensuring the linkage between education and labour market needs is critical.

Conclusion

Overall, from this section we can see that there are multiple factors that can influence an individual obtaining or retaining a job. As such, wraparound supports are key. Furthermore, Northwestern Ontario is running into a labour supply issue due to an aging population and migration levels. That can certainly influence an employer's ability to find candidates for a job.

When it comes to the childcare, transportation and housing, the latter two appear to have more gaps compared to available childcare. Additionally, childcare as a barrier in employment was only noted as an issue for a small portion of the Canadian population.



Concluding Remarks: Where to go from here?

As we know, change is coming. Therefore we must be proactive and comprehensive in response. The first step was initial community consultations across Northwestern Ontario. The second step is this White Paper. The third step is using this information to further drill down into what is achievable and appropriate for Northwestern Ontario so as to ensure a Service System Managers model works for us.

Throughout this White Paper, multiple statements have been assessed in terms of their validity and degree of extent. Below is a recap of the findings:

- There is still much work to do on the ICT infrastructure and digital literacy fronts. Northwestern Ontario ought to consider maximizing current assets to aid in employment and training service delivery.
- In addition to distance and climate, there are other factors that can have an influence on the cost and reliability of service delivery. As well, not all clients live in urban areas and when calculating costs or determining reliability of service delivery, it is essential to break oneself of urban bias so that rural places are not slapped with urban-centric solutions.
- There is much diversity in Northwestern Ontario, however there are many similarities too. However, further information needs to be pursued about clients so that the most up to date data is used for Service System Managers model discussions.
- Placing and retaining individuals in jobs is not solely dependent on the supply of system supports such as childcare, transportation and housing. Further, supports such transportation and housing appear to have more gaps compared to childcare in Northwestern Ontario.



In addition to these highlights, there are several recommended steps that Northwestern Ontario ought to take when discussing what a Service System Managers model could look like here.

- 1. Using the information contained in this White Paper, as well as community discussions, a dedicated analysis of on employment and training management models ought to be conducted.
- 2. Either collect via a client survey or through current employment and training service providers, up-to-date and detailed information about clients so as to properly inform discussions about a future Service System Managers model for the Northwest. The public data that is available is from 2015/16. As well, in areas such as digital literacy, there was not much information and data on the Northwest or Northern Ontario as a whole, for that matter.
- 3. Ask employment and training service providers what their current assets are and whether they partner with other community organizations. It is important to get a sense of how services are delivered in the region and if there are ways we can maximize these resources.
- 4. Relatedly, we need to ask: what can we do in the short and medium-terms with our current assets and structures? What are items that are out of our control and how we can be flexible to those realities? (e.g. road closures due to weather). Whether these questions are asked to the larger group of identified key actors and past consultation participants, or a smaller group of key actors.
- 5. Tap into the Northeastern discussions about the Service System Managers model. While there are obvious differences, there are commonalities too. We can't possibly know everything and looking for practices that can be applied here can be beneficial.
- 6. Review the key actors that were identified in the Sioux Lookout discussion and discuss who exactly needs to be engaged and how what is their role, both now and in the future?
- 7. Where possible, connect with one or more of the prototype regions to get a sense of how they are navigating the new system. Whether that is the North Superior Workforce Planning Board as the main contact point or another organization.



Works Cited

Ahmed, Weseem. 2019. "Measuring Ontario's Urban-Rural Divide." Ontario 360: Toronto. Available online at https://on360. ca/policy-papers/measuring-ontarios-urban-rural-divide/.

Beaton, B., Burnard, T., Linden, A. & O'Donnell, S. (2015). Keewaytinook mobile: An Indigenous community-owned mobile phone service in northern Canada. In L. Dyson, S. Grant & M. Hendriks (eds.), Indigenous People and Mobile Technologies, Routledge. Sydney, Australia, 109-124.

Bonin, Julien. "Public Transportation Not Just an Urban Concern." Northern Policy Institute. Published January 20, 2015. Available online at https://www.northernpolicy.ca/article/public-transportation-not-just-an-urban-concern-293.asp#_edn4.

Canada. 2014. Satellite Inquiry Report. Canadian Radio-television and Telecommunications Commission. Available online at https://crtc.gc.ca/eng/publications/reports/rp150409/rp150409.pdf.

Canada. 2019. "What you should know about Internet speeds." Canadian Radio-television and Telecommunications Commission. Available online at https://crtc.gc.ca/eng/internet/performance.htm.

