POP NB 2021

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Three briefing notes were written by the PopNB data analysts and prepared by the communications coordinator. Each includes a policy recommendation for one of their topics for New Brunswick and stakeholders to consider.

WHO WE ARE

Principal Investigator

Dr. Ted McDonald

Director of the New Brunswick Institute for Research, Data and Training (NB-IRDT) and principal investigator for PopNB's second year of operation, Dr. Ted McDonald directs the vision for this project and execution of the research.

"I am impressed by the variety in the team's academic backgrounds, spanning arts and humanities, social sciences, physical sciences and engineering and how they have been able to translate that education to the data and policy-oriented work in P2P." (Ted McDonald)

Our Team
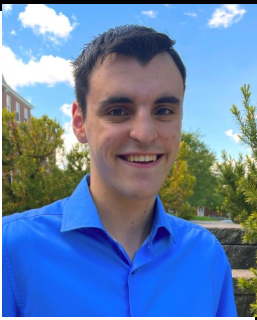
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Population New Brunswick (PopNB) is a research stream in the Pathways to Professions experiential research program at NB-IRDT, and it aims to characterize NB's demographics through open-source data. The purpose of PopNB is to describe various population demographics in order to provide data-driven policy implications for government and community stakeholders. Discerning crucial demographic trends that impact the economy and well-being of New Brunswickers can help us effectively target resources that best benefit the economic growth of the province.

Our Project

This year, PopNB has three students investigating the recent economic implications of aging within New Brunswick. Our team has taken interest in how aging over time has impacted New Brunswick's structure and demographics. Aging is a central piece to New Brunswick's narrative and is the central issue we have identified; however, it is not that simple. Aging has a variety of consequences that affect demographics. Specifically, a population that is aging will face economic consequences, as it increases healthcare expenditures and affects job vacancies and unemployment, post-secondary enrollments, economic mobility, housing tenure, and affordability. These topics are investigated through our research. Interprovincial and international migration have been identified as part of the solution to our aging population problem, and immigrants can contribute to the economy of the province.

Aging & Changing

WHAT WE KNOW

The future of New Brunswick's economic growth and prosperity largely depends on two factors: the number of individuals contributing to our tax base and the number of individuals relying on social support from that tax base. When either of these factors becomes unbalanced, it generates serious social implications for the services and structures that keep our society functioning.

1 in 5 New Brunswickers are 65 or older.
("An Aging Strategy for New Brunswick", 2017)

Unfortunately, many of these services and structures will be impacted by the changing ratio of working-age individuals to seniors in New Brunswick. The province's 2018-2024 Population Growth Strategy forecasted a rate of **2.3** residents aged 15 -64 to every resident aged 65 years or older in 2027, down from **4.5** in 2009. These demographic changes are also reflected in household structures and occupations. This indicates that older age groups in New Brunswick will continue to impact the composition and depth of our labour force. As a result, we will likely see a large number of job vacancies generated by retirees in coming years if our population continues to age at its current rate. Discerning which occupations face this threat and addressing them with immigration, housing, and education policies are central to our province's success.

WHAT WE FOUND

There are two social forces acting on New Brunswick's mature working-age population: One pulling the number of young New Brunswickers down and another pulling the number of older New Brunswickers up, split at 44 years old. This **push-pull** trend is important because it contributes to our shrinking tax base by driving a larger proportion of individuals heading into retirement, as well as driving up the average age of New Brunswickers.

<44
>44

These push-pull aging trends were found to occur generally across most occupations in New Brunswick from 1996-2016. However, the occupations with the largest numbers of individuals aged 55-64 years old in 2016 were sales and services, trades, transport and equipment operators, business, finance and administration, education, law, and government services. These occupations are at an increased risk of impending job vacancies resulting from large numbers of individuals nearing retirement, and they should be the focus of education and training policy efforts.

The future of aging in the province also suggests that these push-pull trends will continue. The number of couple census families **with** children has dropped in recent years, and the number of couple census families **without** children has risen. This means there will be fewer New Brunswickers in the future to support the provincial structures and services required by a large aging population.

FAMILIES **WITH** CHILDREN

FAMILIES **WITHOUT** CHILDREN

2001   **2006**   **2011**   **2016**
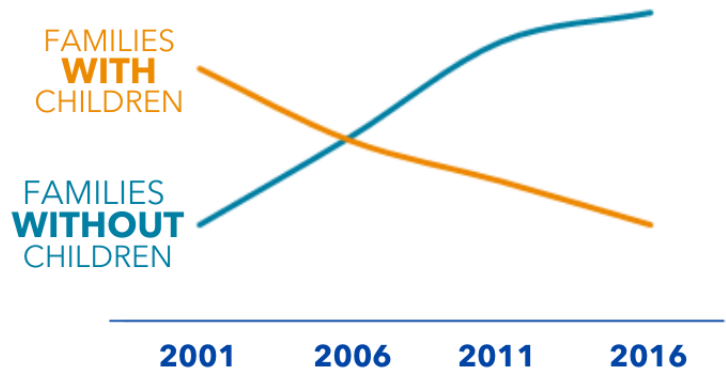
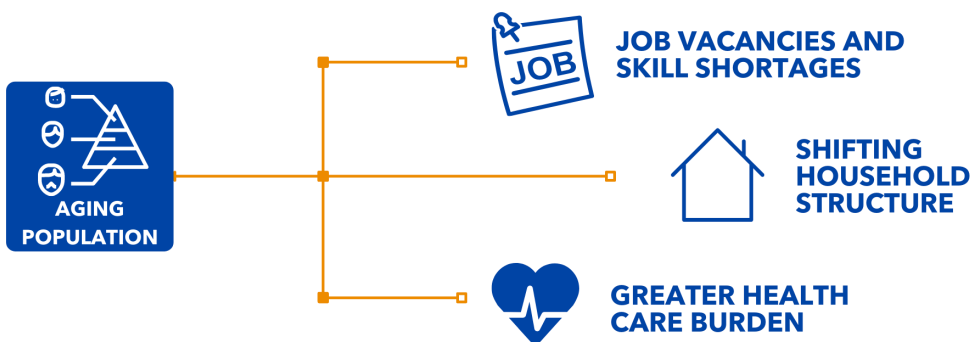Without additional efforts to drive population growth with immigration, or improved interprovincial retention and recruitment, this trend suggests that our average age will continue to increase since there will be fewer young people. It is also means that there might not be enough New Brunswickers left to fill job vacancies left by older age groups when they retire.

