

Immigration Communities

The Miramichi Region in 2040

Population growth planning document

PREPARED BY New Brunswick Multicultural Council

FEBRUARY 2021

Contents

INTRODUCTION: THE MIRAMICHI REGION IN 2040	3
Covid-19 Considerations	4
 The need for a population growth plan 	4
 Sustaining our high-quality health care system and public services 	5
 The health care example 	6
 Sustaining our K-12 school system 	6
 Immigration and the New Brunswick K-12 student population: A model 	7
 Strong local communities = strong provincial economy 	8
 The business plan for New Brunswick and local communities 	9
Why focus on 2040?	10
Where would this new population come from?	11

POPULATION GROWTH IN THE MIRAMICHI REGION THROUGH 2040: THREE SCENARIOS				
The looming workforce shortage	13			
 Summarizing three population growth scenarios 				
 Methodology: Forecasting population growth 	14			
Scenario 1: Current population and workforce trend	15			
 Implications of Scenario #1 	16			
Scenario 2: Population growth to maintain the current workforce size	16			
 Implications of Scenario #2 	17			
 Scenario 3: Population growth to expand the workforce 	17			
 Implications of Scenario #3 	17			
TOWARDS A POPULATION GROWTH PLAN FOR THE MIRAMICHI REGION	18			
Attracting population	19			
Ensuring there is adequate housing	20			
 Ensuring there is a focused effort at retention 	20			
CONCLUSION	21			

N C 2.0 INTRODUCTION

The Miramichi Region in 2040

The primary objective of this report is to show the need for population growth in the Miramichi region in the coming years if the area wants to ensure there will be enough workers to meet local needs and to provide talent for new industries to grow. In addition, another objective is to make the case that the local leaders in the area need to get involved directly in population growth planning and the related work needed to ensure the regional economy can grow in the years ahead.

For the purposes of this report, the Miramichi region is defined as the Census Agglomeration area which includes the City of Miramichi, several parishes surrounding the city and three First Nations communities.

Covid-19 Considerations

The Covid-19 pandemic has impacted the economy and population in New Brunswick in a variety of ways. Some of these implications are temporary such as a reduction in demand for certain local goods and services and the impact on public transportation, and some could be more permanent such as working from home. However, the pandemic has not changed the fundamental demographic situation in New Brunswick. Without a significant increase in population attraction, there will not be enough workers to meet workforce demand now and in the future.

The need for a population growth plan

Historically, not much has been done to deliberately grow the population of New Brunswick. The natural population growth rate was strong (far more births than deaths), and more people moved out of the province in a typical year than moved in. Because of this, it was assumed there was no need to proactively attempt to convince people to move to New Brunswick.

Of course, people did move here from elsewhere in Canada and even from other countries. According to Statistics Canada, in 2016 there were 1,200 people aged five and older living in the Miramichi region who had lived outside New Brunswick five years earlier (105 of these folks lived outside Canada). However, this population attraction was not enough to offset the number who moved away and the negative natural population growth rate (births less deaths). As a result, the overall population in the Miramichi region dropped by 2.1 percent between 2011 and 2016 even as the population over the age of 55 increased significantly.

Since 2016, the estimated population of the region has remained at approximately the same level (28,000 people) but, again, there has been considerable growth among the population over the age of 55 (up 33%).

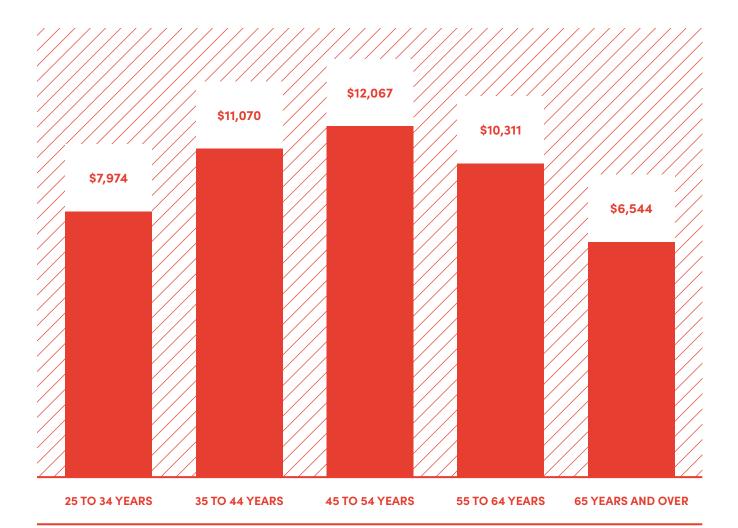
For decades almost all of the economic development efforts in New Brunswick involved trying to convince local firms as well as national and international firms to invest in the province. Increasingly, the focus is shifting to addressing growing workforce gaps around the province as a precondition to industry investment. The Miramichi region is no different.

