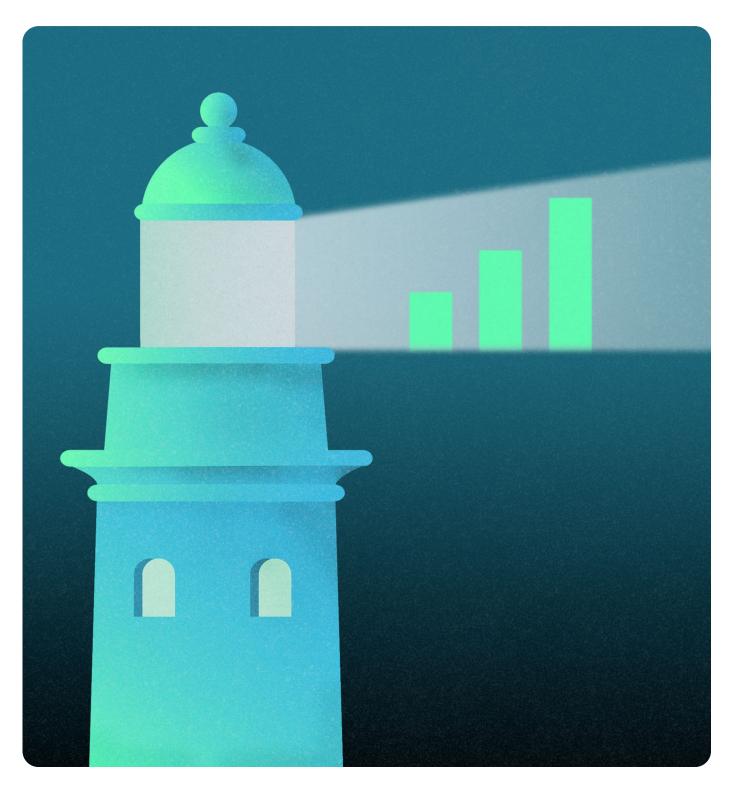




# The Atlantic Canada Momentum Index

BY ANDREW SHARPE





### PUBLIC POLICY FORUM FORUM DES POLITIQUES PUBLIQUES

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# **Preface**The Wind in Our Sails

**Atlantic Canadians have always taken care of each other.** Conditions, from the weather
to the economy, have made us resilient and
entrepreneurial, shapers of our own destiny.

It is apparent to us as former leaders in the region that a new day is dawning. Our focus on education is reaping dividends. We are now widely recognized for our cluster of great universities and colleges, which provide springboards to prosperity in an information economy. During the early stages of the pandemic, our Atlantic bubble formed quickly. Fueled by a hard-wired concern for our neighbours, our social cohesion was the envy of the country. Our vaccination rates were high; our infection rates were low.

"All of us are better," the great Alistair MacLeod wrote, "when we're loved." We are, and we do. It is no surprise to us that, finally, more people are coming down the road than going.

Yet something even more profound is happening — an explosion in innovation led by a new generation of entrepreneurs, combined with our existing economic base and enviable lifestyle, to supercharge opportunity.

As the Public Policy Forum convincingly documents in its Atlantic Canada Momentum Index: Population? Up. Immigration? Up. GDP per capita? Up. Education, employment rate, productivity, housing starts, life satisfaction? Up.

This report produced by PPF is the beginning of what we hope will be a joyous repositioning of the Atlantic provinces within Confederation.

We believe in the future of Atlantic Canada. The wind is in our sails.

**David Alward,** premier, New Brunswick, 2010-2014

**Dwight Ball,** premier, Newfoundland and Labrador, 2015-2020

**Catherine Callbeck,** premier, Prince Edward Island, 1993-1996

**Karen Casey,** deputy premier, Nova Scotia. 2017-2021

**Darrell Dexter,** premier, Nova Scotia, 2009-2013

**Brian Gallant,** premier, New Brunswick, 2014-2018

**Robert Ghiz,** premier, P.E.I., 2007-2015

**Shawn Graham,** premier, New Brunswick, 2006-2010

**Stephen Horsman,** deputy premier, New Brunswick, 2014-2018

**Stephen Kent,** deputy premier, Newfoundland and Labrador, 2014-2015

**Aldéa Landry,** deputy premier, New Brunswick, 1987-1991

**Rodney MacDonald,** premier, Nova Scotia, 2006-2009 **Wade MacLauchlan,** premier, P.E.I., 2015-2019

**Frank McKenna,** premier, New Brunswick, 1987-1997

**Stephen McNeil,** premier, Nova Scotia, 2013-2021

**Tom Marshall,** premier, Newfoundland and Labrador, 2014

**Brian Tobin,** premier, Newfoundland and Labrador, 1996-2000



# Introduction **Have-Not No More**

Atlantic Canada, long considered the poor stepchild of Confederation, has held a special spot in my imagination since my first visit to the region in the 1980s. It was hard to ignore the vitality and cohesion of the people, the concentration of post-secondary excellence, and powerful connections both to Canada and, courtesy of the omnipresent ocean, to the world. It felt to me like a place on the precipice of breaking out, a sense that persisted over 35 years of building up my own professional and personal connections.

But there were obstacles to overcome. My own family had arrived at Halifax's famous Pier 21 in 1929 and started life in Canada working on a fox farm on Prince Edward Island. Soon, though, a lack of cultural diversity (in their case, too few Jews with whom to pray) put them back on the road. For others, it was the limits of economic opportunity. Years of out-migration, little inward immigration and chronically weak economic growth took a heavy toll. The region's share of both

the Canadian population and the Canadian economy fell steadily.

Since the mid-2010s, however, Atlantic Canada has caught a fresh wind in its sails, gathering significant economic momentum and beginning to outpace the rest of the country in population growth rate. In my case, over the past half-dozen years I could feel the ground was shifting; a new energy was afoot, innovation was being unleashed. It became apparent that the long-standing characterization of the Atlantic provinces as a have-not region, thankfully, was being relegated to the rearview mirror.

The Public Policy Forum has enjoyed a long and fruitful relationship with the four Atlantic provinces. Most recently, we have been a champion of the Atlantic Growth Strategy and worked with the federal and provincial governments on how to attract more immigration and improve retention rates. Our optimism about Atlantic Canada's prospects

was reinforced during the pandemic, when its good governance and social cohesion served as a wake-up call to other Canadians. High vaccination and low infection rates, accompanied by an historic turnaround in population growth and significant inroads in the innovation economy, piqued our curiosity.

Was the Atlantic Bubble a precursor to an Atlantic boom? Was there real and measurable momentum in the economy and, if so, where? Which economic and social indicators would be key to ascertaining this and building on current momentum over a 10-year period? If one set higher goals for these indicators, what policies would be needed to support long-term inclusive growth objectives?

So was born PPF's Atlantic Initiative and this, the first edition of our Atlantic Momentum Index. Working with the Centre for the Study of Living Standards (CSLS) and its New Brunswick-born president, Andrew Sharpe, PPF and a group of advisers from the four provinces identified 20 key social and economic indicators to ascertain whether momentum actually exists. The short answer is yes, it does — definitively. A convincing majority of our indicators furnish concrete proof there is indeed something going on. The research shows trendlines pointing upward in the six or seven years since about 2015, in sharp contrast to the performance from 2008 to 2015. Momentum is tangible and recent, so much so that the public imagination has not vet caught up with this profound shift.

