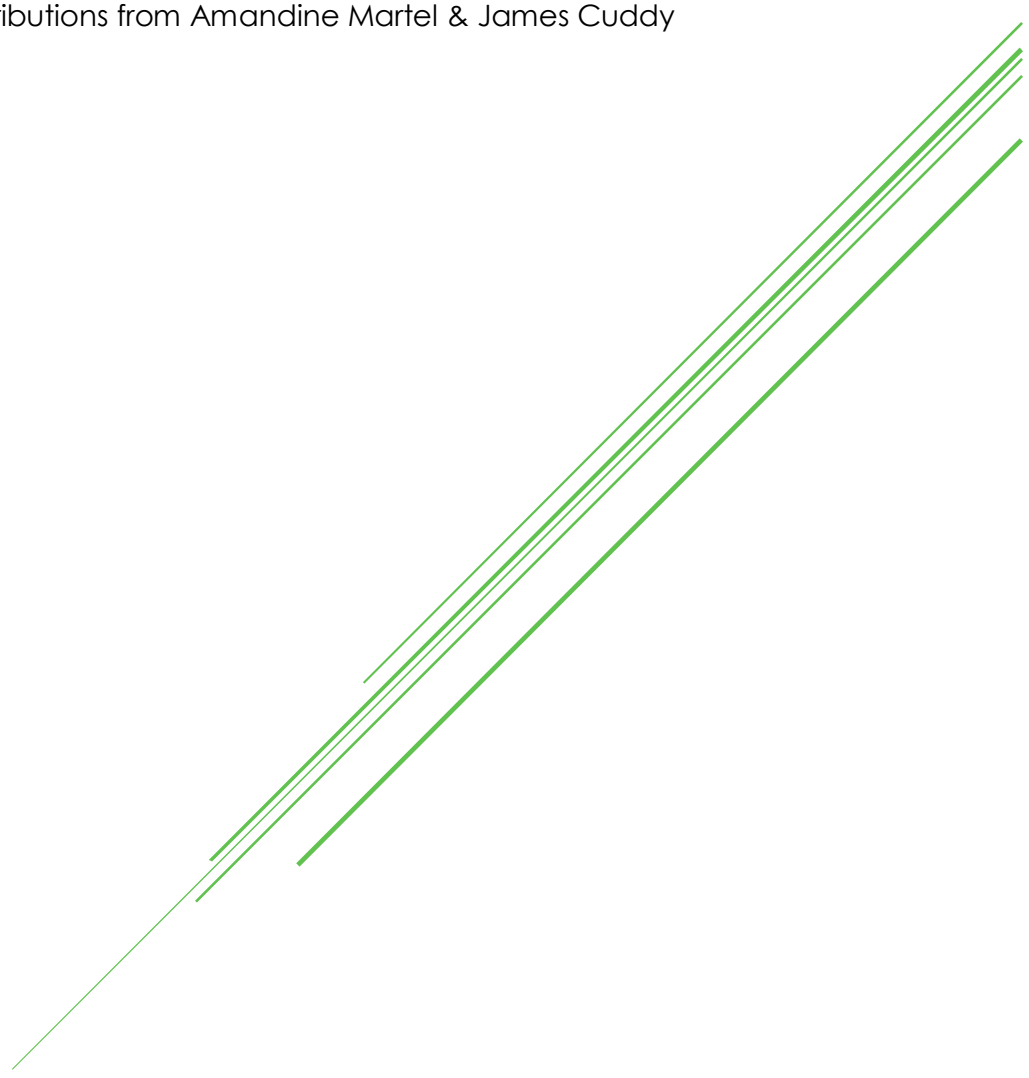


OPEN TO GROWTH

EXPLORING DEPENDENCE AND THE DDR
IN NORTHWESTERN ONTARIO

By Emma Helfand-Green

With valuable contributions from Amandine Martel & James Cuddy



Local Employment
Planning Council

Conseil local de planification
en matière de l'emploi

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For further information, please contact:

Madge Richardson
Executive Director
North Superior Workforce Planning Board
Local Employment Planning Council
107B Johnson Ave.
Thunder Bay, ON, P7B 2V9
mrichardson@nswpb.ca
807.346.2940



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Introduction – What is the Demographic Dependency Ratio (DDR)?

Northern Ontario is facing a combination of trends that have resulted in a declining and aging population. This demographic shift has the potential to influence almost every aspect of society from taxation levels and revenue to consumption and demand. To answer the question of whether Northern Ontario is on the path to a sustainable future, this commentary will consider the demographic dependency ratio (DDR), its implications and possible policy responses to this challenge. This paper will discuss DDR in the context of all Northern Ontario, with a focus on the Thunder Bay District within the Northwest region of Northern Ontario.¹

The DDR can be understood as the ratio of the combined population of youth (0 to 19 years) and seniors (65 years or older) to the working age population (those aged 15 to 64 years). The DDR is expressed as the number of 'dependents' to the number of 'workers' in each population. A DDR score of 0.5 means that in the given community, there are two workers available to support every one dependent person. This is considered a sustainable DDR level as, in this case, there would be enough working age people to support the services (health, education, etc.) that both the working and dependent population require. However, an increasing DDR translates to fewer workers in the population available to support each dependent. This results in an increased burden on the working age population which leads to many challenges for the economy and society.

In Northern Ontario, and Ontario more generally, the DDR is projected to increase in the coming years. The remainder of this paper will discuss the DDR in more detail in Northern Ontario, provide an overview of the implications of a changing DDR and discuss three of the most commonly proposed policy responses to the DDR; immigration, increased participation in the workforce for underrepresented groups such as Indigenous Peoples, and pro-natalist policies (those policies designed to encourage human reproduction).

Although an increasing DDR is a reality for the Thunder Bay District and Northern Ontario as a whole, this paper suggests that policy responses can and should be considered by Northern leaders to mitigate the impacts of the impending demographic shift. Northern Ontario is an open economy, regional leaders should take steps to maximize the advantage that openness provides.

¹ Northwest Ontario is the economic region that lies north and west of Lake Superior and west of James Bay. It consists of three districts; Kenora, Rainy River and Thunder Bay, with the majority of the region's population living in the Thunder Bay Census Metropolitan Area. Northern Ontario consists of 11 districts: Thunder Bay, Kenora, Rainy River, Cochrane, Algoma, Manitoulin, Nipissing, Parry Sound, Greater Sudbury, Sudbury and Timiskaming

Why does the DDR matter?

The DDR ratio has important impacts on every aspect of a society. This section will outline and discuss some of the key factors that are influenced by a changing DDR; production, consumption, savings rates, investment and the tax base. These impacts all influence a sixth factor which we will explore; dependence.

Production

A high DDR is likely to result in a decrease in production as the size of the labour force begins to shrink. This holds true, even in the face of technological change and advancement. David Foote, professor at the University of Toronto, explains: "inevitably, the aging of the population, with more and more people exiting the work force either full-time or part-time – labour force growth slows down, and since labour [growth] is two-thirds of economic growth, inevitably economic growth slows down. As we look forward, much slower economic growth will be the norm" (Parkinson, McFarland & McKenna 2015). As the older generation exits the workforce, labour shortages emerge and labour force growth slows. Because labour is a key component of production, the declining labour force results in a decline in overall production. Thus, it can be expected that an increasing DDR will negatively impact production, and therefore, economic growth for the region. New technologies will offset this of course, but it is not yet clear that technology can completely replace the losses from labour force decline. Production decline means less revenue generated by the region, either by internal trade or export.