WHAT THIS MEANS FOR NB

The push-pull aging trend has many important economic, health, and policy implications for New Brunswick. It directly affects how an aging and changing New Brunswick could be supported through a shrinking tax base. However, since the most recent data in this analysis was limited to 2016, many questions related to our COVID-19 response and our 2019-2024 provincial growth strategy remain. The addition of 2021 Census data in the coming year can help us gain insight into how our provincial growth strategy and COVID-19 response have impacted the trends highlighted through this analysis. With the release of this data, an assessment of our current population growth efforts can be made to determine their effectiveness at mitigating the effects of our aging population.

JOB VACANCIES AND SKILL SHORTAGES

AGING POPULATION

SHIFTING HOUSEHOLD STRUCTURE

GREATER HEALTH CARE BURDEN

Health Characteristics

WHAT WE KNOW

One of the largest challenges related to provincial healthcare is supporting the increasing cost of chronic condition treatment associated with an aging population. This is a particularly complex challenge because we know that individuals with three or more chronic conditions generate **four times** as much healthcare cost as individuals with none, and **twice** as much as individuals with one or two. We also know that older adults have a higher prevalence of chronic conditions, and this demographic is increasing in New Brunswick.

CHRONIC CONDITIONS
#1 Require ongoing management
#2 Cannot be prevented or cured

Given that 62% of New Brunswickers have at least one chronic condition and 20% have three or more, it is important to reduce further instances of chronic conditions and their associated costs wherever possible. Even the relatively small projected increase of 5% in the number of New Brunswickers with three or more chronic conditions is expected to generate a

$100,000,000 increase in healthcare costs by 2027. This is especially concerning because individuals with one or two chronic conditions are at an increased risk of developing three or more, driving most of the increased costs.

3+ Chronic Conditions **20%**

1-2 Chronic Conditions **42%**

No Chronic Conditions **38%**
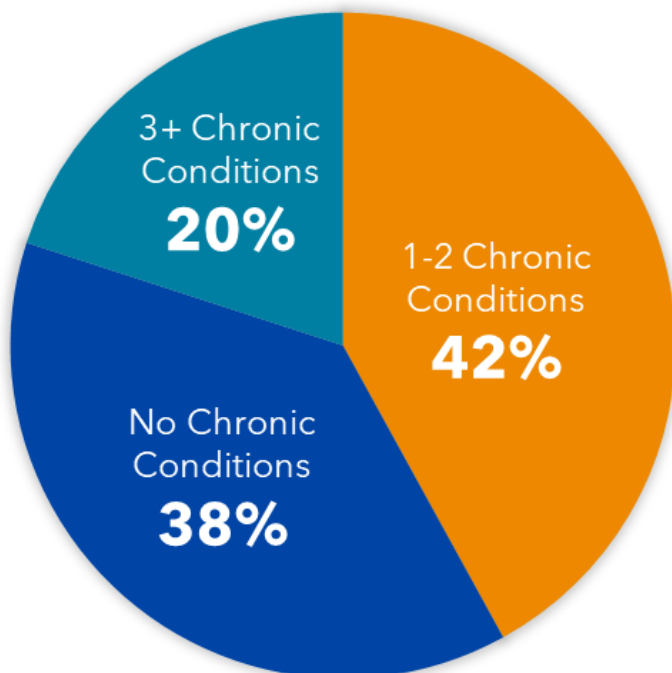
Having a precise picture of chronic condition development will be increasingly important for healthcare professionals and policy makers in the future to adequately prepare plans for spending and recruitment. Education, immigration, and labour policies are all impacted by healthcare demand, in which chronic condition support plays a large role.

WHAT WE FOUND

While life expectancy has increased generally in NB, the instances of chronic conditions in New Brunswickers 65 years and over have also increased. This means that older New Brunswickers are living longer with more chronic conditions while incurring greater costs. Specifically, arthritis and diabetes are among the most prevalent chronic conditions in the province.

AS OF 2019, 65-YEAR-OLDS ARE EXPECTED TO LIVE NEARLY **2** YEARS LONGER THAN THEY WERE 20 YEARS AGO

However, while many of these conditions occur naturally with age and are not preventable, the main issue is their high cost combined with increasing cases over time. The majority of these high costs result from chronic condition treatment in healthcare centres primarily designed for acute care, including hospitals, emergency rooms, and Extra-Mural Programs.

ARTHRITIS 76,500

DIABETES 27,500

2015   2016   2017   2018   2019

These high cost centres are often overloaded by chronic condition treatment since individuals with chronic conditions experience greater healthcare barriers than individuals with none in terms of local healthcare availability and accessibility. Healthcare costs are further compounded by individuals who are unable to leave their homes or travel to receive treatment. This leads to greater numbers of untreated chronic conditions that can easily worsen and increase the risk of developing additional chronic conditions and further costs.
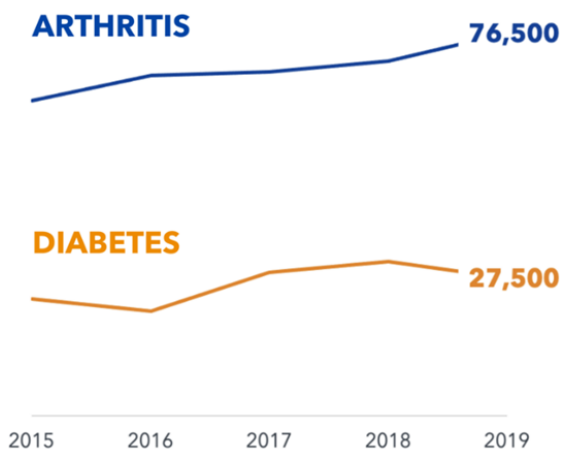
WHAT THIS MEANS FOR NB

The rising cost of chronic condition treatment means that NB should aim to reduce the number of individuals transitioning from **one or two** to **three or more** chronic conditions. To accomplish this, the province could develop more cost-effective infrastructure in the form of primary health services, community health services, and alternative health services such as e-health. These cost-effective services can promote availability and accessibility of quality care for chronic condition treatment. Policy directed at supporting this infrastructure through education, immigration, and labour should be a top priority in NB, as the current costs of continued support for chronic condition treatment are not sustainable.

Job Vacancies & Unemployment

WHAT WE KNOW

New Brunswick's aging and changing demographics suggest that we can likely expect a larger number of retirements in the coming years. These increasing numbers of older adults leaving the labour market pose serious economic and labour force challenges for the province in the form of fewer individuals contributing to the tax base, and increased job vacancies and unemployment in certain occupations.