The objective of this report is two-fold: to report on these indicators and use the data to shape reinforcing policy choices; and to

alert the rest of Canada and even residents of Atlantic Canada that change is occurring. With the evidence from these findings, we hope Atlantic Canadians and their policymakers will be better informed in making policy choices and have new tools at their disposal through the 2020s and into the next decade to supercharge the encouraging trendlines. There is still a lot of ground to make up.

The paper reports on an index PPF and CSLS developed of 20 indicators in five domains, namely:

- the macro economy;
- human capital;
- the labour market;
- · innovation and investment; and
- quality of life.

The performance of these indicators from 2015 to the most recent year for which data are available (it ranges between 2019 and 2022) is compared with the 2008-2015 period for Canada as a whole and Atlantic Canada. An improvement between periods is a sign of growing momentum. Comparisons are also made in rates of improvement in the indicators in Atlantic Canada after 2015 compared to Canada nationally to see if the region's absolute performance has outpaced that of the country. It is possible the region showed a very large improvement after 2015 from very poor performance in the pre-2015 period but is still underperforming the national average. We have tested for that.

In sum, PPF has set out on a three-part mission to determine the following, the first of which this paper addresses:

What are the current measures of economic and social momentum in Atlantic Canada?

What provincial and regional targets should be established vis-à-vis the indicators in this report and their relative position with the rest of Canada?

What policies will best help facilitate the bridging of gaps that ill-serve the residents of Atlantic Canada's four provinces and provide them with a more prosperous and fair future?

Confederation was conceived at the Charlottetown Conference in 1864 as a union of equals. Momentous as it turned out to be, the gathering was overshadowed by the first circus to visit the island in two decades. Small wonder the subsequent progress of the nation has often seemed to be unfolding in separate rings.

Today, Atlantic Canada is poised to assume its rightful place in Canada. Dedicated as we are to this proposition, PPF intends to do its part through our Atlantic Initiative. We are witnessing a quiet revolution and we are determined to help today's leaders arrive at a policy vision and wisdom commensurate with the architects of the great political and economic union of 1867. As you will see in the pages that follow, the wind is finally at their back.

#### **Edward Greenspon**

President & CEO Public Policy Forum

PPF wants to thank all those who have participated so far in our Atlantic Initiative. A special shout-out to the Margaret and Wallace McCain Family Foundation and Margaret McCain for the critical seed money to get the initiative off the ground, and to the Atlantic Canada Opportunities Agency for its interest in PPF's work in the region. Thanks as well to a group of former elected officials who served as a sounding board for the paper and agreed to give voice to it: Stephen McNeil of Nova Scotia; Aldéa Landry of New Brunswick; and Wade MacLauchlan of Prince Edward Island. This work would not be possible without PPF's dedicated and talented staff, particularly in this instance Alishya Weiland, Katie Davey (who has gone on to head the Pond-Deshpande Centre at the University of New Brunswick), Alison Uncles, Naushin Ahmed and PPF's two board members in the region, Laurel Broten and Cathy Bennett. Dozens of dedicated Atlantic Canadian leaders also fed into this work. Their generosity of time and intense desire to make Atlantic Canada, and indeed Canada, a better place is inspiring.



## **A Long-Term Perspective** on Atlantic Canada's Position within Canada

**Over the last 60 years, Atlantic Canada's** share of the Canadian population fell dramatically. In 1961, the population of Canada was 18.3 million, with 1.9 million living in Atlantic Canada. By 2021, Canada's population had grown to over 38 million while Atlantic Canada's population sat at 2.5 million. As a result, Atlantic Canada's share of the Canadian population fell four percentage points from 10.4 percent in 1961 to 6.5 percent in 2021 (Chart 1). The decline in the population share has been fairly steady, dropping at each 10-year census point by 0.9, 0.4, 0.7, 0.9, and 0.7 percentage points respectively from 1961 to 2011 and by a somewhat smaller 0.5 percentage point over the past decade (2011-2021).

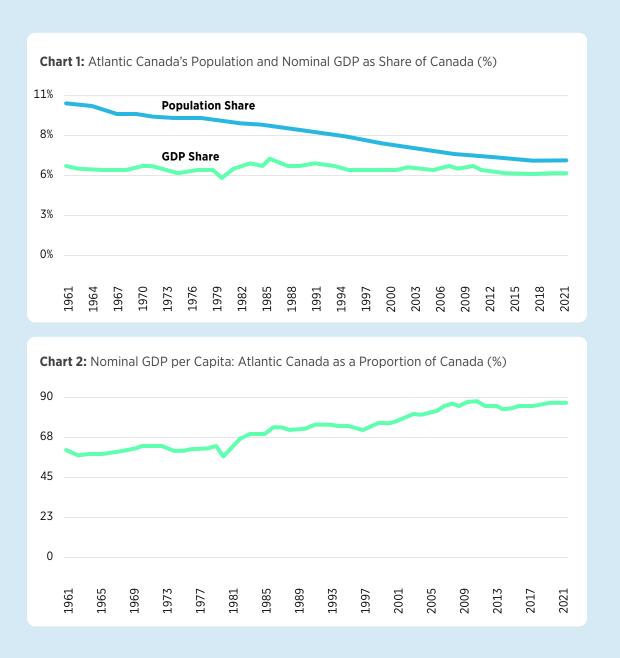
The situation appears to be changing. In 2021-22, population growth in Atlantic Canada exceeded the national average Greater immigration largely explains this turnaround.

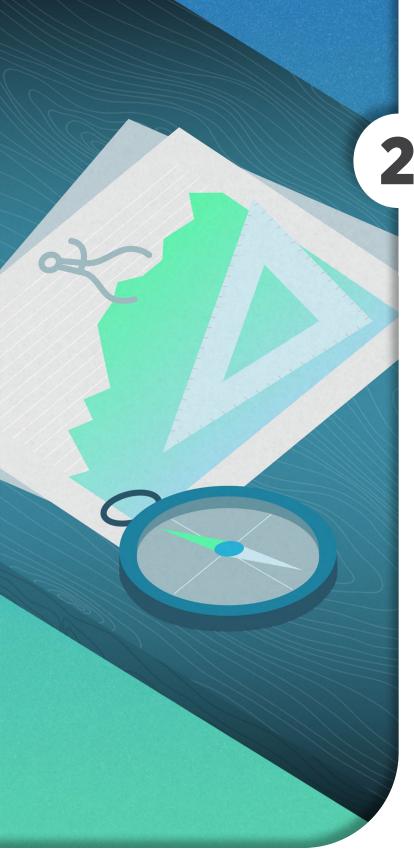
Perhaps surprisingly, the relative size of the Atlantic Canadian economy has not experienced the same magnitude of decline as its population. In 1961, nominal GDP in the region was \$2.5 billion, equivalent to 6.2 percent of Canada's GDP of \$40.6 billion. By 2021, the nominal GDP in Atlantic Canada had risen to \$141 billion while Canada's GDP was \$2.5 trillion. Atlantic Canada now accounts for 5.6 percent of Canada's GDP, down only 0.5 percentage points from its share in 1961 (Chart 1). This is one-seventh of the decline in the region's population share over the same period.

The upshot of this paradoxical development has been a dramatic narrowing in relative living standards between Atlantic Canada and Canada as a whole. In 1961, nominal GDP per capita in Atlantic Canada was \$13,000,

just 59 percent of the national average of \$22,000. By 2021, GDP per capita in Atlantic Canada had risen to \$57,200, or 87 percent of the national average of \$65,700 (Chart 2). The region's standard of living has risen an amazing 28 percentage points, or nearly 50 percent relative to the national average.