There are more than 1,000 employers located throughout the region including more than 150 in retail services, 85 in accommodation and food services and more than 100 in personal services. Ensuring local industries have the workforce they need not only to maintain their current operations, but to grow needs to be a focus of the Miramichi region in the years ahead.

Sustaining our high-quality health care system and public services

What is the relationship between population growth and the quality of public services in New Brunswick? The answer is simple. We need enough workers paying taxes to ensure there is a large enough tax base to sustainably fund health care and other public services. As shown in Figure 1, people are in the top 'taxpaying' years when they are between the ages of 45 and 54. The average taxpayer aged 65 and older pays 46 percent less income tax than the average taxpayer aged 45-54. This is not a criticism of older New Brunswickers. When they were in their prime taxpaying years, they were making an above-average contribution to tax revenue. As more and more people retire each year, there are not enough young people to take their place in the workforce or to provide the talent for growing industries.

A declining population in the Miramichi region and the rest of the province threatens the quality and sustainability of our public services and public infrastructure in the years ahead.



5

Figure 1: Average income taxes paid by age cohort, New Brunswick (2017) *New Brunswick (2017). Statistics Canada Table: 11-10-0051-01

THE HEALTH CARE EXAMPLE

The New Brunswick government spent \$3.2 billion on health care and seniors' long-term care in 2016. Just from the impact of aging through 2034, health care and seniors' long-term care spending is likely to push the costs to \$4.4 billion, a \$1.2 billion increase. This does not include the impact of inflation or other upward cost pressures related to prescription drugs, etc.

As a result, the cost of population aging on the health care system could result in provincial government spending on health care and seniors' long-term care rising from 35 percent of the budget in 2016 to 49 percent of by 2034.

To put this in perspective, \$1.2 billion is more than the New Brunswick government spends each year on the entire K-12 education budget. It is equivalent to nearly double the amount the government spends on post-secondary education and training and five times as much as we spend on public safety. It is also equivalent to 3.5 times as much as the annual Transportation and Infrastructure department budget.

Growing the population in New Brunswick and ensuring we have a growing workforce alone will not solve this issue, but it will go a long way to help. Attracting young migrants to New Brunswick:

- Will ensure there are enough workers to meet the demands of the economy around the province and provide workers for future growth.
- Will not significantly burden the health care system.
- Will help ensure there is enough tax revenue to sustainably fund public services and public infrastructure investment.

Sustaining our K-12 school system

The primary purpose of a population growth plan for the Miramichi region is to ensure workforce demand can be addressed for the foreseeable future to support both 'replacement' workforce demand as people retire and 'new' demand as industries and companies grow.

However, there are many secondary benefits to attracting people to the region. More population means more demand for local business owners. It means more tax revenue for local governments. It also means more young people to populate the province's K-12 education system to ensure workforce needs can be addressed for future generations.

As shown in Figure 2, all counties around the province have seen a reduction in the population between 0 and 19 years of age in the past 30 years, with the exception of Westmorland County. Most regions have seen a substantial reduction, with 10 counties witnessing a 30 percent decline or more. This has led to school closures, consolidations and a number of additional challenges related to the provision of public education around the province.

In other words, just as we need a larger K-12 talent pipeline to address the increasing retirements from the workforce, the local K-12 system is turning out ever fewer graduates. And, according to Statistics Canada, the population under the age of 20 across New Brunswick is forecast to decline by 11 percent more by 2034.