IN 2009, THERE WERE...

4.5 to every **1**

WORKING AGE PEOPLE (15-64)   **SENIOR** (65+)

BY 2027, THIS RATIO IS EXPECTED TO **DROP TO 2.3 TO 1**

From 2018 to 2027, approximately 120,000 job openings were forecasted in New Brunswick as a result of retirements and deaths. 55% of these job openings are expected to be filled by new entrants,10.8% by immigration, and 34.2% by other means such as increased productivity in labour force participation and reduced unemployment levels. However, it is possible the latter category will not reach its intended target, as the forecasted dependency rate of residents aged 15-64 to residents aged 65 is expected to drop to **2.3** by **2027**, down from **4.5** in **2009**. In other words, while there were 4.3 working-age persons in New Brunswick for every one senior (aged 65+) in 2009, by 2027 there are expected to be only 2.3 working-age persons per senior. This will likely mean that openings will become progressively more difficult to fill. Therefore, regular updates on job vacancies and unemployment rates by field are needed to guide policies targeted at immigration, education, and labour recruitment that could mitigate skill shortages and promote economic growth and productivity in New Brunswick.

WHAT WE FOUND

We found that there are three relative forces acting on unemployment and job vacancies across major National Occupation Classifications (NOCs) in New Brunswick.

Firstly, **low unemployment and high job vacancies** in health occupations signal considerable demand for labour in this area. Secondly, **low unemployment and low job vacancies** in business, finance and administration, education, law and social, and community and government services indicate limited openings that could result from high educational requirements or occupational saturation. Lastly, **high unemployment and high job vacancies** in sales and services, manufacturing and utilities, and trades, transport and equipment operators indicate both high demand and low availability of skilled labour.

Unemployment Rate

		Job Vacancies
1.8%	**Health occupations**	1590
4.5%	**Business, finance, and administration occupa-**	845
6.1%	**Occupations in education, law and social, community and government services**	840
9.5%	**Sales and service occupations**	4670
12.7%	**Trades, transport and equipment operators and related occupations**	1630
16.5%	**Occupations in manufacturing and utilities**	1785
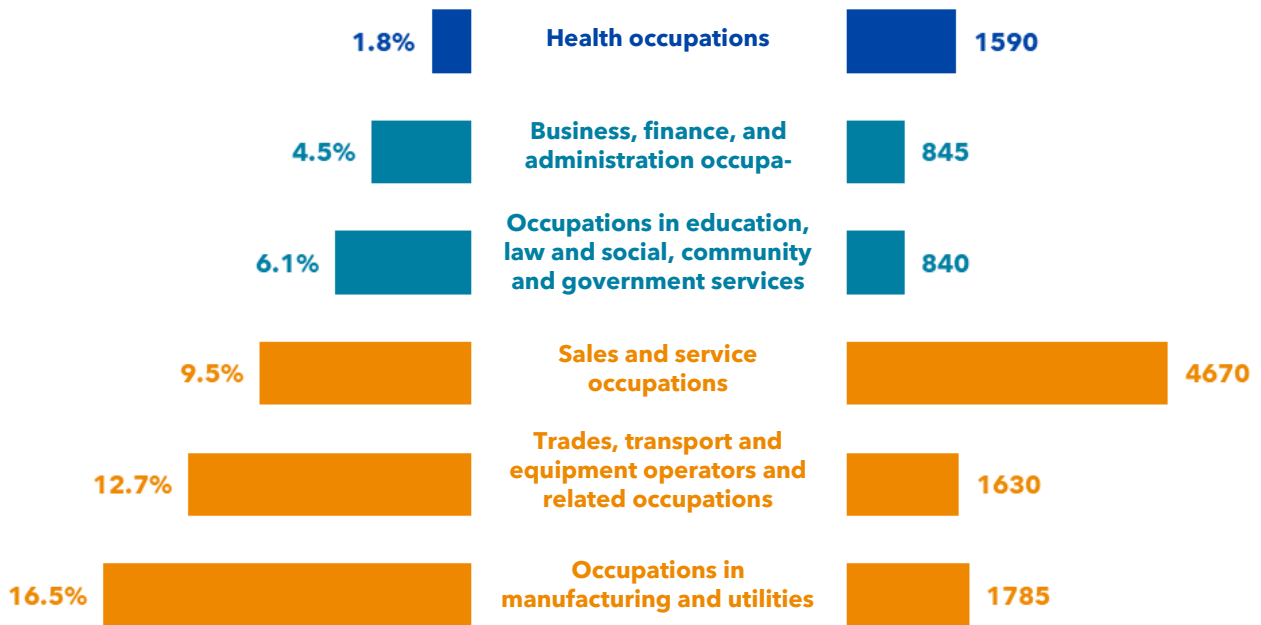
This likely means that reskilling technical skills in computing, trades, and manufacturing could be targeted through education to improve labour balance in these occupations to meet demand.

WHAT THIS MEANS FOR NB

These characterizations of New Brunswick's job vacancies and unemployment rates show that our aging workforce is already impacting labour supply and demand. This means that the province should look to reskilling and training to help alleviate skill mismatches and fill various positions in high-volume occupations with many job vacancies. This approach is especially important for health professions that require post-secondary education needed to meet the already high and increasing demand required by our growing older population. Other fields should also expect similar increases in the number of job vacancies in the coming years for the same reasons. Ultimately, a combination of immigration, education, and recruitment/ retention policy efforts will be needed to support these areas. Alternative sources to fill labour gaps such as increased investment in automation initiatives should also be considered.

Post-secondary Enrollments & Income Disparities

WHAT WE KNOW

As New Brunswick's population continues to age, more workers will be moving towards retirement than we may be ready for. The province's Population Growth Strategy states that these mass retirements will leave behind **120,000 NB jobs that will need to be filled by 2027.** Ensuring that New Brunswickers are graduating in high-demand fields will help the province fill these job vacancies and grow the economy. Knowing which demographics are enrolling in New Brunswick's post-secondary institutions, what they are studying, and the size of their incomes after graduation is key to understanding the future of New Brunswick's economy.

Although some graduates may leave New Brunswick to work elsewhere in Canada, a recent report* by NB-IRDT found that a large majority of university and college graduates remain in the province for at least two years after graduating. This report underscores the importance of examining which demographics are enrolling in our post-secondary institutions, as they will comprise a large portion of our future workforce. By comparing data on enrollments, graduations, and incomes of men and women, we get a glimpse into who will be filling labour market gaps, and how equitable New Brunswick's economy will be.