This is an important finding as it suggests disparities between Atlantic Canada and the rest of the country have diminished markedly over the last 60 years. The reasons for this improvement include reductions in productivity and employment rate gaps, as well as increased transfer payments from the federal government.





# **Methodology Designing** a Momentum Index for Atlantic **Canada**

The methodology used to develop the index is straightforward. First, we selected a set of indicators for various economic and social trends, then we constructed a momentum measure for each indicator. This section of the report reviews key aspects of the methodology, including the choice of indicators, definition of "momentum." dating periods for calculation of momentum and the construction of indicators from provincial data.

#### **Choice of Indicators**

The central task in constructing an index is the selection of a set of indicators that are relevant, reliable, easily accessible, available for the period covered, easily understandable and, above all, capture the elements that the developers believe are most important.

The 20 indicators on economic and social trends in Atlantic Canada chosen for the index resulted from a three-stage process. First, PPF staff developed a list of potential indicators based on their views of which ones had potential to capture a broad picture of the region's economic development. A group of prominent Atlantic Canadians then discussed these indicators and feedback from the group was incorporated. Lastly, CSLS refined the list to produce a final set of indicators.

#### **Exhibit 1: List of Indicators by Domain**

#### **Macro Economy**

- Real GDP
- 2. Real GDP Per Capita
- 3. Real Exports

#### **Human Capital**

- 4. Population
- 5. Median Age
- 6. Immigration
- 7. Immigration Retention Rate
- 8. NEET Rate
- 9. Tertiary Education Rate

#### **Labour Market**

- 10. Employment Rate
- 11. Employment Income Per Economic Family
- 12. Labour Productivity

#### **Innovation and Investment**

- 13. Business Expenditures of Research and Development (BERD)
- 14. Non-Residential Investment
- 15. Production of Non-Emitting Energy

#### **Quality of Life**

- 16. Gini Coefficient
- 17. Housing Starts
- 18. Access to a Family Physician
- 19. Life Satisfaction
- 20. Sense of Belonging

#### **Defining Momentum**

In physics, momentum is the speed of motion of an object. Even if an object has a slower rate of growth or motion now compared to an earlier period, it is still considered to have momentum. However, in economics. momentum refers to an acceleration in the rate of growth of a variable, a change in a change, or the second derivative. If the growth rate falls to two percent in period B from three percent in period A, we do not say the variable has momentum, even though it is still growing. However, if the growth rate of a variable increases from one percent in period A to two percent in period B, we say it has momentum because of the higher growth rate. We have used this second definition of momentum in the report - an improvement in the growth rate of the variable — to define and track momentum. The degree of momentum is the difference between first- and second-period growth rates, measured in percentage points. There can still be momentum if growth rates in both periods experience negative growth rates and the negative growth in the second period is smaller.

#### **Dating of the Periods**

Given that momentum is measured as the difference in growth rates between periods. a well-considered dating of periods is crucial. Generally, it is desirable to use business cycle peaks to date periods to minimize short-term cyclical influences. The years 2000, 2008 and 2019 are all cyclical peaks, so the periods 2000-2008 and 2008-2019 could have been used to measure momentum. However, there appears to have been an improvement in economic performance around 2015, so the 2008-2019 period growth rates would not have captured this shift; it was necessary to divide the 2008-2019 period in two. The year 2015 was chosen as the break point to create periods of roughly equal length. There are seven years in the first period, 2008-2015, and six years in the second period, 2015-2021.

Of the 20 indicators, one ends at 2019 (immigration retention rate), three at 2020 (BERD spending, employment income per economic family, and the Gini coefficient), 12 at 2021 (immigration, NEET, tertiary education, labour productivity, production of non-emitting energy, access to family physician, life satisfaction, community belonging, real GDP, real GDP per capita, real exports and non-residential investment), and four at 2022 (population, median age, employment rate and housing starts). The post-2015 period will be referred to as 2015 to 2021-22 as 16 of 20 indicators are available for these two years.

## Construction of an Atlantic Canada Aggregate

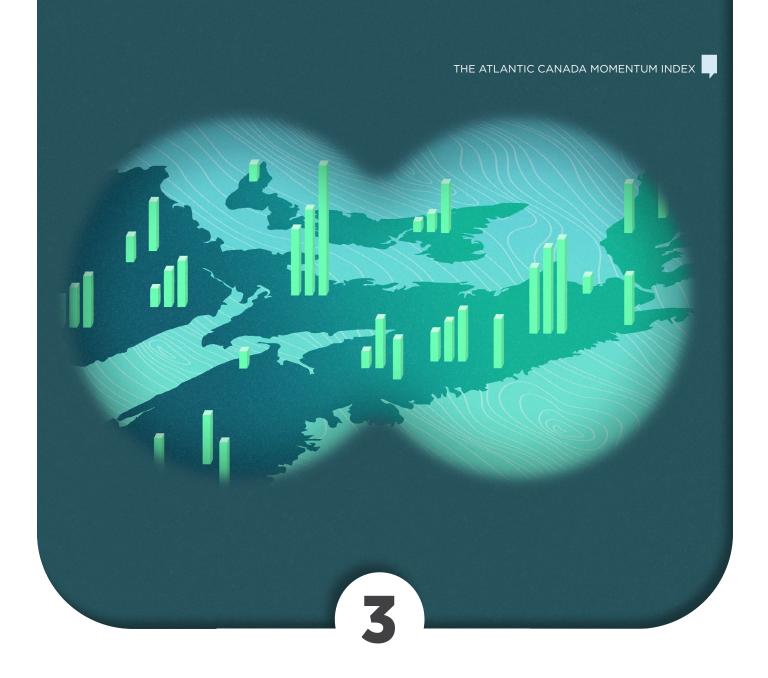
Statistics Canada releases data at the provincial level and often does not produce official

figures for regions. In cases where official figures for Atlantic Canada are not available, CSLS constructed estimates in several ways:

- A sum of estimates for the four Atlantic provinces. This works for variables expressed in absolute terms, such as population and current dollar GDP categories.<sup>2</sup> It does not work for indicators expressed in terms of rates or percentages.
- A sum for the region and calculation of a regional rate where absolute estimates of the numerator and denominator of rates are available.
- The weighting by an appropriate variable of provincial rates, generally the denominator of the ratio, to obtain a regional rate when it has not been possible to obtain estimates in absolute terms.

#### **Data Sources**

All data for indicators used in this report have been sourced from Statistics Canada. CSLS has constructed an extensive database that contains estimates for all 20 indicators for Canada and for the 10 provinces<sup>3</sup> for as long a period as data availability permits. For indicators expressed in absolute terms, provincial shares of the national total have been calculated, as well as per capita estimates in absolute terms and as a proportion of the national average. The Excel files containing these data are found at <a href="http://www.csls.ca/reports/PPF\_Index\_Database.xlsx">http://www.csls.ca/reports/PPF\_Index\_Database.xlsx</a>.



# The Findings Summary Results

Table 1 presents the number of indicators in Canada, Atlantic Canada and the 10 provinces that experienced an absolute improvement or deterioration in performance in the 2015-2021 period, as measured by the growth rate

of the indicator. Note that we do not refer to these as an increase or decrease since for three indicators (median age, the proportion of NEET, and the Gini coefficient) a decrease represents an improvement.