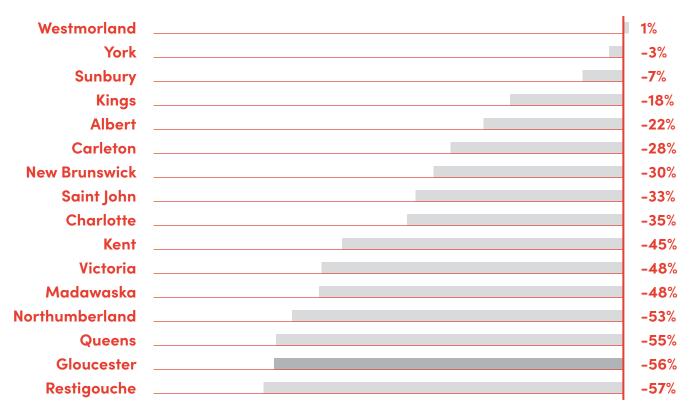


Figure 2: Percentage change in the 0-19 population (1988 – 2018), by county **Source:** Statistics Canada.

Immigration and the New Brunswick K-12 student population: A model

If New Brunswick continues to attract young immigrants to the province, it will help address the decline in the K-12 student population and, indeed, lead to an increase in that population. We could see a repopulation of schools across the province ensuring we have a large potential workforce in the 2030s and 2040s.

The example below is based on a significant increase in immigration in the coming years which would boost the number of immigrant students (and international students) in 2019-20 from 6,700 to more than 19,800 by 2030-31.

7

¹ New Brunswick attracts hundreds of international students into its K-12 system each year through Atlantic Education International and other initiatives.

Model assumptions:

- The baseline immigrant/international student enrolment K-12 is 6,700 (in 2019/2020).
- New immigrants (all age groups): 5,000 in 2019-20 rising to 7,500 by 2023-24 and 10 percent per year afterward.
- The immigrant retention rate will be 85%.
- 22 percent of all new immigrants will be K-12 aged (this is consistent with current levels).
- Immigrant female fertility rate: 2.0 children per female.

Based on these assumptions, the impact of attracting immigrants on the K-12 education system is shown in Figure 3. The number of born-in-Canada (excluding immigrants) K-12 students continues to decline from 90,500 in 2019-2020 to 83,900 by 2029-30, but this decline is more than offset by the newcomer population. Immigrants and international student numbers rise to more than 13,800 by 2024-25 and to 19,840 by 2029-30. This is just one growth scenario, but it is a realistic vision for immigration and how it will impact the K-12 education system.

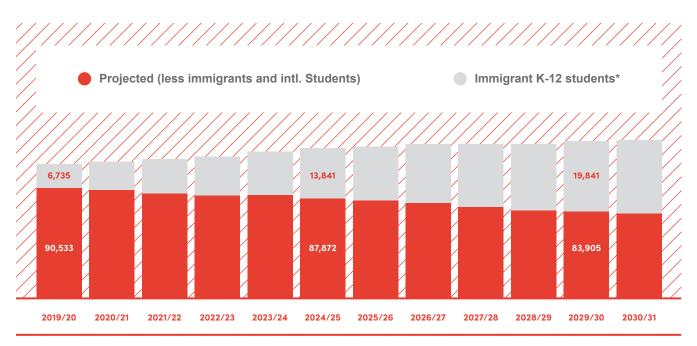


Figure 3: Forecasted impact of immigrants on K-12 student population in New Brunswick Sources: Baseline numbers for 2019-20 provided by GNB. Forecast model based on the assumptions shown in Appendix A.

Strong local communities = strong provincial economy

8

Population decline will lead to less public services in the community and also to less private sector services. If employers cannot find workers, they will move their businesses to other communities. It could have profound long-term impacts on smaller and mid-sized communities such as those in the Miramichi region and could jeopardize the economic vibrancy of downtowns.

All communities around New Brunswick should be asking the question: What do we want to be as a community in 10 years, or 15 or 20? The decisions made now will impact the province for decades to come.