WHAT WE FOUND

Although generally more men enroll in STEM (science, technology, engineering and mathematics) fields overall, more women are enrolling in post-secondary institutions.

In 2018...

- **15%** MORE WOMEN ENROLLED IN UNIVERSITIES
- **58%** MORE WOMEN ENROLLED IN HEALTH FIELDS
- **23%** MORE WOMEN PURSUED POST-GRADUATE EDUCATION IN STEM FIELDS
- **22%** MORE WOMEN ENROLLED IN PHYSICAL AND LIFE SCIENCES AND TECHNOLOGIES

The field with the largest discrepancy between male and female enrollments is health. Significantly more women enroll in and graduate from health programs in universities and colleges. Women make up a smaller portion of STEM graduates, and more women than men pursue further post-graduate education, such as professional or master's degrees, in STEM fields.

*Bhuiyan, E.M., Daigle, B., McDonald, T., & Miah, P (2020). College & university graduate retention in New Brunswick: 2010 - 2018. Fredericton, NB: NB Institute for Research, Data and Training.

Even in fields in which more women are enrolling, men still make more money 2 and 5 years after graduation. For physical and life sciences, men make **$14,300** more than women after 2 years, and **$23,600** more after 5 years.

Overall, men with an undergraduate degree are making more money than women. After 2 years, they make **$6,700** more, and after 5 years the gap widens to a **$12,200** difference between men and women's median incomes. Although there is less data at the college level to compare men and women's post-graduate incomes, we see a similar trend in which men are making more money after graduation.

FIVE YEARS AFTER GRADUATION,
MEN MAKE
$12, 200
MORE THAN WOMEN
WITH AN UNDERGRADUATE DEGREE

**Median Income of Health Fields
2 and 5 Years After Graduation**

2 Years

5 Years
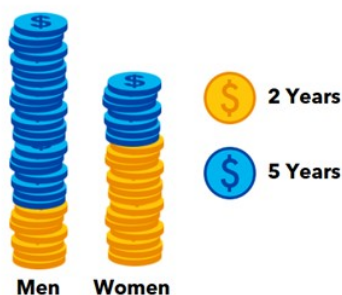
Men   Women

Despite more women enrolling in universities and colleges, they graduate with an expectation of a lower median income than men who make up a smaller portion of post-secondary graduates. In comparison to the rest of Atlantic Canada, **New Brunswick has the lowest median income for female health field graduates after 2 years.** After five years, we have the second lowest, with a median income slightly above Prince Edward Island. Women make up half the population but bring in much less of the share of income.

WHAT THIS MEANS FOR NB

More research is needed to understand the reasons why women are earning less after graduation despite outnumbering men in enrollments, and whether this has any impact on the retention of graduates. This is of particular importance in health fields considering they have the largest gender discrepancy in enrollments. Regardless of the many possible explanations for the wage gap being particularly prevalent in health professions in New Brunswick relative to other provinces, these results have clear implications for our province's retention and recruitment of health professionals. The retention of nurses, doctors, and other health professionals is crucial to the sustainability of our health care system. Studying the causal forces behind the gender wage gap will enable us to have a better understanding of the impacts on the New Brunswick economy and what policy solutions, such as experiential learning opportunities for women, could be implemented to narrow the wage gap.

Economic Mobility

WHAT WE KNOW

The amount of money a person earns will change over their lifetime. Getting a post-secondary education, climbing the corporate ladder, and retiring with savings are all part of the Canadian dream. However, many will not achieve this. As large numbers of New Brunswick workers retire, the province requires a young workforce with skills that match employers' needs. Although some New Brunswickers may find employment in NB after investing in their education, others may take their skills to Ontario or Nova Scotia. Those who cannot find employment after graduating and those without post-secondary training are at risk of becoming low income by falling below the poverty line.

We focus on low-income mobility by analyzing the rates of people entering and exiting the low-income category in recent years, and the duration of those low-income spells. By identifying groups that show greater difficulty exiting low-income brackets, we gain a better understanding of how decision makers can target social supports and skills training so that as we lift people out of poverty, the province's economic needs are also being prioritized.

WHAT WE FOUND

Some groups face more economic challenges than others, and we can see this in the data. In 2018, the low-income entry rate for single parent households was **5.9%**, compared to **2.2%** for other family types. Recent immigrants had a low-income entry rate of **7%,** while Canadian-born citizens had a **2.1%** entry rate. By taking a broader look at the net exit rate for different age groups, we can see that **young New Brunswickers are exiting low-income categories in higher proportions than their middle-aged peers.**
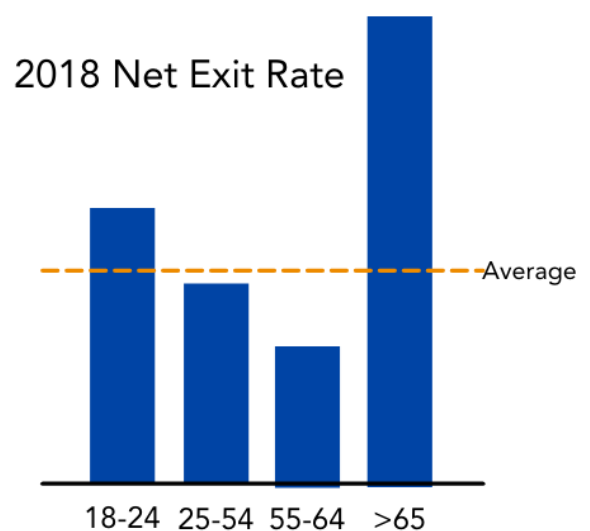
2018 Net Exit Rate

Average

18-24 25-54 55-64 >65

In addition to measuring the rates of people falling below and rising above the poverty line, we also look at how long people remained in low-income categories.