Consumption

On the consumption side, a high DDR once again has an impact. The consensus is that seniors tend to spend less than working age people in most areas (excluding personal services such as health care) (Ip 2015). Working age adults are in, what is sometimes known as, the accumulation phase. In this life phase, individuals collect assets and purchase durable goods such as houses and cars (Ip 2015). Once individuals reach retirement age, their spending patterns tend to shift away from durable goods towards services, which can result in a reduced market for some industries and businesses. Further, in addition to changing their consumption patterns, seniors tend to spend less overall, reducing economic activity. It is important to note here the ongoing shift in the northern economy to one more akin to the global model – a service as opposed to goods-based economy. A changing DDR will affect the overall consumption patterns and levels of the population which will again negatively impact the local economy as services are no longer consumed. There is good and bad news here: declining consumption will offset declining production, however, this will lead to a new, lower, balance point and a smaller economy. Simultaneous production and consumption decline will significantly impact job creation (even a smaller population still requires employment to sustain themselves), local source revenue, and self-sufficiency of the region as a whole.

Savings Rates and Investment

A third implication of an increasing DDR is the impact that it has on savings and investment. An increasing DDR and aging population will mean a reduction of the number of “prime-age savers” (defined by the Bank of Canada as those aged 35 to retirement) (Boivin 2016). This will decrease aggregate savings in the economy, which impacts the availability of funds for investment. The reduction of aggregate savings is exacerbated by the fact that in addition to saving less, seniors will draw on the existing savings. In other words, there will be fewer prime age savers contributing to aggregate savings, and more seniors drawing from the pool of aggregate savings. Once again, this situation has negative impacts on the broader economy as savings are needed to allow for investment to improve the productive capacity of the economy. This can, and should, be offset by external investment as entry costs fall, however, experience in highly dependent regions like Atlantic Canada have demonstrated that this substitution effect can be delayed or even deterred by poor government policy (McMahon, 1996).

Tax Base

Finally, one of the major implications of an increasing DDR is a reduction in the available tax base resulting in fewer funds available locally for public services. Governments rely on an adequate tax base to fund programs and services for the public. A high DDR will mean that there are fewer workers earning an income and contributing to the tax base. To exacerbate this challenge, youth and seniors tend to be higher users of costly government-funded services. This includes services funded and provided locally such as education, recreation, and emergency responders. It also includes services provided by the federal or provincial governments or supported via transfers from those governments, especially health care.

An increasing DDR will impact other local services as well, not just those consumed largely by the dependent population. The amount of funds collected through property taxes which make up about 42 percent of all Ontario municipal revenues (Di Matteo, 2016). Municipal revenues are used to finance important public services such as transportation (roads, public transit), protection (fire and police), and environment services (garbage collection, water).

As to health care, in 2012, seniors made up 14.9 percent of Canada's population, but received 45.2 percent of health spending (Canadian Institute for Health Information 2014). Further, a report by the Fraser Institute predicts that health spending as a share of total program spending in Ontario will increase from 42.9 percent in 2015 to 49.5 percent in 2030 (Barua, Palacios & Emes 2016). As the senior population rises and the local tax base declines northern Ontario will become even more dependent on transfers from other parts of the province and the country. It should also be noted that while the funds for health care are largely generated outside the region, the people that deliver the services are local. Shortages already exist in all health professions in the north, especially in the areas of mental health, personal support workers and professional nurses (NSWPB, 2016). Absent a significant shift in either our local training or

external recruitment success rates, a declining DDR will make these shortages even worse.

Dependence versus self-sufficiency

The literature on the negative impacts of regional dependency in Canada highlights many potential pitfalls: higher taxes, higher levels of unemployment, higher emigration and lower immigration levels, larger debt (Crowley & O'Keefe, 2006). Although it has also been argued that greater dependency on external transfers results in higher levels of public services (MacKinnon, 2005). For Northerners, the level of dependence on southern Ontario and the impacts of having decisions made for us by others is already a significant regional concern (NOMA, 2012). The choice we face is to respond aggressively to a declining DDR by taking advantage of our presence in an open economy or, maintaining the status quo and continuing to fall short of the needed level of external migration and investment, and internal participation, necessary to make the fundamental change required to shift the demographic tide pushing us deeper into dependence and effective political and economic irrelevance.

Even the Federal Department of Finance (2012) has recognized that an unsustainable DDR has several significant implications on the economy and society, leading to slowed economic growth. We can no longer afford to ignore the importance of addressing the DDR to maintain a healthy and viable Northern Ontario.

Calculating the Demographic Dependency Ratio

As discussed in the paper's introduction, the DDR is the ratio of the combined population of youth and seniors to the working age population. The formula for the DDR is provided in Figure 1.

Figure 1: Demographic Dependency Ratio Formula

$$\text{DDR} = \frac{(\text{persons aged 19 years or under}) + (\text{persons aged 65 and older})}{\text{Persons aged between 15 and 64 years}}$$

A DDR score of 0.5 would mean that there are two workers available to support every one dependent person in a community. Increasing the ratio, as an extreme example, to 1.5, would mean that there are 1.5 dependents for every worker. In other words, the higher the dependency ratio, the greater the burden placed on the working aged population to support old and young dependents.

Although the DDR provides a general measure of the ratio of workers to dependents it is by no means a perfect measure. The DDR relies on two key assumptions that do not hold in reality. First, the DDR assumes full employment for those between the ages of 14 and 65. However, this is not the case. In 2014-15 for example, the participation rate for the Thunder Bay District was 61.1 percent and for Northwest Ontario was 60.4 (See Table

1). This means that in reality there is a significantly higher number of dependents to those who are between the ages of 15 and 64 and actually participating in the labour force.

Table 1: Participation, unemployment and employment rates in 2014-15

2014-2015	Thunder Bay District	Northwest Ontario	Northern Ontario	Ontario
Participation Rate	61.1	60.4	59.3	65.2
Unemployment Rate	5.6	5.9	7.2	6.8
Employment Rate	57.7	56.8	55	60.8

Source: Labour Force Survey, Statistics Canada.

Second, the DDR assumes that no one over the age of 65 is working. Once again, this assumption does not hold. Indeed, many individuals over the age of 65 continue to participate in the labour force. For example, in 2014, the participation rate for individuals 65+ was 26.1 percent in Thunder Bay District and 26.9 percent in Northwest Ontario. This translates to a reduction in the number of dependents, bringing down the DDR. However, the number of seniors participating in the economy is not enough to bring down the DDR to a sustainable level without additional interventions. Nonetheless, encouraging the participation of workers 65 years and older is one method for addressing the DDR.

REALITIES: Current DDRs in Northwest Ontario and Northern Ontario

Thunder Bay District, Northwest Ontario and Northern Ontario DDR figures are provided in Table 2. The DDR for all three northern regions was higher in 2015 than in Ontario, demonstrating that the North has been more significantly impacted by this challenge. The current DDR levels, at around 0.50, are considered sustainable. The real challenge lies in what is to come in the next 25 years.