The business plan for New Brunswick and local communities

This document is focused on making the case for a population growth plan in the Miramichi region. However, population growth should not be the only focus of municipal and regional governments as there are many other related actions that will be needed to ensure the region can thrive over the next 20 years. This includes efforts to exploit economic development opportunities, attract more entrepreneurs and ensure there is enough housing to meet the needs of a younger, growing population as well as the increasing number of retirees.

THE CASE: LOCAL COMMUNITIES NEED TO GET ENGAGED

Historically, the role of municipal government in New Brunswick was fairly limited to services such as water/ sewerage, waste management and public safety. Today, there is a demand for them to get involved in a much wider range of activities including economic development, tourism promotion, people attraction/retention efforts, community marketing and activities meant to boost quality of life (Figure 4).

We need all communities/regions to take more control over their destiny and not just wait for the inevitable population decline and the implications of that decline. There needs to be local/regional population growth as well as economic sustainability plans.

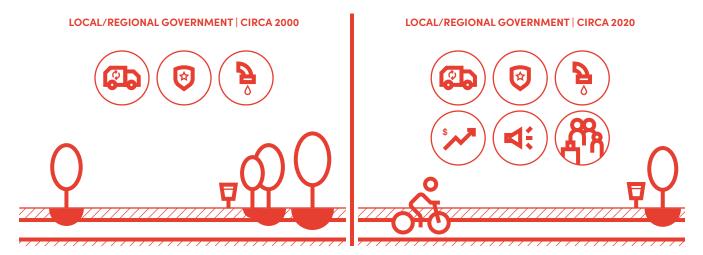


Figure 4: The changing demands on local/regional government

THE GOAL: A STRONGER PARTNERSHIP BETWEEN LOCAL AND PROVINCIAL GOVERNMENT

Empowering local/regional government does not mean less of a role for the provincial government. It does mean a stronger partnership model moving forward. An effective partnership where government partners with local community and business leaders to develop plans to foster economic growth, attract population, ensure there is adequate housing and work collaboratively on other issues that boost quality of life and opportunity.

WHAT DOES A LOCAL 'BUSINESS PLAN' LOOK LIKE?

A local business plan for the Miramichi region would bring together the various components that will influence the future growth and sustainability of the region. These components include:

- A clear understanding of labour market needs to support workforce exits and accommodate new growth.
- What industries have potential to grow in the future in the region?
- What level of inward population migration do we need to support economic development?
- What are the barriers to attracting new population? (e.g. housing, local support infrastructure, language training, etc.)

Most of all the 'business plan' should be aspirational. It might not be easy to grow a regional economy, but we should make the effort.

Why focus on 2040?

The next two decades represent a critical period in the history of New Brunswick. Since the 1950s, the province has made significant economic progress. The income gap between New Brunswick and the rest of Canada has narrowed. The share of the population below the poverty line has declined significantly. Structural unemployment has dropped to the point that many industries are struggling to find workers. Public infrastructure such as highways, bridges, airports, schools and hospitals are much improved compared to 40-50 years ago.

But the province is at a crossroads. Since 2007 the economy has only grown by 0.5 percent per year after several decades of 2.5 percent growth². It has become clear that a significant demographic shift is the top reason for this weak economic performance.

The year 2040 will be a good year of reflection. If after 20 years we have addressed our demographic issues, grown new industries and made the shift to green energy, we will emerge as a stronger, more prosperous New Brunswick. If we cannot, the next two decades will be a challenging time for the people of New Brunswick as governments are forced to decide which schools to close, which health care services to consolidate or which roads and bridges cannot be serviced anymore.

10

We are not disconnected from what is happening elsewhere in Canada. Western Canada, particularly Alberta and Saskatchewan, will be dealing with the transition away from oil and gas production. Other provinces will face their own sets of challenges. The ability of the federal government to provide even more funding to pay for public services in New Brunswick will likely be diminished. All of this means now is the time for us to step up and take more control over our destiny.

Where would this new population come from?

There is potential for people to move to the Miramichi region from elsewhere in New Brunswick or other places in Canada to live in the city and the smaller communities. In many ways, the city and smaller surrounding communities offer the best of two worlds – a small town/rural lifestyle with close proximity to an urban centre.