Table 1: Number of Indicators Experiencing Improvement and Deterioration in the Atlantic Index, 2015 to 2021-22

	Improvement	Deterioration
Canada	14	6
Atlantic Canada	14	6
Newfoundland and Labrador	11	9
Prince Edward Island	17	3
Nova Scotia	16	4
New Brunswick	14	6
Quebec	19	1
Ontario	15	5
Manitoba	8	12
Saskatchewan	7	13
Alberta	7	13
British Columbia	17	3

Note: An increase in the rate of change of the variables for median age, NEET and the Gini coefficient is defined as an improvement; a decrease of deterioration is indicative of positive momentum. For all other variables, positive momentum is associated with a positive change.

In 2015 to 2021-22, 14 of the 20 indicators in Atlantic Canada showed improvements over the period, exhibiting positive growth rates for indicators where more was better and negative growth rates for indicators where less was better. Atlantic Canada performed as well as the country as a whole, where 14 of the 20 indicators also showed improvements. Two of four Atlantic provinces

outperformed and one equaled the Atlantic Canada average: 17 indicators showed improvements in Prince Edward Island. 16 in Nova Scotia and 14 in New Brunswick. In Newfoundland and Labrador, only 11 indicators exhibited improvements. In the earlier 2008-2015 period, all jurisdictions had slightly fewer indicators that demonstrated improvement.

Table 2: Number of Indicators Experiencing a Change in the Rate of Change (2008-2015 vs. 2015-2021)

	Improvement	Deterioration	No Change
Canada	10	10	
Atlantic Canada	16	3	1
Newfoundland and Labrador	13	7	
Prince Edward Island	13	6	1
Nova Scotia	14	6	
New Brunswick	17	3	
Quebec	18	2	
Ontario	11	9	
Manitoba	6	14	
Saskatchewan	8	12	
Alberta	6	14	
British Columbia	15	5	

Note: A negative change in the rate of change of the variables for median age, NEET and the Gini coefficient between two periods is indicative of positive momentum. For all other variables, positive momentum is associated with a positive change.

Sixteen of 20 indicators in Atlantic Canada showed an improvement in 2015-2021 compared to 2008-2015, with three indicators showing a deterioration and one unchanged. This is strong evidence of momentum.4

This momentum was exhibited across all four Atlantic provinces, with similar performance outcomes. Details on the provinces are provided in the Appendix.

Momentum in Atlantic Canada after 2015 considerably exceeded the national average. One half (10 out of 20) of the indicators for Canada experienced a pickup.

At the provincial level, only one province outside Atlantic Canada — Quebec — did better than the Atlantic Canada average and all individual Atlantic provinces, with 18 out of 20 indicators showing improvements. British Columbia ranked third among the provinces at 15 indicators.



# Momentum Results for 20 Indicators

This section presents results for 20 indicators across five domains: the macro economy; human capital; labour market performance; innovation and investment; and quality of life. Trends in Atlantic Canada in these indicators from 2015 to the most recent year for which data are available are compared with the 2008-2015 period for both Canada as a whole and Atlantic Canada.

Comparisons are also made in the rates of indicator improvement in Atlantic Canada after 2015 compared to national rates to determine if the region's absolute performance outpaced other provinces and the country as a whole. It is possible the region showed a very large improvement after 2015 from a very poor performance in the pre-2015 period while still underperforming the national average.



he macro economy domain contains three indicators: real GDP; real GDP per capita; and real exports. Atlantic Canada exhibited considerable momentum on all three indicators after 2015. In contrast, the Canadian economy showed momentum on none of these indicators.

#### Economic Growth (Real GDP)

The Atlantic economy experienced very slow economic growth from 2008 to 2015, only 0.1 percent per year on average. However, economic growth picked up considerably in the 2015-2021 period to 1.3 percent per year, which is strong evidence of momentum. This improved economic growth performance largely reflected a turnaround in exports, as well as faster growth in the consumption and investment components of demand.

The Canadian economy advanced 1.5 percent per year in 2008-2015, but growth fell to 1.4 percent in 2015-2021. While the Canadian

economy decelerated, the Atlantic Canadian economy accelerated.

#### Real GDP Per Capita

Real GDP per capita is a widely used measure of living standards; it is GDP growth controlling for population.

The Atlantic economy experienced negative growth in real GDP per capita from 2008 to 2015, at -0.1 percent per year, a terrible performance. In the 2015-2021 period, real GDP per capita growth, following the trend of real GDP economic growth, picked up to 0.6 percent per year, representing strong momentum.

Real GDP per capita in the Canadian economy advanced 0.5 percent per year in 2008-2015, but growth fell to 0.2 percent in 2015-2021. The annual average rate of growth in real GDP per capita in Atlantic Canada has exceeded the Canadian average since 2015. In absolute terms, real GDP per capita is still lower in Atlantic Canada than nationally, but the gap is closing. In 2021, real GDP per capita was \$47,748 (2012 dollars), 87 percent of the national level of \$55,022. This relative level is up from 85 percent in 2015.

#### Real Exports

The export performance of the Atlantic economy from 2008 to 2015 was very poor, with real exports declining 2.4 percent per year. In the 2015-2021 period, real export growth picked up considerably to 1.2 percent per year.

Real exports at the national level advanced 1.7 percent per year in 2008-2015, but growth fell to 0.2 percent in 2015-2021.

While the Atlantic Canadian economy experienced a boom in exports after 2015, export growth slumped nationally. This is unlike the situation for economic growth.

In absolute terms, real exports per capita are still lower in Atlantic Canada than in Canada as a whole, but the gap is closing. In 2021, real exports per capita were \$15,020 (2012 dollars), 91 percent of the national level of \$16,566, and up from 83 percent in 2015.



he human capital domain contains six indicators: population; median age; immigration; the immigration retention rate; the proportion of youth not in employment, education or training (NEET); and the proportion of the population with tertiary or post-secondary education. On five of the six indicators (NEET is the exception), Atlantic Canada exhibited momentum after 2015.

#### Population

Atlantic Canada experienced very weak population growth from 2008 to 2015, only 0.2 percent per year on average based on mid-year estimates. In the 2015-2022 period, population growth picked up considerably to 0.9 percent per year.

Canada-wide, population grew one percent per year from 2008 to 2015 and picked up only slightly to 1.2 percent in the 2015-2022 period. The pickup in population growth in Atlantic Canada after 2015 was four times larger than the national figure, although both showed momentum.

Population growth after 2015 was thus still slightly higher at the national level than in Atlantic Canada. Relatively fewer immigrants and net migration to the rest of Canada help explain this situation.

#### Immigration

Immigration to Atlantic Canada was very low throughout the 20th century. Starting in the mid-2000s, immigration started growing; it is now by far the region's most important source of population growth.5

Atlantic Canada was already experiencing strong immigration growth of 10.4 percent per year from 2008-09 to 2015-16. In the 2015-16 to 2021-22 period, immigration picked up even further to 13.4 percent per year. The number of immigrants to Atlantic Canada averaged almost 15,000 per year in the seven years from 2015-16 to 2021-22. more than double the annual intake of about 7,000 immigrants from 2008-09 to 2014-15.

Nationally, immigration grew at four percent per year in 2008-09 to 2015-16, albeit on a much higher population base than Atlantic Canada, and increased to 7.3 percent in 2015-16 to 2021-22. There was considerable momentum nationally, as well as in Atlantic Canada, after 2015, although the growth rate was much higher in Atlantic Canada than at the national level, due to the lower base. As a share of population, annual immigration is still lower in Atlantic Canada than at the national level, but it is rapidly increasing.