Table 2: DDRs for 2015

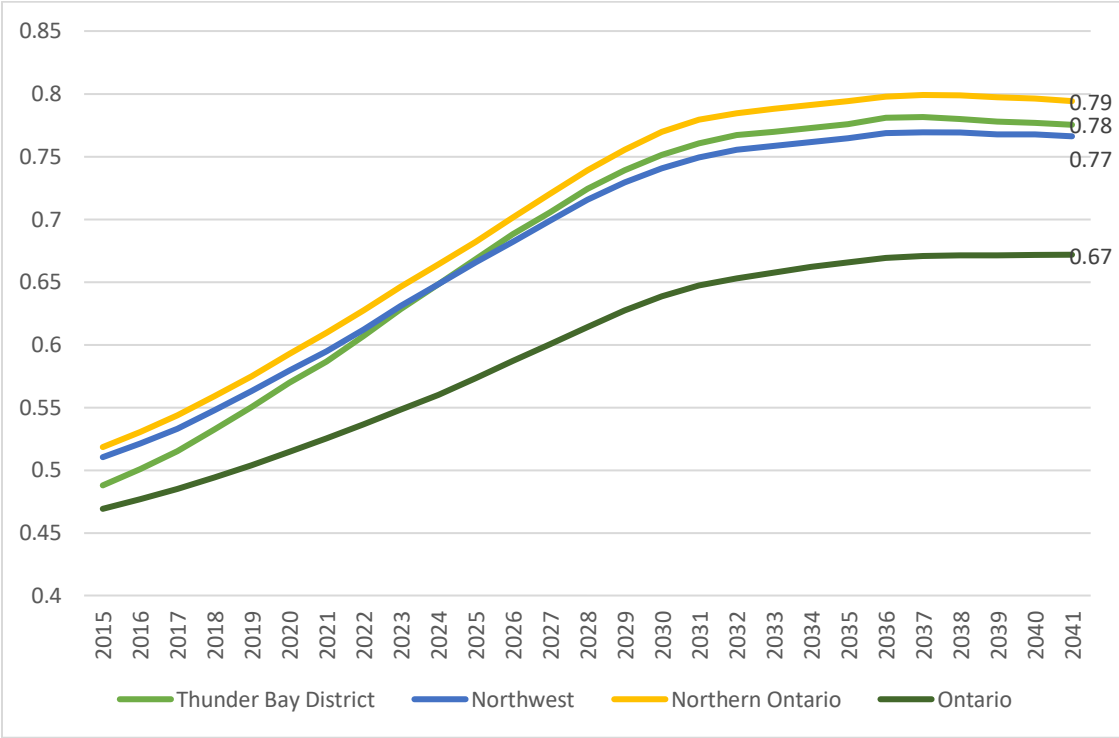
2015	Thunder Bay District	Northwest Ontario	Northern Ontario	Ontario
Under 15 years of age	21,464	40,388	120,964	2,192,984
15-64 years of age	99,965	158,304	525,479	9,387,916
Over 65 years of age	27,300	40,395	151,409	2,211,152
DDR	0.49	0.51	0.52	0.47

Source: Author's calculations based off Ontario Ministry of Finance Population Projections, Spring 2016.

Figure 1 provides current and projected DDRs from 2015 to 2041. These projections are based on the population estimates provided by the Ontario Ministry of Finance. Using these figures, we were able to calculate the currently projected DDR for Northern Ontario and certain sub regions out to 2041. The current projections assume that our historical success in attracting new immigrants remains unchanged, as does our domestic birth rate. The goal of this paper, of course, is to suggest ways we can alter these projections.

The current projected increase for the DDR in Northern regions is more significant for Ontario as a whole, with Thunder Bay District's DDR projected to increase by 0.29 to 0.78, and Northern Ontario's DDR to increase by 0.27 to 0.79. The increase will mean that by 2041 every two working people will support 1.5 dependents.

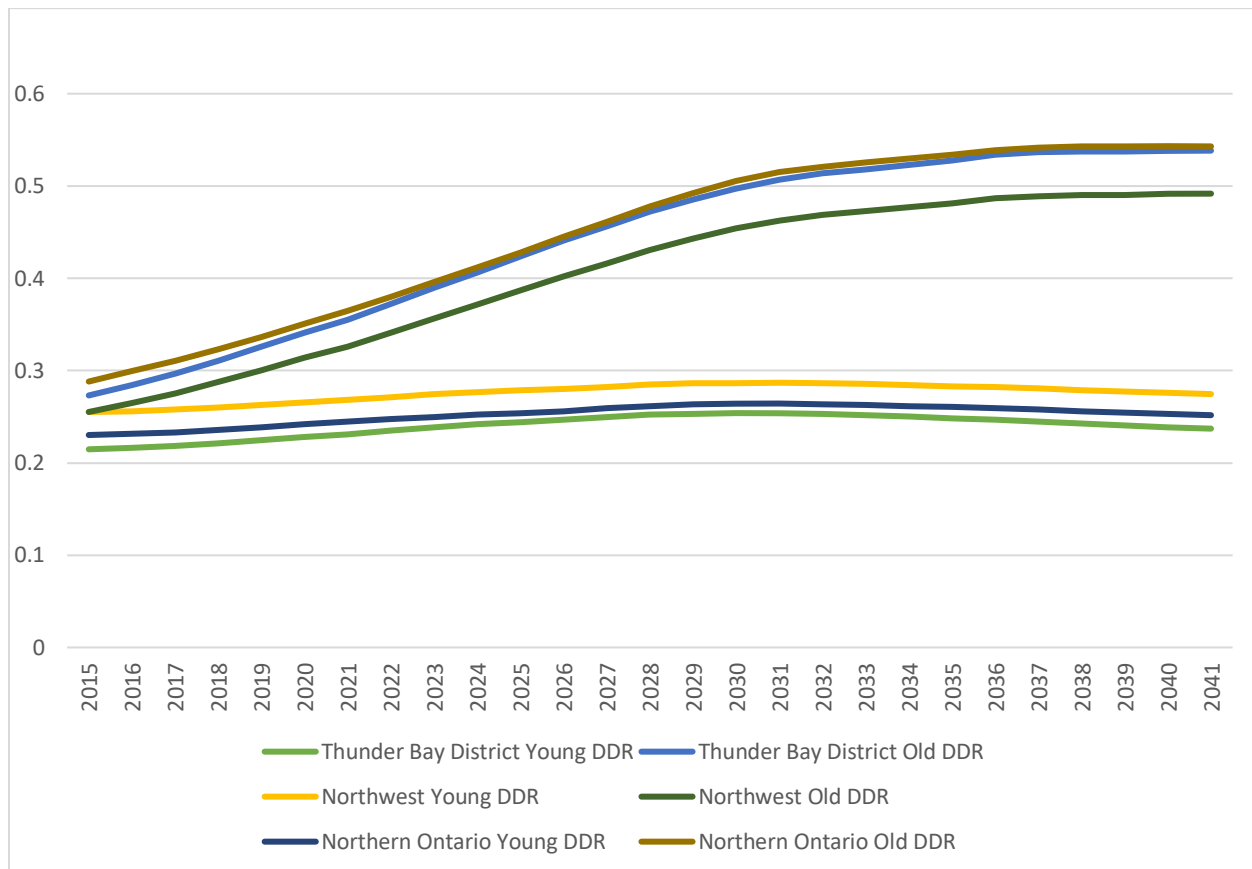
Figure 1: Current and Projected DDRs, 2015-2041



Source: Author's calculations based off Ontario Ministry of Finance Population Projections, Spring 2016.

To provide a closer look at the DDR, Figure 2 presents the youth-only and senior-only DDRs for the respective geographies. These measures look specifically at the ratio of young people to working age people and the ratio of seniors to working age people. Using these measures, we can identify the root cause of the increasing DDR. As made apparent in Figure 2, the growth in the population of those aged 65 and older is the major driver behind the increasing DDRs in Northern Ontario.

Figure 2: Youth-only and Senior-only DDRs



Source: Author's calculations based off Ontario Ministry of Finance Population Projections, Spring 2016.

In other words, the major strain on Northern communities will be an increase in the number of seniors rather than an increase in the number of youth. This is important as two of the available responses to a declining DDR involve making the ratio of youth to workers worse in the short term to allow sustainable medium and long-term solutions. This will be further explained in the following section which discusses the drivers of the changing DDR.