However, the growing workforce shortage has impacted the rest of New Brunswick and northeastern New Brunswick and as a result there will be competition for people across the country who would like to live in a small town or rural area.

Across Canada, since 2013, all net growth in the workforce has come from new immigrants. Among those born in Canada, the number participating in the workforce in 2019 was 14.47 million almost the same as the 14.48 million in 2013. The number of landed immigrants participating in the workforce increased by over a million over the same timeframe (a 25 percent growth rate). If New Brunswick had attracted its 'share' of these immigrant workers over the same period, the provincial workforce would have grown rather than decline as it did between 2013 and 2019.

Immigrants will need to be a main focus of any population growth plan for the region in the years ahead.

POPULATION GROWTH IN THE MIRAMICHI REGION THROUGH 2040:

Three Scenarios

12

N C 2.0

The looming workforce shortage

As discussed above, there is an annual population movement in and out of the Miramichi region. To determine the baseline, the current population mix is used. As of 2020, Statistics Canada estimates there were about 5,200 people aged 0 to 19 living in the Miramichi region. This represents essentially the maximum number of persons currently living in the region who could join the workforce within the next 20 years. However, Statistics Canada also reports that only about 80% of those aged 20-35 are actually participating in the workforce so a more accurate estimate of the maximum local entrants to the workforce would be closer to 4,200.

Based on the 2020 workforce estimates for the region, it is likely around 6,600 people will leave the workforce over the next 20 years through retirements. As shown in Table 1, this leaves a potential workforce shortage of 2,400 before accounting for any migration activity.

POTENTIAL WORKFORCE SHORTFALL BY 2040, CLOSED LABOUR MARKET, MIRAMICHI REGION

Potential entrants	+4,200
Forecasted exits	<u>-6,600</u>
Shortfall	-2,400

Summarizing three population growth scenarios

The following table provides three different scenarios for population growth/decline over the next 20 years in the Miramichi region. They are based on the assumptions detailed below. The assumption for both growth scenarios is that the incoming population would be predominantly working age. There is a scenario where the region attracts considerably more retirees, but that would do nothing to address future workforce needs.

SCENARIO	PROJECTED OUTCOME	IMPLICATIONS
1. Current trajectory	• Population forecast to decline from 28,000 today to 26,800 by 2040 (-4%).	• Any industry that is not required to physically be in the region is at risk of moving (manufacturing, processing, etc.).
	• The workforce will decline from 13,200 today to 10,500 by 2040 (-20%).	 This will weaken the local economy and tax base.
2. To maintain the current workforce size	 The population needs to grow to 32,200 by 2040 (+15%). The workforce stays at around 13,200. 	 Only maintaining the current size of the workforce over the next 20 years will likely lead to fewer workers for important export-focused industries. The region will need to attract on average more than triple the number of immigrants per year to achieve this population growth (from 75 per year to 300). The Miramichi region will need a population growth rate not seen since the 1960s and early 1970s.
 To grow the workforce by 0.5% per year 	 The population needs to grow to 36,000 by 2040 (+28%). The workforce grows to 14,500. 	 The population will need to grow by 8,000. The region will need to attract 400+ more people per year to achieve this population growth.

Methodology: Forecasting population growth

It is challenging to forecast population growth at the urban centre level. The change in population is impacted by several factors including natural population growth (births less deaths), net intraprovincial migration (to and from within the province), net interprovincial migration (to and from other provinces), immigration (from other countries) and emigration (people moving to other countries).

To develop the three population scenarios, a model was developed using the following parameters and methodology:

- Baseline population and workforce data: 2020 population and workforce levels estimated using Statistics
 Canada population and workforce tables.
- Baseline labour market participation: The labour market participation rate by five-year age cohort from the Census was considered to remain consistent through 2040. The participation rate is the share of the population active in the workforce. In the Miramichi region it ranges from 76.6 percent of the population aged 20-24 to 85 percent among those aged 35-44 and back down to 17 percent of the population aged 65-69.