Canada. 2019b. "Broadband Fund: Maps of Areas to Enhance Broadband Access." Canadian Radio-television and Telecommunications Commission. Available online at https://crtc.gc.ca/eng/internet/band.htm.

Canada. 2020. Communications Monitoring Report 2019. Canadian Radio-television and Telecommunications Commission: Ottawa. Available online at https://crtc.gc.ca/pubs/cmr2019-en.pdf.

Canada Mortgage and Housing Corporation. N.d. "Ontario – Rental Market Statistics Summary by Metropolitan Areas, Census Agglomerations and Cities." Available online at https://www03.cmhc-schl.gc.ca/hmip-pimh/en/TableMapChart/ Table?TableId=2.1.31.2&GeographyId=35&GeographyTypeId=2&DisplayAs=Table&GeographyName=Ontario.

Cartovista & CRTC. 2018. "Fixed Internet Access and Transport Maps." https://crtc.gc.ca/cartovista/ fixedbroadbandandtransport_en/.

Chen, James. 2019. "Vacancy Rate." Investopedia. Updated June 21, 2019. Available online at https://www.investopedia. com/terms/v/vacancy-rate.asp.

Cira. N.d. "The gap between us: Perspectives on building a better online Canada." Available online at https://www.cira.ca/ resources/state-internet/report/gap-between-us-perspectives-building-a-better-online-canada

Cirtwill, Charles. 2018. "State of Ontario's Northern Regions". Presentation given in North Bay, Ontario. Available online at https://www.northernpolicy.ca/upload/documents/presentations/2018/presentation-2018-sotn-2018-09-24.pdf.

Contact North. "About Us." https://contactnorth.ca/about-us.

Coverage maps (various). Rogers; TBaytel; Fido; Telus; Bell; Koodo.

Dessanti, Claudia. 2020. "The She-Covery Project. Confronting the Gendered Economic Impacts of COVID-19 in Ontario. Ontario Chamber of Commerce: Toronto. Available online at https://occ.ca/wp-content/uploads/OCC-shecovery-final. pdf.

District of Thunder Bay Social Services Administration Board. "Child Care Fee Subsidy." Available online at https://www.tbdssab.ca/child-care-services/child-care-fee-subsidy/.

Eidelman, Gabriel, Tomas Hachard, and Enid Slack. 2020. "In It Together: Clarifying Provincial-Municipal Responsibilities in Ontario." Ontario 360: Toronto. Available online at https://on360.ca/wp-content/uploads/2020/01/In-It-Together-Clarifying-Provincial-Municipal-Responsibilities-in-Ontario_5FINAL.pdf.

Esses, Victoria and Charlie Carter. 2019. Beyond the Big City: How Small Communities Across Canada Can Attract and Retain Newcomers. Public Policy Forum: Ottawa. Available online at https://ppforum.ca/wp-content/uploads/2019/07/ BeyondTheBigCity-PPF-July2019-EN-1.pdf.

Federation of Canadian Municipalities. N.d. "Integrating Climate Considerations: Service delivery planning." Available online at https://fcm.ca/en/resources/mcip/integrating-climate-considerations-service-delivery-planning.

Ference & Company. 2016. Evaluation of the Employment Program of BC (EPBC). Prepared for the Ministry of Social Development and Social Innovation. Available online at https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/organizational-structure/ministries-organizations/social-development-poverty-reduction/epbc-evaluation-201603.pdf

Hadziristic, Tea. 2017. The State of Digital Literacy in Canada A Literature Review. Brookfield Institute: Toronto. Available online at https://brookfieldinstitute.ca/wp-content/uploads/BrookfieldInstitute_State-of-Digital-Literacy-in-Canada_ Literature_WorkingPaper.pdf

Goss Gilroy Inc. 2007. Evaluation of Employment Support Services Final Report. Prepared for the Policy, Planning and Research/Employment Support Services branch of the Department of Community Services in Nova Scotia. Available online at https://novascotia.ca/coms/department/documents/ESS-Goss-Gilroy-Evaluation-2007.pdf.

Information and Communications Technology Council. 2012. Digital Literacy: Canada's Productivity Opportunity. Available online at https://www.ictc-ctic.ca/wp-content/uploads/2012/06/ICTC_DigitalLitWP_EN_09-10.pdf

Keewaytinook Okimakanak Mobile. 2017. Available online at http://mobile.knet.ca/node/464

Keewaytinook Internet High School. Available online at http://kihs.knet.ca/about.