As mentioned in the previous section, the actual DDR facing the regions discussed in this paper are higher than the numbers shown in Table 1, Figure 1 and Figure 2. This is because DDR assumes full employment for the working age population, which is not the case. Using participation rate per age group for 2014, the DDRs have been re-calculated in Table 3. Using this update, the DDR for Thunder Bay District increases from 0.49 to 0.74 and the DDR for Northwest Ontario increases from 0.51 to 0.80. To make matters worse, the table below does not consider the number of those individuals in the workforce who are employed, rather than just participating (anyone who is still actively looking for work is considered to be participating in the workforce, even though they are in fact, not contributing earned income to support dependents). If this difference was considered, the DDR would increase even further.

Table 3: DDR with participation rate considered

	Thunder Bay District	Northwest Ontario	Ontario
Participation Rate, 2014			
15-19 years old	43.5 percent	39.6 percent	36.5 percent
20-64	81.5 percent	81.0 percent	82.0 percent
65+	26.1 percent	26.9 percent	27.8 percent
Population, 2015			
15-19 years old	8,460	15,031	845,565
20-64	91,505	143,273	8,542,351
65+	27,300	40,395	2,211,152
Actual number of people participating in labour market, 2015			
15-19 years old	3,680	5,952	30,8631
20-64	74,553	116,014	7,006,197
65+	7,125	10,866	614,700
DDR taking participation into account, 2015	0.74	0.80	0.74
DDR from Table 2	0.49	0.51	0.47

Source: Author's calculations based on Taxfiler, 2014 and Statistics Canada estimates of population, 2015.

Overall, it is apparent that a relatively high and increasing DDR is a challenge facing Thunder Bay District and Northern Ontario more generally. The reasons for this demographic reality will be explained in the following section.

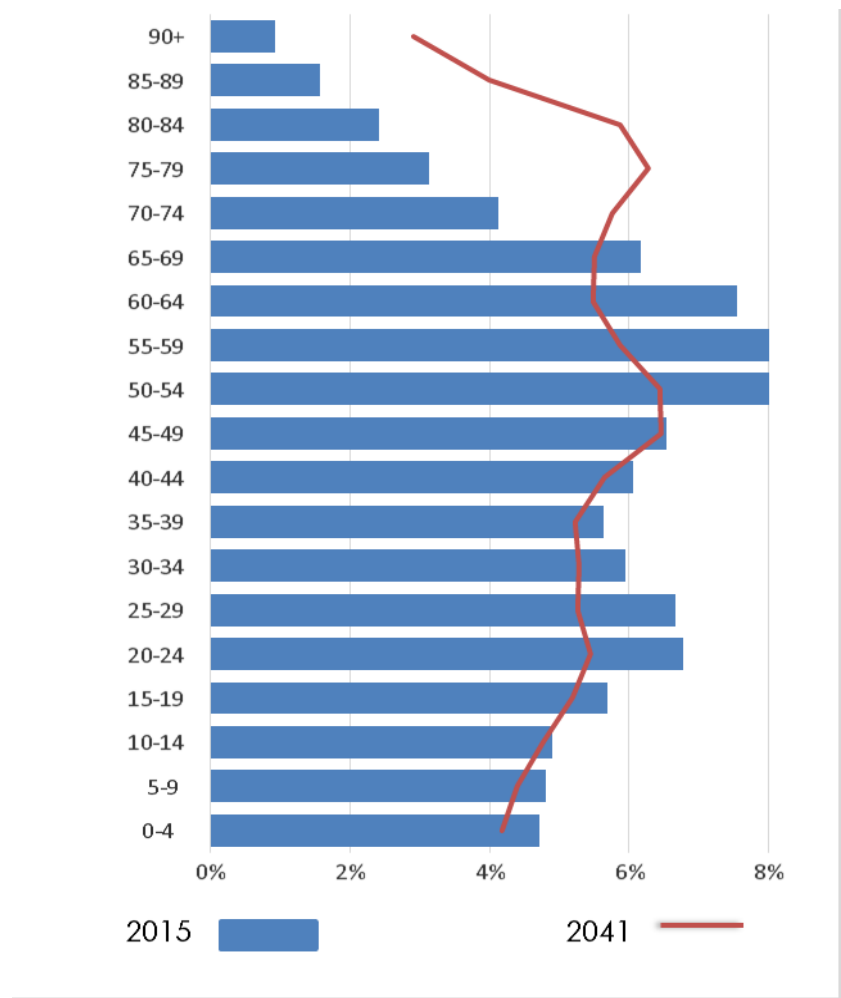
IMPLICATIONS: Drivers of an Increasing DDR in Northern Ontario

There are four main drivers of an increasing dependency ratio; population aging, declining fertility rates, increasing life expectancy and low net in-migration.

Population aging

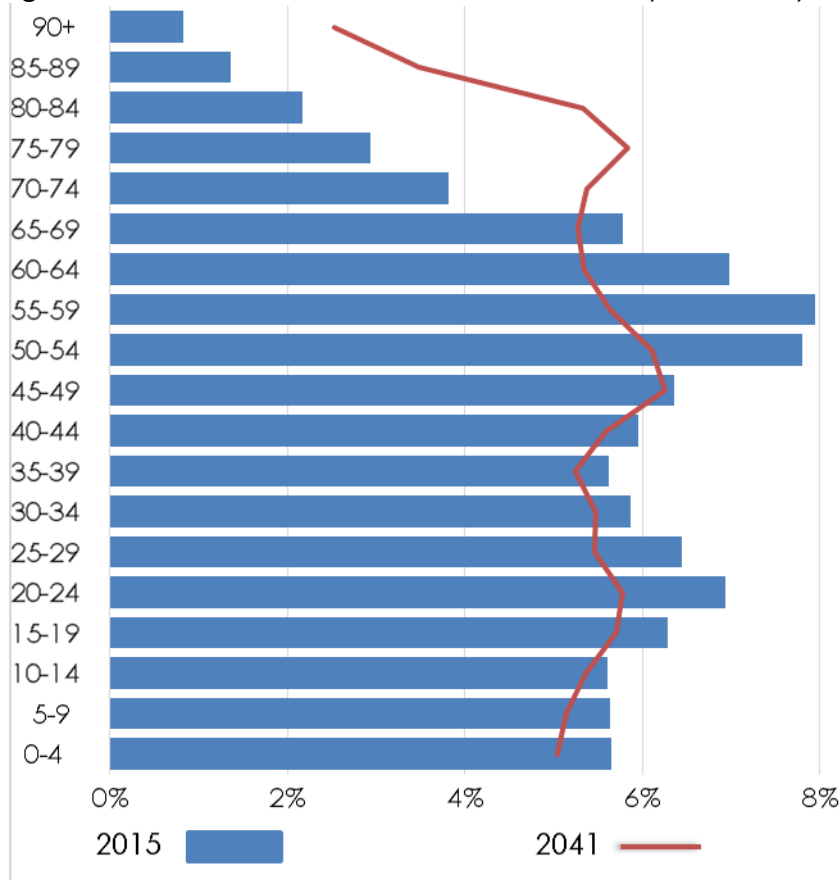
According to the Ontario Ministry of Finance (2015), "the number of seniors aged 65 and over [in Ontario] is projected to more than double from 2.2 million, or 16.0 per cent of population, in 2015 to over 4.5 million, or 25.3 per cent, by 2041" due to the aging of the baby boomers (those born between 1946 and 1965). The effects of baby boomer aging are being felt across Northern Ontario, resulting in significant population shift for the region. Figures 3 and 4 show population pyramids for Thunder Bay District and for Northwest Ontario. These figures demonstrate that the proportion of seniors will increase between 2015 and 2041 and there will be fewer individuals in the prime working age cohort.