- Baseline population growth forecast: Statistics Canada prepares population growth forecasts at the provincial level through 2068 for a variety of scenarios. The 'high growth' scenario for New Brunswick was used for the 2020-2040 period. However, it was adjusted to reflect the current population breakdown by age group and growth rate in the Miramichi region.
- It was assumed that most inward population movement over the next 20 years would be people of working age.
- For scenarios #2 and #3, the population growth scenarios, it was assumed that almost all net new population growth would be in age cohorts under the age of 45. The population over the age of 55 will grow strongly over the next 20 years, but from the existing population.

Scenario 1: Current population and workforce trend

In the past few years, the population in the Miramichi region has remained at approximately the same amount. The population between the ages of zero and 55 declined by 19 percent between 2007 and 2020 while the population 55 and older increased by 33 percent.

Statistics Canada provides population growth forecasts through 2040, but only at the provincial level. Using the statistics agency's 'high growth' scenario for the province and adjusting it to align with trends in the Miramichi region provides an estimate of the baseline population forecast over the next 20 years assuming no significant change in the level of intraprovincial migration, interprovincial migration or immigration.

Based on this forecast, the population in the Miramichi region is expected to decline by only four percent between 2020 and 2040. However, the age distribution will change as the total population under the age of 70 is expected to decline over the 20-year period while the population over the age of 70 will increase significantly.

This will have a significant impact on the workforce. Even though the population is only forecasted to decline by four percent, the number of people in the workforce will decline by 20 percent (or an estimated 2,700) over the 20-year period as more and more retire and there are not enough young people to take their place.

TABLE 2: BASELINE, CURRENT TRAJECTORY OF THE MIRAMICHI REGION'S POPULATION AND WORKFORCE

	2020	2040	CUMULATIVE % CHANGE	AVG. ANNUAL % CHANGE	# CHANGE
Population	28,000	26,800	-4.2%	-0.2%	-1,170
Workforce	13,200	10,500	-20.3%	-1.0%	-2,675

15

See Appendix A for sources and methodology.

IMPLICATIONS OF SCENARIO #1

A steep decline in the Miramichi region workforce will impact industries that can 'move' before those that are less mobile. Mobile industries include most manufacturing, transportation and other related sectors. In the case of the Miramichi region, some other industries are also mobile in that people can drive to other cities to access goods and services. If there are not enough workers for the retail sector, for example, those retailers located in the Miramichi could move to Fredericton or Moncton where there is access to a larger workforce.

The Miramichi region has 28 manufacturing firms³ in a wide variety of sectors including wood products (three firms), fabricated metal (five firms) and food manufacturing (five firms). If these firms cannot access a local workforce, they will be forced to look elsewhere.

There are also 65 firms in the transportation and warehousing sector and over 100 in the construction sector. Again, many of these firms could move to another jurisdiction (in the province or out of province) if workforce demand is not met.

In addition, personal and professional services, retail and entertainment could increasingly shift to other urban centres forcing residents to commute a long way for services. Finally, there would likely be fewer entrepreneurs to take advantage of business opportunities across the region.

Scenario 2: Population growth to maintain the current workforce size

Just to maintain the current workforce size, based on forecasted demographic trends, the Miramichi region would need to grow its population by 4,300 over the next 20 years or a growth rate of 15%. This would represent a significant growth rate; one the region has not seen since the 1960s and early 1970s.

TABLE 3: POPULATION GROWTH TO MAINTAIN THE CURRENT WORKFORCE SIZE

	2020	2040	CUMULATIVE % CHANGE	AVG. ANNUAL % CHANGE	# CHANGE
Population	28,000	32,300	15.4%	0.8%	+4,300
Workforce	13,200	13,200	0.0%	0.0%	0

See Appendix A for sources and methodology.

IMPLICATIONS OF SCENARIO #2

Maintaining the workforce at the current level over the next 20 years could lead to fewer workers for important export-focused industries. There is going to be an increasing need for workers in service sectors such as home care, ambulatory health care and other industries to service an older population in the region. If the workforce remains at 13,200 and a much larger share are providing local services, that will leave a smaller workforce for companies in natural resources, agriculture, manufacturing, transportation, and other export-focused sectors.