Between 2008 and 2015, the average duration was 1.87 years. Since then, it has fallen to 1.81 years. This data shows us that for each year a person earns low income, their chances of rising above the poverty line in the next year decrease. In other words, **the longer you stay below the poverty line, the harder it is to get out.**

Exit Rate Per Year in Low Income

Years	Exit Rate
1 Year	~52
2 Years	~37
3 Years	~30
4 Years	~22
5 Years	~18
6 Years	~10
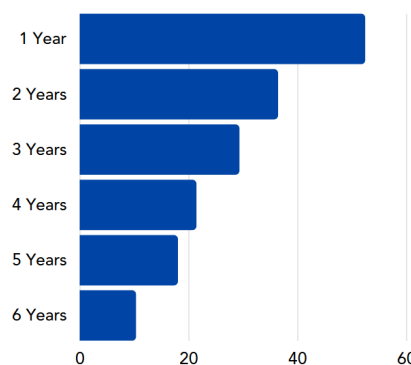
WHAT THIS MEANS FOR NB

Poverty is not always obvious, and it does not affect everyone equally. This data shows us how some groups have a harder time escaping poverty than others. Longer spells of poverty can have a multitude of impacts on individuals and the province. Poverty can lead to negative physical and mental health outcomes. These have a detrimental effect on the wellbeing of individuals and puts an additional strain on our already stressed health care system. Social supports and accessible skills training that are targeted towards the populations most at risk of entering long periods of low income can ensure an equitable future for New Brunswick.

Poverty can have lasting intergenerational effects. More research is needed in this area to understand the structural barriers in place that keep families in poverty. A person's ability to make more money than their parents is part of the Canadian dream and is a key factor in retaining a young population that believes in a prosperous future in New Brunswick.

Affordable Housing

WHAT WE KNOW

Housing is a key part of the New Brunswick economy, and like all aspects of our economy, it is impacted by our aging population. If our older adults do not have access to affordable and supportive housing, they will be required to move into costly long-term care facilities. That increased demand may reduce the available housing supply in rural areas, where seniors are more likely to be renting. The housing market also faces increased demand as our province becomes more attractive to interprovincial and international migrants. These demand pressures can contribute to housing becoming increasingly unaffordable for certain populations.

Core housing need is an indicator of housing suitability and affordability. Ensuring access to affordable housing protects individuals from serious health and economic consequences. Those who do not have access to affordable and suitable housing are more likely to experience chronic physical and mental health conditions that may require additional support. Further, when individuals spend a high proportion of their income on housing, they lack financial resources to invest in themselves and their children. As New Brunswick renters are at higher risk of being in core housing need than homeowners, we focused our research on characterizing who is renting versus owning, as well as which populations are in core housing need, as this is key to predicting which populations may benefit from support.

22.2% OF RENTERS **vs** **4.7%** OF HOME OWNERS

ARE IN CORE HOUSING NEED
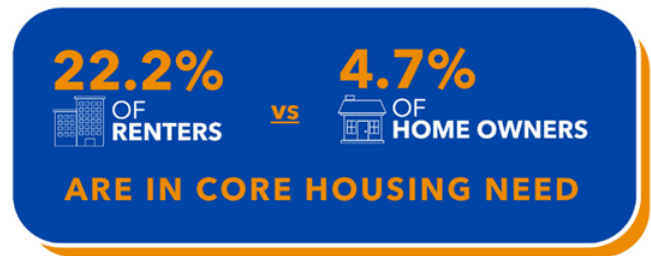
WHAT WE FOUND

New Brunswick has a clear urban/rural divide when it comes to housing. Sometimes there are similarities: for instance, **in both urban and rural communities, the age group with the highest proportion of home ownership is the 55-65 age group.** However, differences emerge in the rental market. When looking at urban centres, we find that more people in younger age groups are renting than their older peers. We see this reversed in rural communities in which more seniors are renting than younger cohorts, indicating diverging trends of rental demand between urban and rural communities.

Housing supply, along with demand, is an important indicator of housing affordability. Costs tend to rise when housing supply is diminished, or when the rental vacancy rate is low. New constructions, an indicator of both housing supply and economic growth, steadily decreased from 2006 to 2016 both for single-detached homes and buildings with multiple units such as apartment

CONSTRUCTIONS OF:

SINGLE-DETATCHED HOMES

MULTIPLE UNIT HOMES

1033
805

2006   2016

buildings. Although construction began to rise after 2016, the province's vacancy rate did not seem to be impacted by the decrease in new constructions between 2006 and 2016. **New Brunswick's overall vacancy rate hit a low of 3.6% in 2008 and a high of 8.9% in 2013. In 2016 it was measured at 6.6%.** This suggests the vacancy rate is more sensitive to other pressures, such as interprovincial migration or economic downturns.
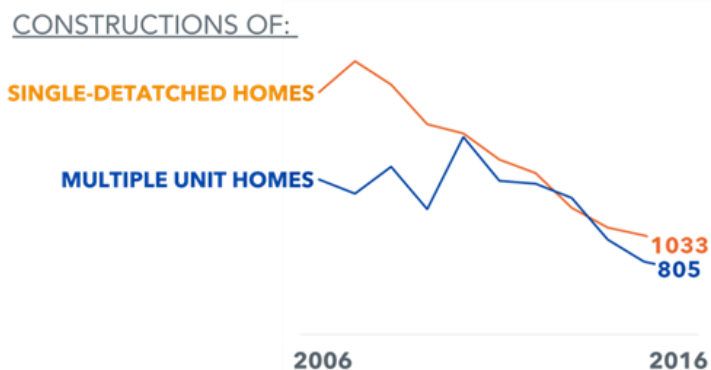
These pressures on housing supply and demand can render housing unaffordable for some individuals. Characterizing those most at risk of being put under financial stress due to unaffordable housing can inform who will be using or requiring housing support in the highest numbers. We found that marginalized populations such as recent immigrants, visible minorities, First Nations, and women are more likely to have inadequate, unsuitable, or unaffordable housing. Age also matters: core housing need is highest for the 15-24 age group and decreases as individuals age. 17.7% of the time, housing affordability rather than

IN 2016, **36.5%** **OF SINGLE MOTHERS** WERE IN CORE HOUSING NEED. **In 2001, it was over 50%.**

suitability of the housing causes renters to be considered in core housing need. However, the proportion of people in core housing need is falling. **In 2011, 24.3% of renters were in core housing need, in 2006 it was over 25%.**

WHAT THIS MEANS FOR NB

During the COVID-19 pandemic, New Brunswick experienced a large influx of interprovincial migrants and a historic demand for single-detached homes in the province. As more data becomes available, future research will be needed to understand what long-term impact these forces may have on individuals in core housing need in both rural and urban areas.