Figure 3: Thunder Bay District – Distribution of Population by Age



Source: Statistics estimates, 2015, and Ontario Ministry of Finance Population Projections, Spring 2016.

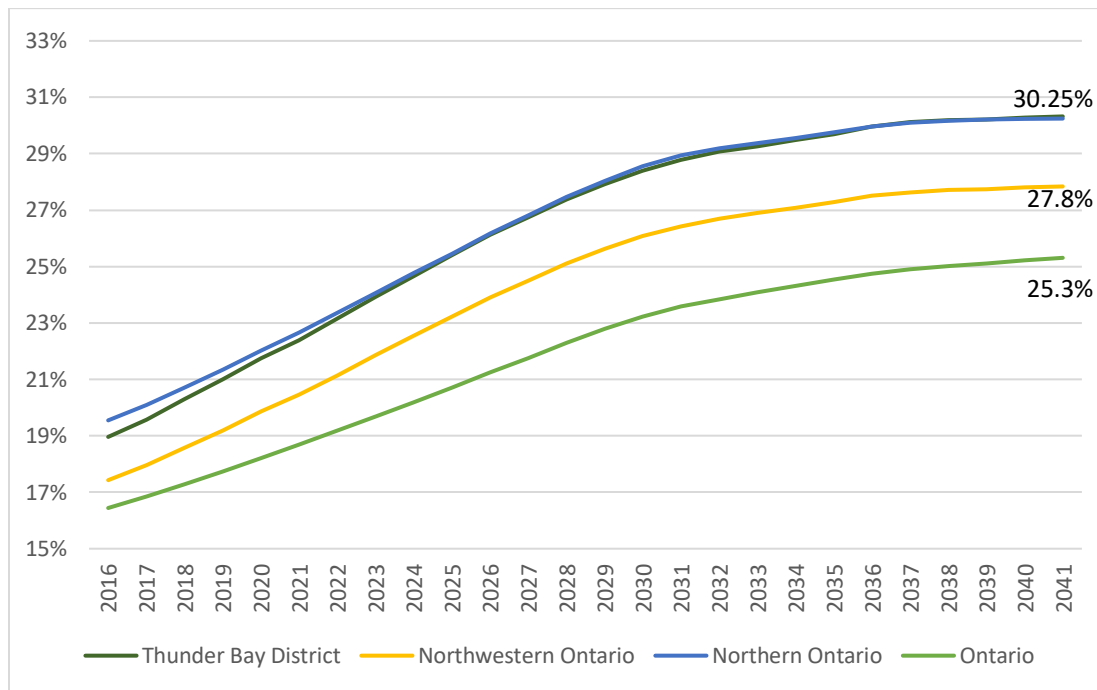
Figure 4: Northwest Ontario – Distribution of Population by Age



Source: Statistics estimates, 2015, and Ontario Ministry of Finance Population Projections, Spring 2016.

Population aging is impacting Northern Ontario more significantly than the rest of the province. Figure 5 shows that by 2041, individuals aged 65 and older will make up 30 percent of the total population in the Thunder Bay District and Northern Ontario and 28 percent in Northwest Ontario, compared to approximately 25 percent in Ontario as a whole.

Figure 5: Projected population 65 + as percent of total, 2016-2041²



Source: Author's calculations based off Ontario Ministry of Finance Population Projections, Spring 2016.

Increasing Life Expectancy

Over the past 30 years, life expectancies have increased significantly across Ontario and Canada. This has significantly impacted the population aging situation that was described in the previous section, as it results in an increased number of older seniors. Table 4 shows life expectancies for men and women, at birth and at age 65, over time. This table highlights that life expectancy will continue to increase, with men expected to live to 86.6 years of age and women to 88.7 by 2041. Because the population will live longer, healthier lives, there will be a larger portion of seniors in the future.

² Data for the Thunder Bay District mirrors that for Northern Ontario, causing the Thunder Bay District line to disappear.

Table 4: Life Expectancy in Ontario, 1981 to 2041

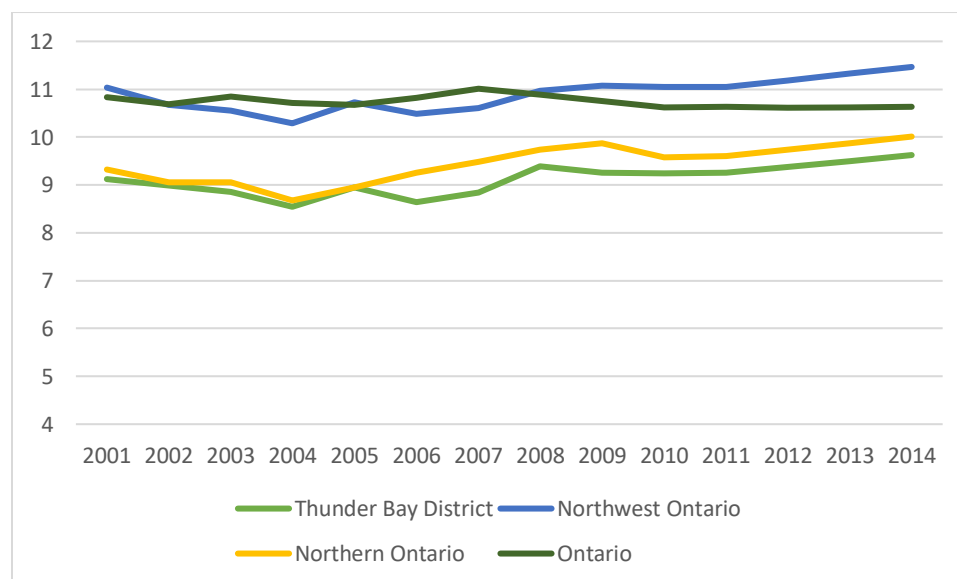
	1981	1991	2001	2011	2021	2031	2041
Male - At birth	72.5	75	77.4	80	82.4	84.6	86.6
Male - At age 65	14.5	15.8	17.2	19.2	20.9	22.4	23.9
Female - At birth	79.3	80.8	82.1	84.1	85.7	87.3	88.7
Female - At age 65	19	19.7	20.4	22	23.2	24.4	25.5

Source: Ontario Ministry of Finance Population Projections, Spring 2016.

Fertility Rate

In the past, Ontario experienced a generally declining fertility rate, especially among young women (Ontario Ministry of Finance, 2016). However, in recent years, the fertility rate has begun to level out. For the purposes of this paper, the crude birth rate has been calculated. This measure considers the number of live births per year per 1000 living people in the population.

Figure 6: Crude Birth Rate - Births per 1000 people



Source: Author's calculations based on Statistics Canada: CANSIM Table 051-0059 and 051-0001

This chart demonstrates that the Thunder Bay District has fewer births per 1000 people as compared to Ontario as a whole. Northwest Ontario has a higher birth rate than the Thunder Bay District, and in 2008, had a higher birth rate than Ontario which has

continued until 2014. The higher crude birth rate in Northwest Ontario may be related to the Indigenous population that has a higher birth rate than the non-Indigenous population. In fact, due to a higher number of births, the Indigenous population is expected to grow by nearly 42 percent from 2013 to 2041 in the Thunder Bay District (Moazzami & Cuddy 2016, p. 6).

Low Net In-migration

Emigration, or the movement of people out of the region, is also influencing the DDR in the north. There is a higher proportion of individuals leaving Northern Ontario than coming in, resulting in negative net migration. Table 5 shows net migration for three age groups as well as the total labour force and total population. Although the figures change over time, generally both Thunder Bay District and Northwest Ontario experience negative net migration. Many of those leaving tend to be in either the entry age (15-24) or prime working age (25-64).