Scenario 3: Population growth to expand the workforce

The third scenario involves modest workforce growth in the Miramichi region of an average 0.5 percent per year. This only represents annual workforce growth of an average of less than 70 per year over the 20-year period (or 1,300 in total) but, again, because of the age distribution of the current workforce this would require significant growth in the younger population to provide the workers needed to make up for those retiring and to provide the 1,300 for net growth in the workforce. Overall, the population in the Miramichi region would have to grow by 8,000 over the 20-year period or an average annual growth rate of 1.4 percent (assuming all of the incremental growth is at the younger end of the age distribution) to ensure the workforce grows by 0.5 percent per year over the 20-year period.

TABLE 4: POPULATION GROWTH REQUIRED TO EXPAND THE WORKFORCE

	2020	2040	CUMULATIVE % CHANGE	AVG. ANNUAL % CHANGE	# CHANGE
Population	28,000	36,000	28.5%	1.4%	+8,000
Workforce	13,200	14,500	10.1%	0.5%	+1,300

See Appendix A for sources and methodology.

IMPLICATIONS OF SCENARIO #3

A growing pool of working-age population in the Miramichi region would mean more potential entrepreneurs and the potential to grow emerging and new industries in tourism, agriculture, services and manufacturing.

Towards a population growth plan for Miramichi region

A population growth plan for the Miramichi region requires a number of components including:

Attracting population

The region has seen an uptick in the number of immigrants in the past few years, from an average of 23 per year between 2010/2011 and 2016/2017 and 75 per year since then. However, the immigration rate is only 31 per 10,000 population. In order to meet the modest population growth rate projected above (to maintain the current workforce size), the Miramichi region will likely need to attract immigrants at around 110 per 10,000 population per year in the near future and even at a faster rate of attraction if it is to grow the size of the workforce in the years ahead⁴. This means increasing the annual intake of immigrants from 75 per year now to at least 300 per year.

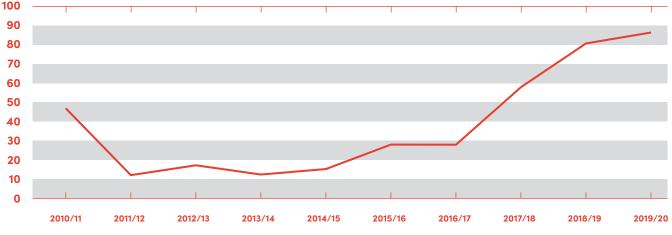


Figure 5: Immigrants settling in the Miramichi region by year **Source:** Statistics Canada Table: 17-10-0140-01.

In order to increase the immigrant attraction from 75 per year now to 300 per year or more, a deliberate focus is required. It will take cooperation between industry and government along with local community groups. An identification of specific jobs and labour market demand in the short term will help attract newcomers as well the identification of specific entrepreneurial opportunities.

In addition, the Miramichi region will need to work with the provincial government and other stakeholders on a specific immigrant attraction strategy. It is important to align immigrant attraction to specific jobs and entrepreneurial opportunities available in the community. Long-term retention will be tied to attracting people who have the skills and interest in working the available jobs in the community.

19

Ensuring there is adequate housing

This is emerging as a real challenge across New Brunswick. The reality is that more people are retiring – they are not moving out of the region. Therefore, new population attraction will require more housing options in the Miramichi region. This new housing will need to be priced at a reasonable level as many of the available jobs are not high-wage jobs. The standard of no more than 30 percent of household income going towards shelter costs should be the objective.

In addition, more rental housing options are important. Many newcomers prefer to rent rather than buy when they first settle in the community. This puts smaller communities at a disadvantage compared to larger urban centres, and it needs to be a focus.

To illustrate the extent of the challenge, the average annual number of new housing units built across the Miramichi CA has dropped by 40 percent between the 1991-2000 period and the 2011-2016 period. The last time the region's population increased in a significant way was in the 1960s and early 1970s and therefore it is likely new housing construction will need to get back to at least that level to accommodate new population growth.