Kernaghan, Kenneth. 2011. "Innovations in municipal service delivery." Municipal World. Published December 2011. Available online at https://www.municipalworld.com/feature-story/innovations-in-municipal-service-delivery/.

Kvas, Maia. 2020. "From Crisis to Recovery: How COVID-19 is Impacting Businesses in Thunder Bay (Part 3)." Northern Policy Institute: Thunder Bay. Available online at https://www.northernpolicy.ca/upload/documents/publications/briefing-notes/ covid-business-impact-summary-august.20.001.pdf.

Macdonald, David and Martha Friendly. 2017. "Time Out Child care fees in Canada 2017." Canadian Centre for Policy Alternatives: Ottawa. Available online at https://www.policyalternatives.ca/sites/default/files/uploads/publications/ National%20Office/2017/12/Time%20Out.pdf.

Melillo, Eric. 2018. Setting the Table: Food Insecurity and Costs in Ontario's North. Northern Policy Institute: Thunder Bay. Available online at https://www.northernpolicy.ca/upload/documents/publications/commentaries-new/commentary-melillo-cof-en-19.01.18.pdf.

Metclaf Foundation, Toronto Region Board of Trade, and United Way Greater Toronto. 2019. Help Wanted: Modernizing Employment and Skills Training Services in Ontario. Available online at https://metcalffoundation.com/site/uploads/2019/06/2019-06-18-Help-Wanted-Report.pdf.

Moazzami, Bakhtiar. 2018. REMOTENESS INDICATORS AND FIRST NATION EDUCATION FUNDING. Assembly of First Nations: Ottawa. Available online at https://www.afn.ca/wp-content/uploads/2018/07/Remoteness-report.Final_.May7-2018.pdf

Moazzami, Bakhtiar. 2019. Northern Projections Kenora District Human Capital Series. Northern Policy Institute. Available online at https://www.northernpolicy.ca/upload/documents/publications/reports-new/kenora_en_20.03.12.pdf.

Moazzami, Bakhtiar. 2019b. Northern Projections Rainy River District Human Capital Series. Northern Policy Institute. Available online at https://www.northernpolicy.ca/upload/documents/publications/reports-new/rainy-river-19.12.17--1-.pdf.

Moazzami, Bakhtiar. 2019c. Northern Projections Thunder Bay District Human Capital Series. Northern Policy Institute. Available online at https://www.northernpolicy.ca/upload/documents/publications/reports-new/thunder-bay-19.12.17.pdf.

Noga, Anthony. 2020. A Tale of Ten Cities: Comparing Key Costs for a Family of Four in Urban Areas of Northern and Southern Ontario. Northern Policy Institute: Thunder Bay. Available online at https://www.northernpolicy.ca/upload/ documents/publications/commentaries-new/noga_ataleoftencities_20.03.18_final.pdf.

Northern Development Ministers' Forum. 2019. Growing the Digital Economy in Rural and Remote Northern Communities. https://www.gov.nl.ca/ola/wp-content/uploads/NDMF-2019_Priority-Project_Growing-Digital-Economy_January-2019.pdf.

North Superior Workforce Planning Board. 2018. Employer Consultations Thunder Bay District. Available online at https://www.nswpb.ca/application/files/8215/4160/4959/EmployerOne_Consultations_Report_-FINAL.pdf.

Northwest Training and Adjustment Board. 2017. Kenora & Rainy River Districts Final Report. Available online at https://www. ntab.on.ca/reports-publications/our-publications/

OECD (2018), Job Creation and Local Economic Development 2018: Preparing for the Future of Work, OECD Publishing, Paris. https://doi.org/10.1787/9789264305342-en

Ontario. 2017. Draft 2041 Northern Ontario Multimodal Transportation Strategy. Ministry of Transportation and Ministry of Northern Development and Mines. Available online at https://northernontariommts.files.wordpress.com/2017/07/draft-northern-ontario-multimodal-transportation-strategy1.pdf

Ontario. 2017. Ministry of Labour, Training and Skills Development. "Employment Services Program Client Outcomes by Census Division FY1516." Published October 2017. Available online at https://www.eo-geohub.com/datasets/21a6459d6a55 4f659b7b8ba8dfaeb20d_0?geometry=-124.037%2C38.920%2C-45.462%2C58.787.

Ontario. Office of the Auditor General of Ontario. Annual Report 2016 (Volume 1 of 2). [Toronto], 2016. http://www.auditor. on.ca/en/content/annualreports/en16/2016AR_v1_en_web.pdf.