Table 5: Net Migration for Thunder Bay District and Northwest Ontario

Thunder Bay District	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Entry (15-24)	-16	-217	56	60	28	40
Prime (25-64)	-147	20	-72	-151	-236	-213
Exit (65+)	-1	11	-41	5	-70	-68
Total Labour Force (15+)	-164	-186	-57	-86	-278	-241
Total Population	-29	-124	38	-63	-276	-227
Northwest Ontario						
Entry (15-24)	-223	-381	-114	-107	-174	-154
Prime (25-64)	-394	-238	-316	-324	-443	-387
Exit (65+)	-36	-51	-116	-89	-153	-146
Total Labour Force (15+)	-653	-670	-546	-520	-770	-687
Total Population	-746	-711	-550	-559	-832	-719

Source: Author's calculations based on Statistics Canada, CANSIM Table: 051-0063

Taken together, these factors will contribute to DDR rates that are expected to increase over the next 25 years. By identifying the drivers of an increasing DDR, possible solutions can be provided. That is the focus of the final section.

Addressing a Changing DDR

This section discusses three areas where policy interventions can address the increasing DDR and bring Northern Ontario closer to a sustainable future. The three policy areas include: increased In-migration, encouraging participation in the workforce for underrepresented groups, and pro-natal policies. As will be made clear throughout this section, no one policy response will address the problem sufficiently.

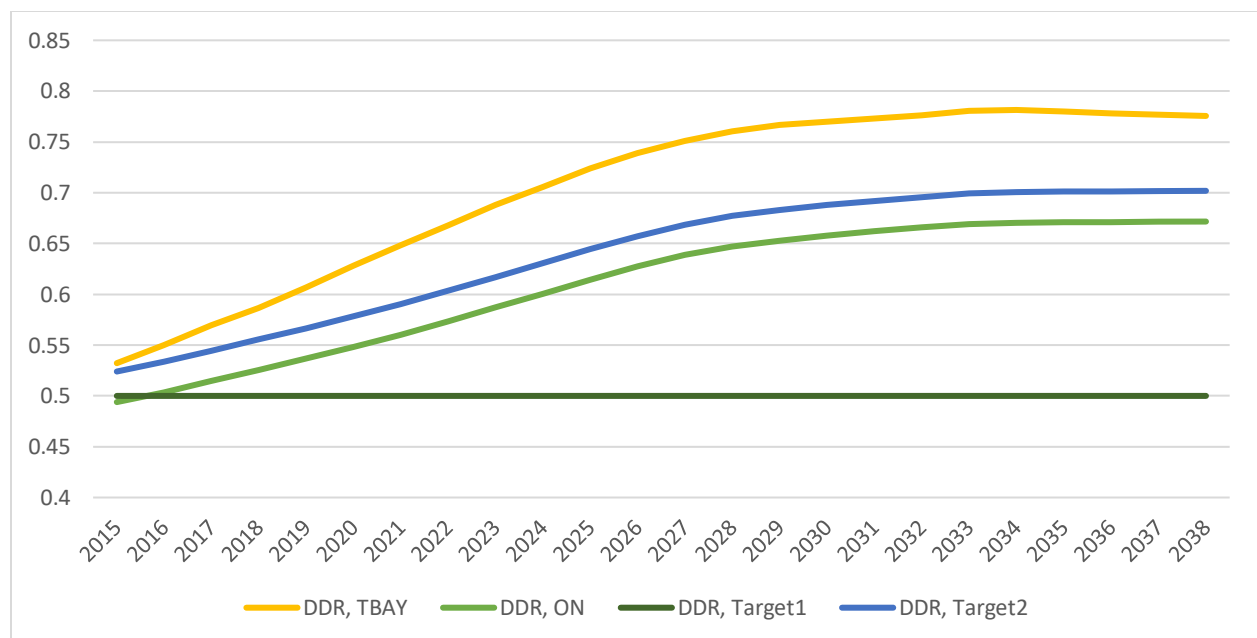
Instead, a combination of policy responses will be necessary to bring Northern Ontario to a sustainable DDR.

Increased In-migration

One clear response to a declining DDR is to encourage immigration. Recall, a declining DDR means that a community has fewer working age people supporting a higher number of dependents. Encouraging immigrants should increase the number of working age people, lessening the burden on the existing workforce by distributing the regional load across a broader number of contributing workers. This assumes, of course, that the immigrants tend to be of working age and to bring with them younger, as opposed to older, dependents.

In order to estimate the necessary level of net migration to address the increasing DDR, it is necessary to set DDR targets. Two targets have been established: the first is to hold the DDR steady at its present level (of around 0.5 – Target 1). The second is to tie regional DDR growth to projected provincial DDR growth (using 2016 as a reference year – Target 2). Figure 7 compares the projected DDR for Thunder Bay District and Ontario and the two DDR targets for the Thunder Bay District.

Figure 7: Two possible DDR Targets for Thunder Bay District

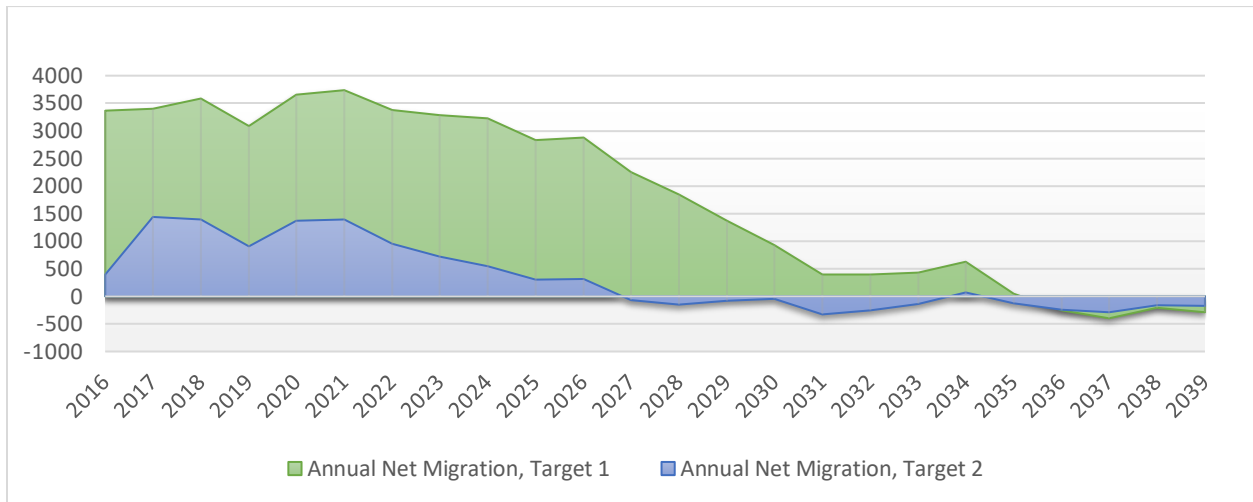


Source: Author's calculations based on Ontario Ministry of Finance Populations Projections, Spring 2016.