Interprovincial Migration

WHAT WE KNOW

A fundamental driver of the aging population problem in New Brunswick is the out-migration of young people. This out-migration **speeds up the aging** of New Brunswick's population, **worsens labour shortages**, and **shrinks the tax base.**

Of particular importance is the out-migration of skilled workers, resulting in a **loss of knowledge** and **worsening skills shortages**. Historically, many more young New Brunswick residents have left the province than have arrived. Often, we hear that they leave due to better economic opportunities in other provinces. Characterizing in-, out-, and net migration patterns over time can inform New Brunswick decision makers of who is staying and leaving the province. This, in turn, shows where recruitment and retention efforts should be focused.

WHAT WE FOUND

The largest net negative migration in the past few decades has been among males aged 18-24. In the early 2010s, New Brunswick lost more people to Alberta, Saskatchewan, and Newfoundland and Labrador than is currently the case. In 2019/20, Ontario was the most common province of destination for people leaving New Brunswick.

More people have been moving to New Brunswick in recent years.

1 in 3 people who moved to New Brunswick in 2019/20 came from Ontario, with a +746 net in-migration, larger than any other province.

New Brunswick has improved retention for 18- to 24-year-olds in recent years. In 2020, New Brunswick lost **783** fewer 18- to 24-year-olds to other provinces than in 2013. Yet, despite having improved retention and receiving many interprovincial migrants in 2019/20, there was still a substantial **net negative** migration for this age group. Unlike New Brunswick, Nova Scotia and Prince Edward Island had **net positive** interprovincial migration for 18– to 24-year-olds.
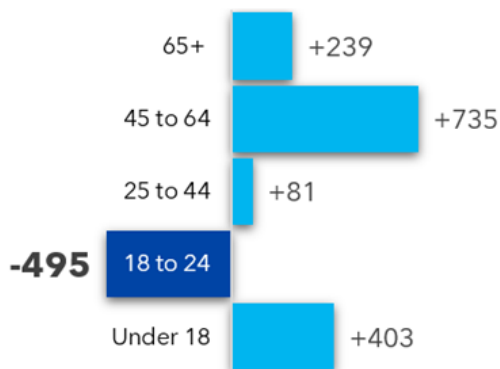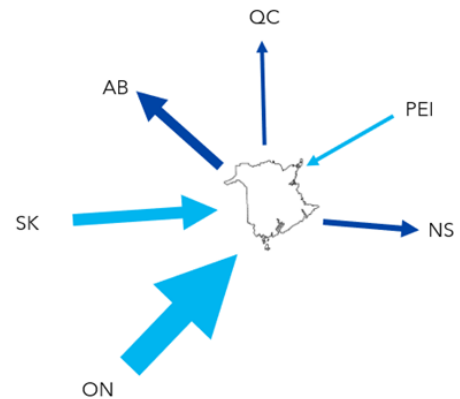
In 2019/20, there was also a large influx of older age groups, further speeding up aging in New Brunswick. However, the province had **net positive** interprovincial migration for people under 18 and for 25- to 44-year-olds, indicating that New Brunswick effectively attracted and retained families in the past year. Record numbers of people arrived in New Brunswick from other provinces in 2020, partially due to lifestyle changes caused by COVID-19. New Brunswick has a lower cost of living and more space, and it had an effective pandemic response.

WHAT THIS MEANS FOR NB

To foster long-term growth, New Brunswick should attempt to retain people who arrived during the pandemic and maintain high levels of in-migration afterwards.

Further characterizing in-, out-, and net migration would give a more complete picture of interprovincial migration. For example, the occupations and fields of interprovincial migrants could be analyzed and compared against labour shortages. Exploration of in- and out-migration patterns for regions of New Brunswick could show local variations. New Brunswick can also look to Nova Scotia and Prince Edward Island to further understand what factors contribute to successfully attracting and retaining young adults in the Atlantic region. Overall, more in-depth demographic comparisons and analysis can improve our understanding of what factors contribute to individuals staying in or leaving the province.

Do Immigrants Stay in NB?

WHAT WE KNOW

Attracting and retaining international immigrants is a crucial pathway to reducing the effects of New Brunswick's aging population. Immigrants are part of the solution to New Brunswick's population challenges, as they have the potential to change our demographics, fill labour shortages, add to our tax base, and make New Brunswick a more diverse province. Historically, New Brunswick has received fewer immigrants than the rest of Canada. To increase immigration, the provincial government implemented a Population Growth Strategy with ambitious targets of welcoming 7,500 newcomers annually and having an 85% retention rate 1 year after arrival by 2024. In 2016, we began to see these efforts actualized, with New Brunswick welcoming more immigrants than in previous years, making 2016 a pivotal year and the focus of this analysis.

Analyzing recruitment and retention efforts can provide policy makers with evidence to inform ways to improve policies and focus spending. Improving retention means that recruitment efforts do not go to waste.

WHAT WE FOUND

New Brunswick loses immigrants each year after initial admission. Immigrants with the lowest retention rates in New Brunswick are English speakers, economic immigrants, and 25- to 54-year-olds. These demographics are typically associated with being strong contributors to their local economies. In particular, economic immigrants are admitted specifically for this purpose.

While gender does not tend to impact the likelihood an individual will stay, the community they live in does. Urban areas (Fredericton, Saint John, and Moncton) have lower immigrant retention than the rest of New Brunswick.

New Brunswick tends to lose immigrants to certain provinces over others, losing by far the most immigrants to Ontario across admission years. Some immigrants leave even after they have been in New Brunswick for several years.

Goal 85%
New Brunswick 66%
Moncton 56%
Saint 50%
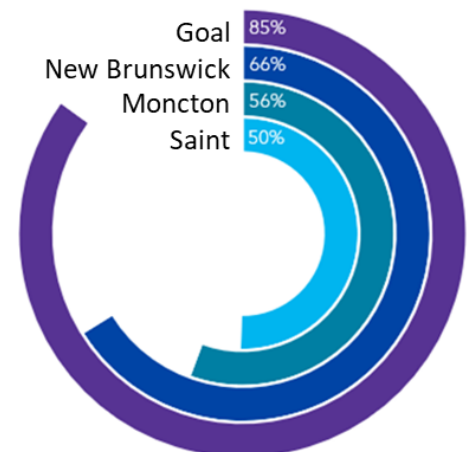
As New Brunswick continues to admit more immigrants over time, the number of immigrants leaving for Ontario each year is increasing. Looking at the province of residence two years after immigrants were admitted to New Brunswick in 2016, we saw that **710** New Brunswick immigrants had moved to Ontario.