#### Immigration Retention Rate

The immigrant retention rate, defined as those still in the province or country of their arrival a year later, has historically been lower in Atlantic Canada than Canada as a whole, reflecting more limited employment opportunities and the smaller size of immigrant communities. In recent years, the region's immigrant retention rate has been improving significantly.

In 2010, the first year for which data are available, 67 percent of immigrants in Atlantic Canada who had arrived a year earlier were still in their province of arrival. By 2019, the most recent year for which data are available, the retention rate jumped to 72 percent.

At the national level, the immigration retention rate was 92 percent in 2010, falling to 88 percent in 2019. The rate of decline was 0.8 percent per year in 2010-15 and 0.1 percent per year in 2015-19.

Both Atlantic Canada and Canada as a whole experienced momentum in the immigration retention rate after 2015, with momentum

much greater in Atlantic Canada.

There is, however, significant variation in immigrant retention rates within Atlantic Canada. In 2019, Nova Scotia had the highest one-year retention rate at 77 percent, followed by New Brunswick (73 percent), Newfoundland and Labrador (63 percent), and Prince Edward Island (58 percent). The larger the population of a province, the higher the retention rate.

#### Median Age

The interpretation of median age (the midpoint of the age structure of a population) as a performance indicator is not straightforward. Longer life expectancy, reflected in median age, is obviously a desirable development. However, it can be argued that a younger population is positive for the economy and society — more dynamic, more amenable to change, more adoptive of new technologies. As well, a younger population carries lower pension and health costs than an older population. For these reasons, a fall in the median age is considered a positive performance indicator within this index.

There are two possible ways to define momentum in terms of median age: an absolute fall in the median age, or a deceleration in the rate of increase (or a larger rate of decline) in median age. For consistency's sake, we use the second.

Atlantic Canada experienced a large rise in the median age of the population from 2008 to 2015, 0.9 percent per year. In the 2015-2021 period, the median age grew at a much slower pace of 0.1 percent per year.

Nationally, the median age grew 0.5 percent per year in 2008-2015 and fell to 0.1 percent per year in 2015-2022. The fall in the advance of the median age in Atlantic Canada after 2015 was slightly more than twice that of Canada as a whole, with both showing considerable momentum.

In terms of growth rates, median age growth after 2015 was virtually identical in Atlantic Canada and nationally.

With its higher share of population 65 and over, Atlantic Canada in 2022 had a median age at 110 percent of the national average (45 years versus 41 years). After rising from 107 percent of the national average in 2008 to 110 percent in 2015, the region's median age relative to the national average has now stabilized.

#### Youth Not in Education, **Employment and Training (NEET)**

One insightful measure of the performance of the labour market for younger people, and society as a whole, is the proportion of youth (defined as those aged 15-29) who are neither employed nor in education or training (NEET). The larger the proportion of NEET, the less well the labour market is meeting vouth needs. For this indicator, momentum is defined as a downward change in the rate of growth.

Atlantic Canada experienced a fall in the proportion of NEET in the population from 2008 to 2015 at a 0.5 percent average annual rate, a positive development. However, from 2015 to 2021, the proportion increased at a rate of 0.3 percent. Not only was there no positive

"In recent years, **Atlantic Canada has** enjoyed rapid growth in the educational attainment of its population."

momentum for this indicator, the trend is moving in the wrong direction.

In Canada, the proportion of NEET advanced at a 1.15 percent average annual rate between 2008 and 2015, picking up to 1.24 percent per year in 2015-2021, a 0.1 percentage point change between the two periods. As for Atlantic Canada, there was no momentum at the national level for this indicator.

The NEET rate was higher in Atlantic Canada than nationally, although the gap has been falling given the faster NEET growth rate at the national level. In 2008, the NEET rate in Atlantic Canada was 129 percent of the national level. This proportion fell to 115 percent of the Canadian level in 2015 and 109 percent in 2021.

#### Educational Attainment

A well-educated population and workforce are key to a prosperous economy and well-functioning society. The indicator used to track this characteristic is the proportion (or rate) of the population aged 25-64 with a tertiary education, defined as post-secondary or trade training. This age range excludes those younger than 25, most of whom have not yet completed their education, and those 65 and older, who on average have lower educational attainment and are mostly out of the workforce.

In recent years, Atlantic Canada has enjoyed rapid growth in the educational attainment of its population. From 2008 to 2015, the proportion with tertiary education increased at an average annual rate of two percent. The growth rate picked up to three percent from 2015 to 2021, showing strong momentum in the share of well-educated workers in Atlantic Canada.

At the national level, there has also been an upward trend in the tertiary education rate, although at a slower pace than in Atlantic Canada. From 2008 to 2015, the rate advanced at an average annual rate of 1.7 percent, picking up to two percent in 2015-2021. There was momentum for this indicator after 2015 at the national level, but less than that of Atlantic Canada.

The proportion of the population aged 25-64 with tertiary education is lower in Atlantic Canada than nationally, although given the faster growth rate of educational attainment in Atlantic Canada, the gap has been narrowing. In 2008, the tertiary education rate in Atlantic Canada was 88 percent of the national level, rising to 89 percent in 2015 and 95 percent in 2021. Atlantic Canada's momentum in this area is a result of faster growth in the share of population with tertiary education and the shrinking gap in this indicator relative to Canada nationally.



he labour market performance domain contains three indicators: employment rate; employment income; and labour productivity. Atlantic Canada exhibited momentum in two of these indicators after 2015, compared to one at the national level.

#### Employment Rate

The proportion of the working-age population that is employed, which reflects both labour force participation rate and unemployment rate, is an important indicator of the health of a labour market and economy. The higher the rate, the better the labour market performance.

The aging of the population, in particular the rising share of the population in the low-employment-rate 65+ age group, is

exerting a downward effect on the aggregate employment rate. For this reason, we focus on the employment rate for the 15-64 age group.

The employment rate for this group in Atlantic Canada rose at 0.1 percent per year from 2008 to 2015. This growth rate picked up to 0.6 percent in 2015-2022. There is momentum here. The greater employment opportunities related to strong economic growth explain this rise in the employment rate.

At the national level, the employment rate fell 0.2 percent per year in the 2008-2015 period, then grew at an average annual rate of 0.5 percent from 2015 to 2022.

In absolute terms, the employment rate is lower in Atlantic Canada than nationally, with the gap remaining relatively stable over time. In 2008, the employment rate in Atlantic Canada was 92 percent of the national level, rising very slightly to 95 percent in 2015 and remaining virtually unchanged in 2022.

#### Employment income

Employment income, an important indicator of labour market performance, reflects the ability of the labour market to generate income for workers. The Canadian Income Survey provides a measure of employment income in constant 2020 prices for economic families and those not in an economic family (an economic family is a group of two or more persons who live in the same dwelling and are related to each other). It is the most comprehensive of several available measures, so we are using it here.

Atlantic Canada experienced growth in real employment income for economic families and

# "Greater employment opportunities related to strong economic growth explain the rise in the employment rate"

those not in an economic family of 0.5 percent per year from 2008 to 2015. From 2015 to 2020, employment income fell 0.6 percent year, therefore there is no momentum in the employment income trend in Atlantic Canada. The fall in employment income is surprising given the positive trends in other economic indicators and merits investigation.