Ontario. Office of the Auditor General of Ontario. Annual Report 2018 (Volume 1 of 2). [Toronto], 2018. http://www.auditor. on.ca/en/content/annualreports/arreports/en18/2018AR_v1_en_web.pdf

Ontario. 2019. "Transforming Ontario's Employment Services." Available online at https://news.ontario.ca/maesd/ en/2019/02/transforming-ontarios-employment-services.html.

Ontario. 2019b. Ministry of Training, Colleges and Universities. "CALL FOR PROPOSAL (CFP) For Service System Managers Employment Services Transformation". CFP Tender # 11855. Available online at http://www.tcu.gov.on.ca/eng/eopg/publications/cm-est-call-for-proposal-cfp-en.pdf

Ontario. 2019c. "Up to Speed: Ontario's Broadband and Cellular Action Plan." Ministry of Infrastructure. Available online at https://www.ontario.ca/page/speed-ontarios-broadband-and-cellular-action-plan?_ga=2.150332854.144811851.1581911593-105151650.1534771999.

Ontario. 2019d. Ministry of Labour, Training and Skills Development. "Employment Service." Updated November 2019. Available online at https://www.eo-geohub.com/datasets/a8f3dfa1b38c4e91bade7b3186e8bbf5_0.

Ontario 2019e. Ministry of Municipal Affairs and Housing. "More Homes, More Choice: Ontario's Housing Supply Action Plan." Published May 2019. Available online at https://files.ontario.ca/mmah-housing-supply-action-plan-21may2019.pdf.

Ontario Centre for Workforce Innovation. 2017. "Conversations with Employment Ontario Service Providers." Available online at https://ocwi-coie.ca/wp-content/uploads/2018/06/OCWI-ServiceProviderReport2017-ENG-Web.pdf

Organization for Economic Corporation and Development. 2006. "Digital Divide." Available online at https://stats.oecd.org/glossary/detail.asp?ID=4719

Organization for Economic Corporation and Development. 2008. "Innovative Service Delivery Meeting the Challenges of Rural Regions." Available online at https://www.oecd.org/regional/regional-policy/Innovative-Service-Delivery.pdf.

Organization for Economic Corporation and Development. N.d. "Survey of Adult Skills (PIAAC): Full selection of indicators." Available online at https://www.oecd.org/skills/piaac/.

Organization for Economic Corporation and Development. N.d.-2. "Service delivery in rural areas." Available online at http://www.oecd.org/cfe/regional-policy/service-delivery-in-rural-areas.htm.

Northwestern Health Unit. 2020. "Northwestern Health Unit regional COVID-19 results." Available online at https://www.nwhu. on.ca/covid19/Pages/regional-COVID-19-results.aspx.

Prentice, Barry. 2017. Winter Roads into the Far North. Northern Policy Institute. Available online at https://www. northernpolicy.ca/upload/documents/publications/commentaries-new/prentice_winter-roads-en.pdf.

Renner, Cory. 2020. "Canada's recovery continues at a slower pace." Published September 4, 2020. Available online at https://www.conferenceboard.ca/insights/featured/canadian-economics/canadas-recovery-continues-at-a-slower-pace.

Rogers. "Our network coverage map." https://www.rogers.com/consumer/wireless/network-coverage-map.

Rosairo, Sean. 2020. Disconnected: What happens when you CAN'T work from home during a pandemic? Northern Policy Institute: Thunder Bay. Available online at https://www.northernpolicy.ca/upload/documents/publications/briefing-notes/ rosairo_workfromhome.20.07.08.pdf.

Ross, Alex. 2020. Assessing Labour Market Shortgages in the City of Thunder Bay. Northern Policy Institute: Thunder Bay. Available online at https://www.northernpolicy.ca/upload/documents/publications/briefing-notes/ross-nac-thunderbay_en.20.03.23.pdf.

Shekar, Shruti. 2019. Budget 2019 invests \$1.7 billion for high-speed internet access by 2030. March 19. Accessed August 19, 2019. https://mobilesyrup.com/2019/03/19/budget-2019-internet-rural-communities/.

Statistics Canada. 2016. Census Profiles.

Statistics Canada. 2016b. Census of Population, Statistics Canada Catalogue no. 98-400-X2016324.

Statistics Canada. 2016c. Census of Population, Statistics Canada Catalogue no. 98-400-X2016328.

Statistics Canada. 2017. Northwest [Economic Region], Ontario and Ontario [Province] (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 March 12, 2020).

Statistics Canada. 2017b. Northwest [Economic region], Ontario and Hamilton--Niagara Peninsula [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 March 12, 2020).