While we would hope that the arrival of immigrants from other provinces to New Brunswick would balance out some of the loss from immigrants leaving New Brunswick, this is far from the case. New Brunswick attracts very few immigrants from other provinces. New Brunswick lost over **10 times** more immigrants to Ontario than it received from Ontario, 2 years after the 2016 admission year. In the available data up to 2018, migration to New Brunswick of immigrants admitted in other provinces was not increasing. Most of the immigrants New Brunswick receives from other provinces are economic immigrants who do not have work, study, or other permits.

Out-migrants to ON

710

205

2008   2016

1045

225

Came to NB   Left NB

■ Ontario   ■ Other provinces
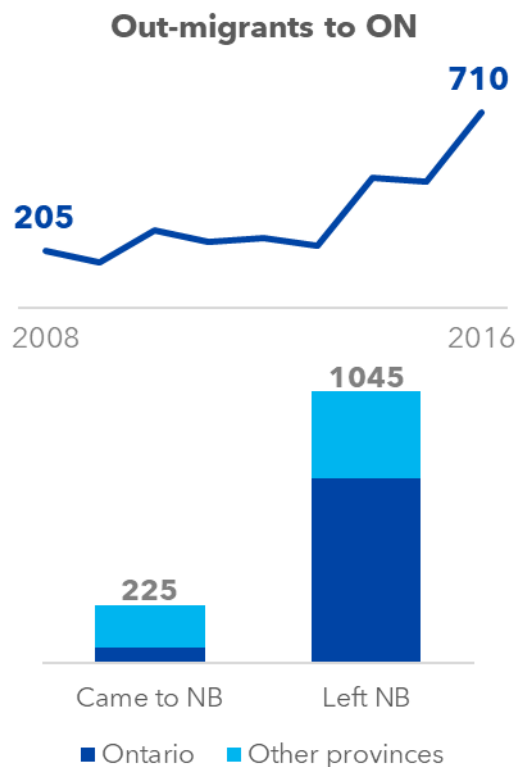
WHAT THIS MEANS FOR NB

New Brunswick needs to improve immigrant retention significantly, and limiting immigrant migration to Ontario could help it reach its target of 85% retention by 2024. New Brunswick could target immigrants who are more likely to stay while attracting more immigrants that arrive in other provinces.

Like the problems we see among young adults in New Brunswick, immigrants are likely leaving in part for better economic opportunities. Characterization of retention rates by immigrant occupation could inform us whether immigrants are effectively filling skill shortages.

Further exploration could answer other questions, like why do urban areas have a lower retention rate for immigrants despite being more multicultural? Are immigrants primarily moving to Canadian cities larger than New Brunswick has to offer?

Immigrant Success in the Labour Market

WHAT WE KNOW

Immigration has been identified in New Brunswick's Population Growth Strategy as a vital pathway to alleviate some of the economic burden caused by the province's aging population. Immigrants not only increase the number of working-age individuals contributing to our tax base, but they can also help fill labour shortages and boost innovation by starting businesses. The province hopes that if immigrants can integrate well into the labour market, they will be more likely to stay, and their success will attract more immigrants. Government resources are allocated each year to attract economic immigrants who are admitted based on their ability to contribute to the economy. However, as highlighted in the previous section, New Brunswick has difficulties retaining 25– to 54-year-old economic immigrants.

There are several economic admission categories in the province, including skilled workers/trades and the Canadian Experience Class. Immigrants from the skilled workers/trades streams are selected to meet labour needs as skilled workers or meet labour demands in specific trades. Immigrants from the Canadian Experience Class are chosen based on their work experience in Canada.

Two ways to quantify immigrants' successes in the labour market are by looking at their median total income and incidence of employment insurance. By characterizing these economic indicators by admission category, immigrant recruitment strategies can be adjusted to effectively target immigrants who tend to perform best in our province.

WHAT WE FOUND

As expected, immigrants admitted through economic admission categories earned more than other immigrants across all admission years. Within the economic immigrant class, the skilled worker/trades and Canadian Experience Class immigrants earned the most income across admission years. When comparing income by country of origin, immigrants from India made the most across all admission years since 2010. Among the lowest earners were immigrants from China.

MEDIAN INCOME OF
IMMIGRANTS ARRIVING FROM...

INDIA

$49,000

$15,600

CHINA

WHILE ON AVERAGE, IMMIGRANTS
EARN $23,500 IN YEARLY INCOME

This could be due to the number of Chinese international students, as 15- to 24-year-olds and immigrants with only study permits made lower incomes. Other higher-earning immigrant groups were 25- to 34-year-olds, males, and immigrants with both work and study permits. Immigrants from recent admission years have fared better in the labour market, with higher incomes and a decreasing gender wage gap.

However, when we look at the incidence of employment insurance among recent admission years, a concerning trend emerges. Recent admission years had higher incidences of employment insurance. Unlike for immigrants, the use of employment insurance for the general population of New Brunswick remained relatively constant, around 4-5% before COVID-19, and much lower than that of immigrants.

INCIDENCE OF EMPLOYMENT INSURANCE
1 YEAR AFTER ARRIVAL

ALL IMMIGRANTS   10.9 %
                  10.1 %
6.4%
5.5%   ECONOMIC IMMIGRANTS

2009   2018
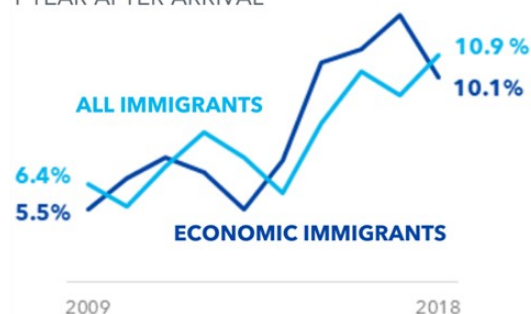
While it may be expected that economic immigrants would use employment insurance less, given the nature of their admission criteria, economic immigrants had a similar incidence of employment insurance as other immigrants, and the incidence of employment insurance was higher in New Brunswick than in other Atlantic provinces.

WHAT THIS MEANS FOR NB

The high incidence of employment insurance and low retention of economic immigrants presented in the previous section may indicate that economic immigrants are having difficulty finding jobs in New Brunswick.

As New Brunswick continues to admit more immigrants each year while improving admission processes, the province could invest more in the skilled worker/trades stream and work with the federal government to expand the Canadian Experience Class. New Brunswick could analyze why immigrants from India make more income and could consider more extensive immigrant recruitment campaigns in India.