Across Canada there also has been a downward trend in employment income across both periods. From 2008 to 2015, employment income fell at an annual rate of 0.2 percent, and from 2015 to 2020 it fell to 0.3 percent. As in Atlantic Canada, there is no momentum at the national level.

In absolute terms, employment income is lower in Atlantic Canada than nationally, with the gap falling slightly over time. In 2008, employment income in Atlantic Canada was 82 percent of the national level (\$53,000 constant 2020 dollars versus \$64,800), rising to 85 percent in 2015 (\$54,200 versus \$64,100) and falling by 2020 to 83 percent (\$52,500 versus \$63,100).

#### Labour Productivity

Labour productivity is a key determinant of a population's standard of living. Only with

more output produced per hour worked can real incomes rise. Given shortcomings with productivity measurement in the non-business sector, we focus on business sector productivity, the most widely used productivity metric.

Atlantic Canada experienced negative productivity growth after the financial crisis. From 2008 to 2015, output per hour in the business sector decreased at an average annual rate of 0.4 percent, largely driven by a substantial fall in productivity in Newfoundland and Labrador due to developments in the oil and gas sector. The productivity growth rate picked up to 1.8 percent per year from 2015 to 2021. This indicates very strong momentum in the labour productivity performance in Atlantic Canada.

At the national level, there was a very different picture. From 2008 to 2015, labour productivity advanced at a 1.2 percent average annual rate, falling to 0.9 percent in 2015-2021. In contrast to Atlantic Canada, there was negative momentum for this indicator after 2015 at the national level.

In absolute terms, the level of business sector labour productivity remains lower in Atlantic Canada than in Canada as a whole. In 2008, the level of labour productivity in Atlantic Canada was 96 percent of the national level (\$49 per hour versus \$51 per hour, expressed in 2012 chained dollars, which adjusts real dollar amounts for inflation over time). That was up from 85 percent in 1997. Labour productivity fell to 86 percent in 2015 (\$47 per hour versus \$55 per hour), then rose to 91 percent in 2021 (\$53 per hour versus \$58 per hour).



he innovation and investment performance domain contains three indicators: BERD spending; non-residential investment; and non-emitting energy investment. Atlantic Canada exhibited momentum in two of three indicators after 2015, compared to one at the national level.

#### BERD Spending

Business enterprise in-house expenditure on research and development (BERD) is a key metric of innovation intensity and a driver of economic opportunity and growth. It can be measured in three ways: on a per capita basis; as a share of GDP; or in absolute terms (millions of current or constant dollars). This report uses the absolute level of BERD in nominal terms, but trends in the other BERD measures are provided for context.

Atlantic Canada experienced relatively weak BERD growth from 2008 to 2015 at 2.5 percent per year. BERD growth picked up dramatically to 5.5 percent per year from 2015 to 2020. There has been very strong momentum in BERD performance in Atlantic Canada since the mid-2010s, especially in New Brunswick and Newfoundland and Labrador.

At the national level, there has also been a marked acceleration in BERD growth after 2015. From 2008 to 2015, BERD advanced at an average annual rate of only one percent in Canada. It then picked up to 4.8 percent from 2015 to 2020. The momentum for this indicator was greater in Canada nationally than in Atlantic Canada, but the strength of BERD growth in both jurisdictions is encouraging.

In per capita terms, the level of BERD in Atlantic Canada was \$209 in 2020 or 35 percent of the national average. BERD is very weak in Atlantic Canada, but there is an upward trend relative to the country as a whole. In 2015, BERD per capita in Atlantic Canada was 33 percent of the national average; in 2008 the figure was 28 percent.

The same upward trend is observed for BERD as a share of GDP, or BERD intensity. In 2020, BERD intensity in Atlantic Canada was 0.4 percent of the region's nominal GDP, or 40 percent of the national average. This is up from 33 percent of the national average in 2008 and 39 percent in 2015.

#### Non-Residential Investment

Non-residential investment, which includes machinery, equipment and structures investment by businesses and governments, is a crucial driver of economic activity, both

through short-term aggregate demand effects and longer-term effects of adding to the capital stock, boosting the economy's production capacity. This indicator is measured in real gross terms in 2012 chained dollars.

Non-residential investment in Atlantic Canada from 2008 to 2015 was very strong, advancing at 5.1 percent per year. However, this situation for the region as a whole is somewhat misleading: the strength of non-residential investment was in Newfoundland and Labrador, while the Maritime provinces exhibited weak or negative growth. After 2015, non-residential investment in Atlantic Canada plummeted, decreasing at an average annual rate of 8.5 percent from 2015 to 2021. Again, Newfoundland and Labrador were responsible for 90 percent of this decline. For this indicator, there is definitely no momentum in Atlantic Canada.

At the national level, there was much less volatility in non-residential investment trends, although there was a dip after 2015. Non-residential investment advanced at an average annual rate of 1.4 percent per year from 2008 to 2015, then fell 2.1 percent per year from 2015 to 2021.

The lack of momentum in investment in Atlantic Canada since 2015 is evidenced by the region's falling share of national non-residential investment. In 2015, the region accounted for close to seven percent of Canada's non-residential investment, up from five percent in 2008. By 2021, the share had fallen by a third to four percent.

#### Production of Non-Emitting Energy

A key metric to gauge progress toward sustainable development is the production (measured in terajoules) of non-emitting

energy, defined as primary electricity generated by hydro, nuclear and renewables Perhaps surprisingly, growth in the production of non-emitting energy has been slow both in Atlantic Canada and nationally in recent years. From 2008 to 2015, this indicator fell at a rate of 0.3 percent per year in Atlantic Canada, and then fell at a 0.04 percent rate from 2015 to 2020. While still falling, there is momentum. for this indicator in Atlantic Canada.

At the national level, production of non-emitting energy advanced at a 1.1 percent average annual rate from 2008 to 2015, then fell to 0.5 percent per year in 2015-2020.



he quality of life domain contains five indicators: the Gini coefficient; housing starts; access to a family physician; life satisfaction; and sense of belonging. Atlantic Canada showed momentum in four out of

five of these indicators after 2015. In the fifth. access to a family physician, there was no change. At the national level, only three of five indicators exhibited momentum.

#### Gini Coefficient

Equality is an important component of economic well-being and standard of living. There are several measures of income distribution, with the Gini coefficient being the best known. The metric used in this report is an after-tax measure, which exhibits lower levels of inequality than other measures of market income and money income. An improvement in the trend toward greater equality (a fall in the Gini coefficient) is defined as a sign of momentum for this indicator.

After rising in the 1980s and 1990s, income distribution as measured by the Gini coefficient has been stable or on a slight downward trend in 21st-century Canada.

In Atlantic Canada, the Gini coefficient rose 0.3 percent per year between 2008 and 2015, then fell at an average annual rate of 2.2 percent from 2015 to 2020, indicating momentum.

Nationally, the Gini coefficient was unchanged between 2008 and 2015 and then fell 2.2 percent per year from 2015 to 2020. Income equality gained momentum at the national level, but at a slightly slower pace than in Atlantic Canada.

The level of income equality is greater in Atlantic Canada than nationally. In 2020. the Gini coefficient in Atlantic Canada was 94 percent of the national average, up from 92 percent of the national average in 2008, reflecting trends in the Gini coefficient in the two jurisdictions between the years.

#### Housing Starts

Housing is a key contributor to living standards and an adequate supply of labour requires increased housing supply to match demand growth. Trends in housing starts in units are an indicator of housing supply.