Statistics Canada. 2017c. Thunder Bay, DIS [Census division], Ontario and Rainy River, DIS [Census division], 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 March 22, 2020).

Statistics Canada. 2017d. Thunder Bay, DIS [Census division], Ontario and Kenora, DIS [Census division], 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 March 22, 2020).

Statistics Canada. 2018. "Economic region (ER)". Available online at https://www150.statcan.gc.ca/n1/pub/92-195-x/2011001/geo/er-re/er-re-eng.htm

Statistics Canada. 2018b. "Census metropolitan area (CMA) and Census agglomeration (CA)". Available online at https://www150.statcan.gc.ca/n1/pub/92-195-x/2011001/geo/cma-rmr/cma-rmr-eng.htm

Statistics Canada. 2018c. "Census metropolitan influenced zones: Detailed definition." Available online at https://www150. statcan.gc.ca/n1/pub/92-195-x/2011001/other-autre/miz-zim/def-eng.htm.

Statistics Canada. 2019. "Survey on Early Learning and Child Care Arrangements, 2019." Available online at https://www150. statcan.gc.ca/n1/daily-quotidien/190410/dq190410a-eng.htm.

Statistics Canada. 2019b. 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016228.

Suttor, Greg. 2012. Moving Forward on Affordable Housing and Homelessness in Northern Ontario. Northern Ontario Service Deliverers Association and Housing Service Corporation. Available online at file:///C:/Users/rbeals/Downloads/28-Moving_Forward_Affordable-Housing-and-Homelessness-in-Northern-Ontario_2012.pdf.

Thomas, Matthew A. 2017. "ON THE BENEFITS OF AFFORDABLE HOUSING: An Assessment of Recent Literature for Municipalities". Table de Quartier Sud de l'Ouest-de-l'Île: Pointe-Claire. Available online at https://tqsoi.org/wp-content/uploads/2018/03/On-the-benefits-of-affordable-housing.pdf.

Thunder Bay District Health Unit. 2020. "Current COVID-19 Data in TBDHU." Available online at https://www.tbdhu.com/ coviddata.

Volini, Erica, Brad Denny, Jeff Schwartz, David Mallon, Yves Van Durme, Maren Hauptmann, Ramona Yan, and Shannon Poynton. 2020. "Returning to work in the future of work." Deloitte. Published May 15, 2020. Available online at https://www2. deloitte.com/us/en/insights/focus/human-capital-trends/2020/covid-19-and-the-future-of-work.html.

Watson, H.G. (2019). "What banking deserts mean for some of northern Ontario's most vulnerable residents." TVO. Retrieved from https://www.tvo.org/article/what-banking-deserts-mean-for-some-of-northern-ontarios-most-vulnerable-residents

Western James Bay Telecom Network. Available online at http://wjbtn.com/network.htm.

Workforce WindsorEssex. 2016. Barriers for Job Seekers Literature Review. Available online at https://www. workforcewindsoressex.com/wp-content/uploads/2017/07/Summary-Barriers-Literature-Review.pdf.

Zefi, Christina. 2018. The Northern Attraction Series: Exploring the Need for a Northern Newcomer Strategy. Northern Policy Institute: Thunder Bay. Available online at https://www.northernpolicy.ca/upload/documents/publications/commentaries-new/commentary-zefi_newcomers-1-en.pdf.



Appendix A

Statistical Area Classification Types

Rural or Urban	SACtype	SACtype description
Urban	1	Census subdivision within census metropolitan area
Urban	2	Census subdivision within census agglomeration with at least one census tract
Urban	3	Census subdivision within census agglomeration having no census tracts
Rural	4	Census subdivision outside of census metropolitan area and census agglomeration area having strong metropolitan influence
Rural	5	Census subdivision outside of census metropolitan area and census agglomeration area having moderate metropolitan influence
Rural	6	Census subdivision outside of census metropolitan area and census agglomeration area having weak metropolitan influence
Rural	7	Census subdivision outside of census metropolitan area and census agglomeration area having no metropolitan influence
Rual	8	Census subdivision within the territories, outside of census agglomeration

Modified table from Statistics Canada.

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.

Related Research

Northern Projections Human Capital Series Dr. Bakhtiar Moazzami

Assessing Labour Market Shortages Series Alex Ross

Case Studies in Effective Indigenous Skills Development Dharmjot Grewal







Giwednong Aakomenjigewin Teg Institu dPolitik di Nor

northernpolicy.ca