Labour shortages identified by the province inform the admission criteria for many economic immigrants. Further characterization of the occupations of economic immigrants with higher incidences of employment insurance could show the government if there is a mischaracterization of labour demand in the province.

POP NB 2021

BRIEFING NOTES

This year, each PopNB data analyst selected one of their topics to create a briefing note. These briefing notes connect findings from their analyses to relevant financial and economic implications in the province. The intent is to help inform actionable policy opportunities to support equity, growth, and innovation in New Brunswick.

E-health and Healthcare Job Vacancies in New Brunswick

Prepared by Griffin Higgins

The Issue

As New Brunswick continues to age and change, a growing proportion of retirees is expected to generate large numbers of job vacancies in critical occupations. This is especially true for healthcare occupations, which already struggle to meet current labour demand while utilizing nearly all available healthcare resources.

Recommendations/Next Steps

E-health is one of the many innovative avenues that can be explored to help manage healthcare labour demand.

> *[E-health] is an overarching term used today to describe the application of information and communications technologies in the health sector. It encompasses a whole range of purposes from purely administrative through to health care delivery. (Government of Canada)*

As demonstrated during the COVID-19 pandemic, E-health facilitates access to primary care for those who otherwise may experience accessibility barriers, especially for rural communities. The public's current familiarity with E-health makes it an excellent time to continue investing in and developing an E-health strategy to alleviate pressure on our healthcare system from current and imminent job vacancies.

Background

Historically, older age groups played a large role in healthcare occupations from 1996 onwards, compared to younger age groups that only started increasing their roles from 2006 onwards. While this latter trend is good news, it is not enough to fill the decade-wide labour gap that has only widened due to increased healthcare demand from an increasingly large group of older New Brunswickers. Recent data indicates that healthcare occupations are in high demand with a very low unemployment rate of 1.8%, paired with nearly 1,600 job vacancies. Maintaining good retention rates among healthcare occupations to keep unemployment low will be vitally important to prevent a worsening of this job vacancy gap, which is only expected to grow.

Economic Implications

Increased reliance on E-health services would require investment in reliable internet access in rural areas. However, once investments are made, cost savings would be expected from diverting patients away from high-cost centres. Large-scale implementation of E-health across NB will provide faster and better access to primary healthcare, improving the lives of New Brunswickers and ensuring the health needs of our aging population are serviced effectively and efficiently.

Pay Equity in Healthcare Professions

Prepared by Lee Whelan

The Issue

Although women vastly outnumber men in enrollments in health programs at New Brunswick universities, 5 years after graduation men earn a higher median income than women.

Recommendations/Next Steps

On August 31, 2021, the federal government will begin enforcing the Pay Equity Act to address this issue nation-wide by requiring employers to evaluate the value of positions that are predominantly occupied by males or females. At the provincial level, New Brunswick can help improve the earning potential of women entering health fields by investing in experiential learning programs in post-secondary institutions and mentoring programs for women interested in leadership positions. Researching the potential impacts on graduate retention could also reveal the benefits of pay equity in addressing shortages of health care professionals.

Background

In every Atlantic province, more women than men enroll in health programs at universities. In 2018, 5,607 women entered health programs in New Brunswick, while only 1,497 men enrolled in the same programs. Even though women make up the majority of health care professionals, men working in this field still earn a higher median income. NB had the largest pay gap in Atlantic Canada in 2013, with men making a median income that was $8,900 higher than that of women after graduating from a health program. There are various reasons why this pay gap may exist: it may be attributable to men attaining higher paying roles within the health professions, as well as a higher proportion of men entering leadership positions. The introduction of the Pay Equity Act will give the province three years to address disparities in compensation between roles.

Economic Implications

While there will be an upfront cost to complying with the Pay Equity Act, the economic benefits of a smaller wage gap will have a positive impact on the NB economy. Primarily, a rise in income will result in an increase in spending, which will help grow GDP and will likely help offset the costs of implementing the Pay Equity Act. As compensation increases for low-wage, high demand, and traditionally female-dominated roles, those who might not have considered these positions may be more inclined to pursue them. This may help improve labour shortages in the health professions.

Immigrant Income and Work Experience in New Brunswick

Prepared by Samuel McNally

The Issue

The Government of New Brunswick invests many resources in recruiting immigrants to the province each year. However, recruitment efforts do not always match immigrants' contributions to the economy, as the latter vary considerably by admission category, pre-admission experience, and years since admission. For instance, over 75% of economic immigrants are low-earning provincial nominees, and less than 10% are high-earning Canadian Experience Class (CEC) immigrants.

Recommendations/Next Steps

Investment in programs allowing immigrants to gain work experience in Canada could help connect immigrants to better employment opportunities, fill job vacancies, and increase government revenue. This could include expanding the CEC program to attract more high-earning immigrants and issuing more work permits to make it easier for immigrants to obtain work experience in NB.

Background

Identifying high-performing groups in the labour market is vital to achieving the best return on investment, and our research shows that immigrants with work experience – particularly CEC immigrants – earn more than others. CEC immigrants are selected based on their work experience in Canada. Meanwhile, provincial nominees are chosen to fill specific labour needs and contribute to the provincial economy but have no prior Canadian work experience. One way to quantify immigrants' success in the labour market is through median total income. CEC immigrants make more and provincial nominees make less income than other economic immigrants across admission years. For example, two years after admission to New Brunswick in 2016, the median total income for CEC immigrants was $65,800; for all economic immigrants, it was $40,000; for provincial nominees, it was $37,800. Immigrants with work permits make more income than other immigrants, and their earnings increase each year after arriving in New Brunswick as they obtain work experience. These findings suggest that work experience in New Brunswick is crucial to the labour market success of immigrants. Many immigrants find that their foreign credentials matter little to employers, forcing some to pursue further education in Canada or start at low-status jobs.

Economic Implications

Immigrants contribute over a hundred million dollars more to government revenue than is spent on recruitment annually, indicating a high return on investment. Immigrants' contributions to the economy could increase further by focusing on programs that allow immigrants to gain Canadian work experience through a reallocation of resources or increased spending. Connecting immigrants to work experience in Canada will hopefully encourage new immigrants to stay and fill the 13,000 job openings that are expected in the next ten years, boosting both retention and economic success in the province.

Pathways to Professions is a summer program facilitated by NB-IRDT with degrees of support from our community partners.

If you have any questions about Pathways to Professions, you can contact us at nb-irdttaining@unb.ca.

Thank you | Merci | Wəliwən | Wela'lin