Atlantic Canada saw a collapse in housing starts from 2008 to 2015, down 5.8 percent per year. Housing starts rebounded strongly between 2015 and 2022, advancing at an average annual rate of 8.4 percent, demonstrating very strong momentum. Low interest rates were a key factor behind the strong housing market.

At the national level, housing starts followed a more muted, but similar, pattern. They fell 1.1 percent per year between 2008 and 2015, rebounding to five percent between 2015 and 2022. Economic momentum for this indicator is much greater in Atlantic Canada because of the greater fall in 2008-2015.

#### Access to a Family Physician

An important aspect of living standards is a healthy population. Ready access to medical services is required to ensure the population remains in good health. One metric of this access is the proportion of the population with access to a regular family physician.

In Atlantic Canada, there has been a downward trend in the proportion of the population with access to a family physician: The average annual rate fell 0.38 percent in both the

"In Atlantic Canada, there has been a downward trend in the proportion of the population with access to a family physician"

2009-2015 (data not available for 2008) and 2015-2021 periods. There was no momentum in this indicator.

Nationally, the proportion of Canadians with access to a family physician fell 0.3 percent between 2009 and 2015. However, unlike in Atlantic Canada, this indicator advanced 0.5 percent per year between 2015 and 2021.

In 2021, the proportion of Atlantic Canadians with access to a family doctor was 87 percent, or 102 percent of the national average of 86 percent. However, with the decline in the proportion of the population with access since 2009, the region's superior performance on this indicator has fallen in relative terms, from 108 percent of the national average in 2009 and 107 percent in 2015.

#### Life Satisfaction

Statistics Canada asks Canadians to rate their overall satisfaction with life on a scale of one (extremely dissatisfied) to 10 (extremely satisfied). This measure of subjective well-being, or happiness, is a very important part of the perceived quality of life in a jurisdiction.

The proportion of the population 12 and over stating they are satisfied or very satisfied with their lives is the indicator for life satisfaction used in this report.

The level of life satisfaction in Atlantic Canada declined at a 0.2 percent average annual rate from 2008 to 2015. It then turned positive, growing 0.2 percent a year from 2015 to 2021, showing momentum for this indicator.

In contrast, at the national level, life satisfaction rose 0.3 percent per year from 2008 to 2015 and then fell 0.2 percent from 2015 to 2021. There is negative momentum for this indicator nationally.

The overall level of life satisfaction is remarkably similar across the provinces. Indeed. it would be hard to find another indicator that exhibited so little interprovincial variation. In 2021, the life satisfaction in Atlantic Canada, with 92 percent of the population 12 and over satisfied or very satisfied with their lives, was virtually identical to the national figure. In 2008, Atlantic Canadians were slightly more satisfied with life than Canadians nationally at 102 percent of the national average, but this fell to 98 percent of the national average in 2015.

#### Sense of Belonging

A key determinant of happiness is a sense of belonging to the local community. Statistics Canada asks Canadians this question each year in the Canadian Community Health Survey.

The proportion of persons 12 and over in Atlantic Canada who reported they felt a



"Atlantic **Canadians exhibit** a significantly higher sense of belonging to the local community than Canadians in general."

sense of belonging to the local community increased at a 0.1 percent average annual rate from 2008 to 2015, and then picked up to 0.4 percent per year for 2015-2021. There is momentum for this indicator in the region.

At the national level, the proportion of the population reporting a sense of belonging advanced a strong 0.7 percent per year from 2008 to 2015, with growth then falling to 0.4 percent per year in 2005-2021, demonstrating a lack of momentum.

Atlantic Canadians exhibit a significantly higher sense of belonging to the local community than Canadians in general. In 2021, 77 percent of the population in Atlantic Canada reported a sense of belonging to the local community, which was 111 percent of the national proportion.

#### **SUMMARY OF INDICATORS**

Table 3 highlights (in green) the 16 indicators that exhibited momentum in the region and provides growth rates for the 2008-2015 and 2015 to 2021-22 periods upon which momentum is calculated.

 Table 3: Atlantic Canada Momentum Index (average annual rate of change)

		2008-2015	2015-2021/22	Difference in Growth Rate (% Points)
	Real GDP	0.08	1.28	1.20
Macro Economy	Real GDP Per Capita	-0.13	0.59	0.72
	Real Exports	-2.42	1.17	3.60
	Population	0.21	0.94	0.73
	Median Age	0.94	0.11	-0.84
	Immigration	10.43	13.49	3.06
Human Capital	Immigrant Retention Rate	-0.95	3.07	4.02
	Proportion of NEET	-0.47	0.29	0.76
	Proportion of Population with Tertiary Education	2.03	3.12	1.09
Labour	Employment Rate	0.13	0.56	0.43
Market	Employment Income	0.45	-0.64	-1.08
Performance	Labour Productivity	-0.42	1.84	2.25
	BERD Spending	2.48	5.47	2.99
Innovation and Investment	Non-Residential Investment	5.10	-8.47	-13.57
	Non-Emitting Energy	-0.32	-0.04	0.28
	Gini Coefficient	0.29	-2.20	-2.49
	Housing Starts	-5.76	8.39	14.14
Quality of Life	Access to Family Physician	-0.37	-0.37	0.00
	Life Satisfaction	-0.24	0.18	0.42
	Community Belonging	0.14	0.42	0.28

<sup>\*</sup>Note: A negative change in the rate of change of the variables median age, the Gini coefficient and proportion of NEET between the two periods is indicative of positive momentum. For all other variables, positive momentum is associated with a positive change.

<sup>\*\*</sup>Indicators in green exhibit momentum.

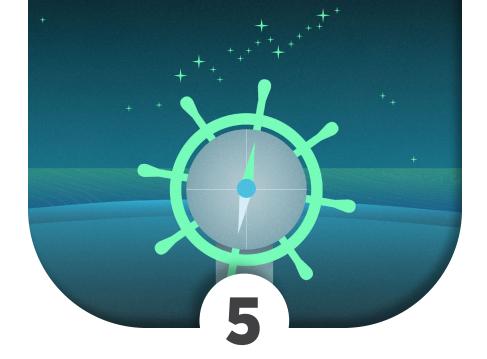
Table 4 provides similar information for Canada as a whole, with 10 indicators showing momentum at the national level (in green).

**Table 4:** Canadian Momentum Index (average annual rate of change)

		2008-2015	2015-2021/22	Difference in Growth Rate
	Real GDP	1.54	1.39	-0.15
Macro Economy	Real GDP per Capita	0.51	0.24	-0.27
	Real Exports	1.73	0.22	-1.50
	Population	1.02	1.24	0.22
	Median Age	0.46	0.10	-0.36
Human	Immigration	4.02	7.29	3.27
Capital	Immigrant Retention Rate	-0.75	-0.06	0.69
	Proportion of NEET	1.15	1.24	0.09
	Proportion of Population with Tertiary Education	1.66	2.02	0.35
Labour	Employment Rate	-0.20	0.54	0.74
Market	Employment Income	-0.22	-0.31	-0.10
Performance	Labour Productivity	1.16	0.91	-0.25
	BERD Spending	1.09	4.75	3.66
Innovation and Investment	Non-Residential Investment	1.36	-2.08	-3.44
	Non-Emitting Energy	1.07	0.46	-0.61
	Gini Coefficient	0.00	-2.20	-2.20
	Housing Starts	-1.09	4.99	6.07
Quality of Life	Access to Family Physician	-0.30	0.46	0.75
	Life Satisfaction	0.28	-0.18	-0.46
	Community Belonging	0.65	0.36	-0.28

<sup>\*</sup>Note: A negative change in the rate of change of the variables median age, the Gini coefficient and proportion of NEET between the two periods is indicative of positive momentum. For all other variables, positive momentum is associated with a positive change.