Based on these two targets, the required annual net migration can be calculated. To reach Target 1 (keep the DDR at the present level of 0.5), the Thunder Bay District would be required to add approximately 1900 people annually for the next 25 years (See Figure 8). Further, the number of newcomers from other parts of the province, country and world would have to be much higher than 1900 to allow for those who will leave

the district. To reach Target 2 (tie DDR to provincial growth), an average of 300 people would be needed annually for the next 25 years (See Figure 8)³

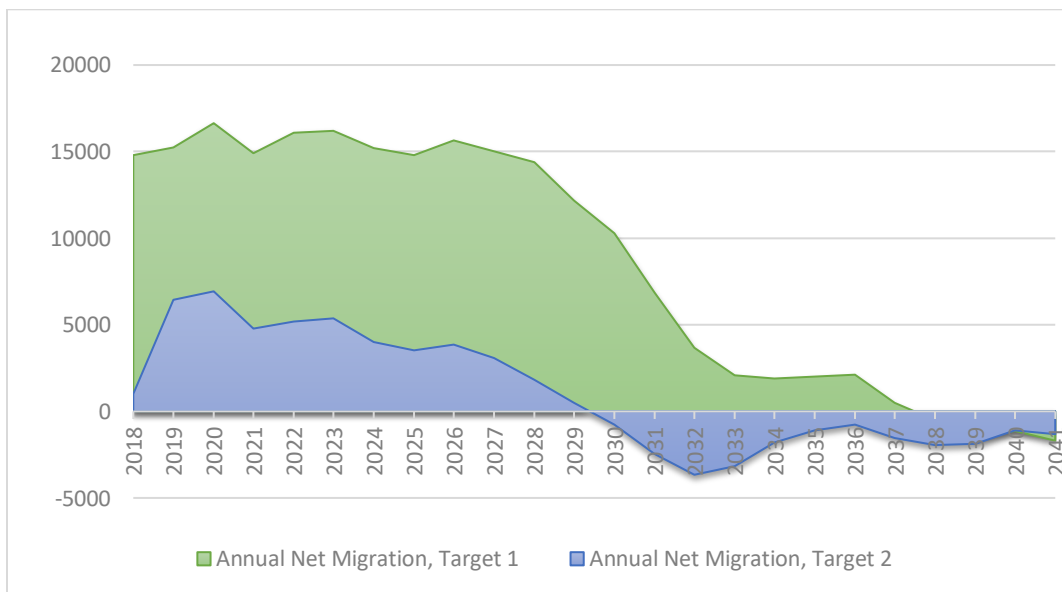
Figure 8: Required Annual Net Migration – Thunder Bay District



Source: Author's calculations based on Ontario Ministry of Finance Populations Projections, Spring 2016

For Northern Ontario as a whole, the same targets can be applied. An average of 9000 migrants would be required annually to meet Target 1 and 1200 required to meet Target 2 (see Figure 9).⁴

Figure 9: Required Annual Net Migration – Northern Ontario



Source: Author's calculations based on Ontario Ministry of Finance Populations Projections, Spring 2016

³ The exact annual average would be 1861 to meet Target 1 and 356 to meet Target 2.

⁴ The exact annual average would be 8918 to meet Target 1 and 1248 to meet Target 2.

In both scenarios, Thunder Bay District and Northern Ontario would require a significant number of newcomers to meet the targets. This presents many policy challenges related to settling immigrants and newcomers to ensure they have the supports they need to contribute to the economy. A further challenge is related to secondary migration and whether the newcomers to the North stay in the North, rather than moving to Southern Ontario or other regions. Nonetheless, it is clear that increased migration to the North will be critical for the future sustainability of the region. Policymakers should consider possible methods for attracting and retaining newcomers.

Increase participation in the workforce and employment for underrepresented groups such as Indigenous people

A second approach to addressing the DDR is to encourage and support the participation of currently underrepresented groups in the labor force. Recall however that this solution would not impact current DDR projections but simply make them more accurately reflect the reality on the ground. DDR calculations **assume** full employment of all existing working age residents, including those in under-represented groups. Thus, this policy response would only close the gap between the notional DDR presented in figure 1 and the actual DDR presented in Table 3.

This does not make it any less important to address this challenge. Underrepresentation itself is an economic and social crisis with its own short, medium and long-term impacts. At the same time, addressing this underrepresentation responds not only to its direct dilatory affects but also impacts medium and long-term DDR. This is the case because, as we saw above, labour productivity represents about two-thirds of economic growth. It is also the case because just as we know that a cycle of dependence can be created we also know a virtuous cycle of participation and progress can also be initiated (see for example, Cheng et. al. 2016). Meaning that as participation levels increase, family outcomes improve and the ability to both deliver local services and access external goods (as and when required) is enhanced.

In Northern Ontario, a key demographic is the Indigenous population. The Indigenous population is considerably younger than the non-Indigenous population in Ontario, with a higher birthrate. Further, a significant proportion of the Indigenous community in Northern Ontario does not live on reserve - instead, this population is increasingly moving towards larger cities and towns such as Thunder Bay.

Despite their significant population contribution in Northern Ontario, Indigenous people continue to be underrepresented in the labour force. According to Statistics Canada data from 2011, the unemployment rate for the Thunder Bay District's Indigenous population was 20 percent compared to 9 percent for the total district (see Table 6). Further, the participation rate among the Indigenous population was 13 percent lower than for the general population (Cuddy & Moazzami 2016, p. 18).

Table 6: Labour Market Trend for Indigenous Population 15 to 64 Years of Age, Thunder Bay District, 2001 and 2011

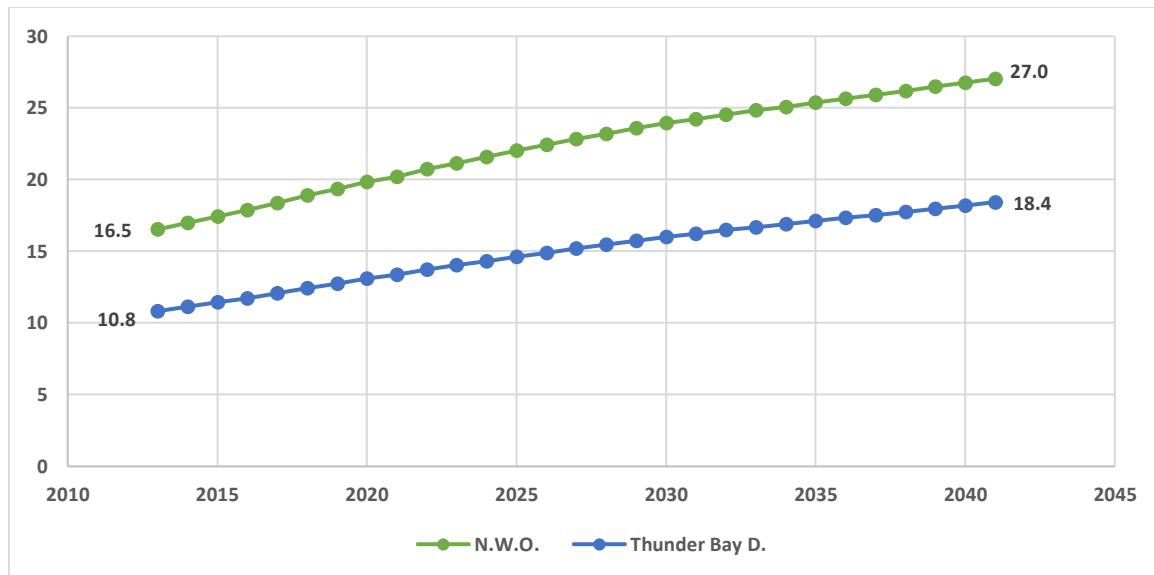
Labour Market Outcome	2001	2011
Total District Population		
Total population 15 to 64 years of age	100,605	98,460
In the labour force	76,485	72,360
Employed	69,420	65,845
Unemployed	7,060	6,520
Not in the labour Force	24,125	26,100
Participation Rate	76.0 percent	73.5 percent
Employment Rate	69.0 percent	66.9 percent
Unemployment Rate	9.2 percent	9.0 percent
Indigenous Population		
Total population 15 to 64 years of age	8,360	11,375
In the labour force	5,350	6,880
Employed	4,190	5,465
Unemployed	1,150	1,410
Not in the labour Force	3,015	4,495
Participation Rate	64 percent	60 percent
Employment Rate	50 percent	48 percent
Unemployment Rate	21 percent	20 percent

Source: Cuddy & Moazzami 2016, *Northern Projections Human Capital Series - Thunder Bay District*. Statistics from Statistics Canada, 2001 Census and 2011 NHS, custom tabulation.