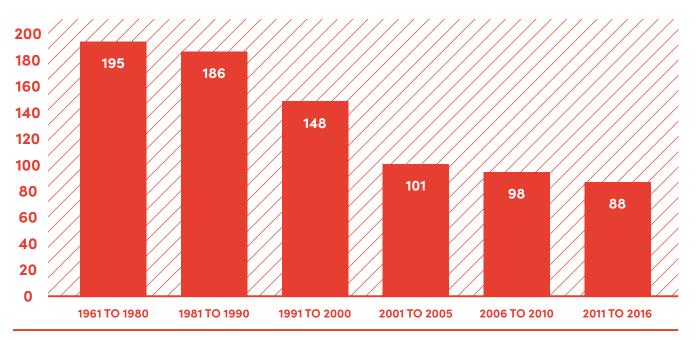


Figure 6: Average annual private dwellings built by year, Miramichi CA **Source:** Statistics Canada 2016 Census.

Ensuring there is a focused effort at retention

In the long run, the goal is to retain as many newcomers as possible in the community. This means integration into business and social networks, local schools, churches, sports and recreation organizations. Ultimately, newcomers that build these relationships and develop personal networks and friendships are far more likely to stay in the community long term. This can be facilitated by settlement agencies as well as a host of other organizations in the community.

Conclusion

This is an exciting time for New Brunswick and for the Miramichi region. The coming years represent a great opportunity for communities across the province to reinvent themselves by developing new industries and attracting new population.

There are no fundamental reasons why the Miramichi region in 2040 could not have a larger and more vibrant economy with a growing population and sustainable municipalities. The region is well positioned to prosper but it must address this fundamental issue of population growth and workforce sustainability.

After more than a decade of virtually no population growth, since 2016, the overall population in New Brunswick has started to grow again adding 26,000 people in the past five years. This is good but we need to do better. Ensuring smaller urban centres such as the Miramichi region attract the population needed to address workforce demand will be a big part of ensuring New Brunswick will prosper and thrive in the years ahead.

APPENDIX A:

Sources and Methodology

Population projections for New Brunswick	Source: Statistics Canada. Population Projections for Canada, Provinces and Territories, 2018 to 2068
	Population values: Table 17-10-0057-01
	Components of growth: Table 17-10-0058-01
Recent population trends – Miramichi region	Source: Statistics Canada Table: 17-10-0139-01
Components of population growth, annual, Miramichi region	Source: Statistics Canada Table: 17-10-0140-01

New Brunswick K-12 education enrolment forecast

Model assumptions:

- The immigrant/international student baseline population (2018-2019): According to Statistics Canada there were approximately 4,500 immigrants and non-permanent residents enrolled in New Brunswick K-12 education in 2015-2016 (or 4.6 percent of the total student population). This number likely understates the impact of immigration on K-12 enrolment as students born to immigrant parents after arriving here are not included in the total. The timing of the Census could also impact the non-permanent resident numbers. Since the 2015-2016 school year, another 3,900 K-12 age students have arrived in New Brunswick. The model assumes grade 10, 11 and 12 immigrant students since the 2015-2016 school year have graduated by the first projection year (2020-2021).
- Immigrant retention: It was assumed that 85 percent of annual immigrants would be retained in New Brunswick.
- Age at arrival: 21 percent of all new immigrants each year arrive school aged (K-12). This is consistent with existing immigration patterns (New Brunswick).
- The immigrant female fertility rate: 2.0 children per female.
- Distribution pattern of new births after arrival: Equal annual distribution of additional births (beyond those arriving as children) over a six-year period after arrival (i.e. assumes some women will start having additional children right away but it will take six years from the year of immigration for all children of the women arriving during the year to be born).

- Age at school entrance: All children will attend school starting at age 5.
- The baseline K-12 student projection:
 - Base 2018-2019 enrolment numbers (Source: Department of Education and Early Childhood Development)
 - Project future enrolment in subsequent years using Statistics
 Canada Projection Scenario LG: low-growth forecasts of
 population growth by age through the forecast period.
 - Excludes the forecasted new immigrant student population starting in 2020-2021. It was assumed that the age distribution (aged 5 to 17) would be the same each year for new immigrant cohorts each year through the forecast period.
- The model includes an estimate of 700 international students per year.



The Miramichi Region in 2040





Atlantic Canada Opportunities Agency Agence de promotion économique du Canada atlantique