Further, in the Thunder Bay District, the Indigenous population in prime working age is expected to increase by 38 percent by 2041 from 11 percent to 19 percent (Moazzami & Cuddy 2016 p. 16). Thus, while the non-Indigenous labour force is expected to decline in this time period, the Indigenous labour force is expected to increase from 11 percent to 18 percent for Thunder Bay District and 16.5 percent to 27 percent in Northwest Ontario (Figure 10).⁵

⁵ For more information on Indigenous population and labour force participation, see Cuddy J. & Moazzami, B. (2016). "Northern Projections Human Capital Series – Thunder Bay District." *Northern Policy Institute*. Retrieved from <http://www.northernpolicy.ca/upload/documents/publications/research-reports/paper-tbay-en-digital-16.09.13-0836.pdf>

Figure 10: Projected Indigenous Share of the Labour Force (percent)



Source: Moazzami & Cuddy, 2016: Author's calculations based on Ontario, Ministry of Finance, "Ontario Population Projections, 2013-2041"

This presents a promising opportunity for Northern Ontario. Identifying ways to encourage and support Indigenous people to enter the labour force will be a sustainable way to mitigate the effects of accelerating growth in the DDR among the broader population. That being said, encouraging labour force participation alone will not close the discrepancies between Indigenous and non-Indigenous people. The high unemployment rate among Indigenous people demonstrates that in addition to encouraging Indigenous people's participation in the labour force, supporting this group in finding and maintaining education and skills development, meaningful family and cultural supports, and a broader welcome from the general population are critical.

Pro-natal Policies

A third area to consider is pro-natal policies, which are population policies that aim to encourage more births. Pro-natal policies can range from campaigns to encourage couples to have children, to expanding supports to families and parents through programs such as daycare, family allowance, etc.

Many countries and communities have engaged in pro-natal policies to varying degrees of success. For example, in France, a combination of pro-natal policies has been implemented including tax breaks for parents, statutory parental leave, government-subsidized day care and grants for parents who have had more than two children (Economic & Social Research Council n.d). In Quebec, affordable universal child care introduced in 1997 can be considered a prenatal policy as it may lessen the burden of childbearing for parents (Varga-Toth 2006; Krull 2001). Furthermore, parental leave policies have often been utilized as tools for encouraging a higher birth rate by

reducing the opportunity costs of having children and facilitating the combination of employment and child rearing (Kalwij 2010, 517).

Although parental policies vary from country to country, in general they have been implemented across the globe and have been seen to have effects on birth rates.⁶ Finally, some countries have moved in more unique directions to increase births. In Denmark (and other countries such as Russia), holidays and informational campaigns have been established or considered to encourage couples to have more children (Basu 2016) and in one town in Sweden, a government official has proposed giving municipal employees a paid hour per week to go home and have sex (Bilefsky and Anderson 2017). Some pro-natal policies have been successful, for example in France, which has one of the highest birthrates in Europe (Economic & Social Research Council n.d). However, some pro-natal policies may be more difficult to implement in a Northern Ontario context (as compared to the first two policy areas) as they may be politically unpopular and may be considered by some as overstepping the appropriate role of government. Thus, broader social policies to support families may be a more realistic option in this context to encourage Northern Ontarians to have more children.

Although in the short term, policies that encourage an increase in the birth rate will increase the DDR as more youth means more dependents. Nonetheless, for the long-term sustainability of the region, it is important for birth rates to remain adequate. The children of today are the workers of tomorrow.

Recommendations: What to do and When

Overall, it seems clear that a combination of migration, labour force participation, and pro-natal policies will be necessary to address the increasing DDR facing Thunder Bay District, Northwest Ontario and Northern Ontario as a whole. A mix of policy responses will also address the need for both short and long-term solutions to ensure a sustainable workforce for the future of Northern Ontario.

It is also clear that of the three options available only net In-migration can impact the DDR significantly in the short term. This does not mean that pro-natal or supportive policies for underrepresented communities can be delayed or deferred. All three areas

⁶ For an analysis of the impacts of parental leave on fertility rates see Lavile, R. & Zweimuller, J. (2015). "Does parental leave affect fertility and return-to-work? Evidence from a 'true nature experiment.'" *IZA Discussion Paper No. 1613*. Retrieved from <http://repec.iza.org/dp1613.pdf> and Kalwij, A. (2010). "The impact of family policy expenditure on fertility in Western Europe." *Demography* 47(2):503-519. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3000017/pdf/dem-47-0503.pdf>

should be a matter of urgency to ensure a sustainable response to the north's rising DDR and the growing dependence and unsustainability that will result.

Given this reality the priorities for policy changes in Northern Ontario in our view should be:

Increasing Net In-migration

- 1) A regionally focused immigrant nominee program allowing accelerated access and direct linkage between available jobs and immigrant candidates;
- 2) A more focused approach to our immigration attraction and settlement efforts to maximize our scarce resources, this should include better alignment with provincial and federal priorities and known local success patterns (refugees, francophone population and cultural communities that are growing organically (the Mennonites and Amish being two examples);
- 3) An aggressive direct marketing campaign in the Greater Toronto and Hamilton Area (GTAH) about the opportunities in Northern Ontario;
- 4) A representative poll of the GTHA to test awareness of and potential interest in the North to be replicated every two years for ten years to test the effectiveness of our collective outreach and education campaign;

Enhancing Economic Participation of Underrepresented groups

- 5) Increased flexibility in the allowable uses of existing funds given to job developers to allow local responses to better reflect the realities of local communities and the breadth of barriers to inclusion over and above skills enhancement;
- 6) Enhanced promotion of existing programs to support job seekers and employers in connecting with each other and creating welcoming workplaces, this could include expanding pilot programs like Baakaakonaanan Ishkwaandemonan;
- 7) Increasing the resources available to programs seeking to collect and then make available to the widest pool of employers the existing skill sets of underrepresented communities;
- 8) Expanded efforts in understanding and reporting on known local employment opportunities and expected replacement labour demand, so that job seekers, their communities, their families, and Northern education institutions can better choose what skills and education programs to access or offer;

Pro-Natal policies

In large part these policies are already in place: expanded maternity leave, increased support for child care, extensive pre and post-natal maternal care but three potential enhancements do stand out:

- 9) Understanding and responding, with increased investment of money and staff, to the issues present in rural and remote communities in accessing family supports;
- 10) Supporting fathers in engaging in their role in the family with both paternal education and supports and expanded access to parental leave;

- 11) Reducing the tax burden on families, especially low income and middle-income families, through broad based tax relief like increasing the basic personal exemption;
- 12) A focused effort to address the real gap between those eligible to receive existing services and supports and those receiving them, including, for example, expanded resources to allow community service or other support workers to commit the time to assist clients in completing critical forms like annual tax returns.

Conclusion

In the next 25 years, the Thunder Bay District and Northern Ontario is projected to experience an increased DDR which will result in fewer working age people available to support a higher number of dependents. A high DDR places additional pressures on the working age population and has several negative impacts on the economy and society more broadly. This is especially the case where, as in our case, the increasing DDR is driven not by a baby boom, but by an aging population. To address the increasing DDR, a combination of policy responses should be considered by local policymakers. Addressing the DDR will be critical for the sustainable future of the Thunder Bay District and Northern Ontario.

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