<sup>\*\*</sup>Indicators in green exhibit momentum.



### **Conclusion**

#### This report documents the very real presence of economic momentum in Atlantic

Canada. The positive trendlines of 16 of the 20 indicators examined should be taken as an encouraging sign by policymakers and an inducement to further growth-oriented efforts. The message is simple: Build on your achievements to date; pick your spots strategically for policy intervention; and pick up the pace.

The region is experiencing an historic moment. Conditions are in turnaround mode. It would be negligent to let this swelling momentum pass without putting the necessary policy supports in place to perpetuate it.

With these findings as a base, Atlantic Canadians and their policymakers are better equipped with a new set of tools to plot out their next moves. PPF will continue to lend a hand through its Atlantic Initiative.

Next steps include:

- The Public Policy Forum plans to meet with policymakers and convene two meetings of Atlantic Canadian advisers before summer aimed at establishing higher goals into the 2030s for the indicators contained in the Index and determining a system for assessing them.
- PPF will work with its many interlocutors in the region to identify the highest-return policy options to support the realization of these goals and, therefore, the continued building of momentum in the region.
- PPF plans to publish periodic special reports on particular Atlantic Canadian opportunities, beginning in the coming months with an in-depth look at the potential impact of offshore wind.

Should you be interested in learning more about PPF's Atlantic Initiative, please contact Alishya Weiland at aweiland@ppforum.ca



## **Appendix Tables**

The appendix tables include all the detailed data for the indicators. The appendix also includes fact sheets for each Atlantic province. These fact sheets show where each

province is showing momentum. The appendix data can also be found in excel format on the CSLS website at: http://www.csls.ca/ reports/PPF\_Index\_Database.xlsx.

#### **Appendix Table 1:** Indicator Levels in 2000, 2008, 2015, 2021/22

		Year	Canada	Atlantic Canada	NL	Prince Edward Island	Nova Scotia	New Brunswick
		2000	1,447,508	87,113	23,334	4,554	32,041	27,184
	Real GDP (2012	2008	1,739,534	108,490	34,404	5,284	36,915	31,887
	dollars)	2015	1,936,100	109,118	32,965	5,770	38,429	31,954
		2021	2,103,305	117,780	33,006	6,965	42,927	34,882
		2000	47,172.02	37,089.71	44,196.03	33,369.97	34,311.71	36,220.37
Macro	Real GDP per	2008	52,321.35	46,500.28	67,250.35	38,083.16	39,443.44	42,693.78
Economy	Capita (2012 dollars)	2015	54,228.08	46,079.65	62,419.88	39,918.09	41,033.61	42,108.90
		2021	55,022.17	47,747.52	63,417.95	42,274.12	43,311.74	44,132.20
	Dool Eymorta	2000	17,785,14	13,200.50	20,694.51	7,672.02	7,349.37	16,214.16
	Real Exports per Capita (2012	2008	16,670,11	17,579,58	33,367.15	9,081.15	7,944.25	20,418.36
		2015	17,501,29	14,588,08	22,212.88	9,374.18	7,126.34	19,483.63
	dollars)	2021	16,566,28	15,020,32	27,768.17	9,365.25	6,875.07	18,018.77

		Year	Canada	Atlantic Canada	NL	Prince Edward Island	Nova Scotia	New Brunswick
		2000	30,685,730	2,348,774	527,966	136,470	933,821	750,517
	Population	2008	33,247,118	2,333,104	511,581	138,749	935,897	746,877
	(persons)	2015	35,702,908	2,368,030	528,117	144,546	936,525	758,842
	(20.00110)	2022	38,929,902	2,528,446	525,972	170,688	1,019,725	812,061
		2000	36.8	37.6	37.4	37.1	37.9	37.6
	Madian Aga	2008	39.4	42.1	42.3	41.4	42.1	42.0
	Median Age	2015	40.7	44.9	45.2	43.9	44.8	45.1
		2022	41.0	45.3	47.8	41.7	44.2	45.7
		2000/ 2001	252,527	3,255	445	189	1,747	874
	Immigration	2008/ 2009	245,289	6,658	571	1,723	2,446	1,918
	(persons)	2015/ 2016	323,192	13,335	1,420	2,015	5,442	4,458
		2021/ 2022	492,984	28,496	2,843	3,436	13,816	8,401
		2000/ 2001	0.82	0.14	0.08	0.14	0.19	0.12
Human Capital	Immigration as Share of	2008/ 2009	0.74	0.29	0.11	1.24	0.26	0.26
	Population (%)	2015/ 2016	0.91	0.56	0.27	1.39	0.58	0.59
		2021/ 2022	1.29	1.16	0.55	2.09	1.39	1.06
	Immigrant	2010	91.70	66.90	70.30	31.90	79.80	68.10
	Retention	2015	88.30	63.74	65.30	57.90	65.30	63.00
	Rate (%)	2019	88.10	71.92	63.40	58.10	76.80	72.30
		2001	13	18	24	17	16	18
	NEET (%)	2008	12	15	19	15	14	15
	INLL   (/0)	2015	13	15	17	15	13	16
		2021	14	15	19	12	14	15
		2000	40	34	26	36	37	37
	Proportion of Population	2008	49	43	36	45	43	46
	(15+) with Tertiary	2015	55	49	41	53	52	50
	Education	2021	62	59	54	61	61	59

		Year	Canada	Atlantic Canada	NL	Prince Edward Island	Nova Scotia	New Brunswick
		2000	70.9	62.7	53.2	68.7	65.6	64.9
	Employment	2008	73.4	67.8	60.5	71.6	69.5	70.0
	Rate (15-64)	2015	72.4	68.4	64.8	72.4	69.3	69.1
		2022	75.2	71.1	66.6	74.5	72.3	71.8
	Employment	2001	60,300	49,600	46,200	43,800	50,600	51,900
Labour	Income for Economic Families	2008	64,800	53,000	50,800	52,400	54,000	53,100
Market Performance	(EF) and Persons not in an EF	2015	64,100	54,200	68,700	47,700	52,300	53,700
	(2020 dollars)	2020	63,100	52,500	56,600	50,800	52,700	51,200
	Labour	2000	47.1	40.7	62.0	30.9	35.1	36.8
	Labour Productiv- ity (2012	2008	51.0	48.8	92.3	33.7	36.5	40.4
		2015	55.3	47.4	75.3	35.7	39.2	41.3
	dollars)	2021	58.4	52.9	87.2	42.0	44.0	45.7

		Year	Canada	Atlantic Canada	NL	Prince Edward Island	Nova Scotia	New Brunswick
		2000	12,395	132	20	5	67	40
	BERD	2008	16,644	331	90	15	105	121
	(current dollars)	2015	17,954	393	116	22	165	90
		2020	22,638	513	172	27	179	135
		2000	403.93	56.20	37.88	36.64	71.75	53.30
	BERD per	2008	500.61	141.44	175.93	108.11	112.19	162.01
	Capita (cur- rent dollars)	2015	502.87	165.96	219.65	152.20	176.18	118.60
		2020	595.62	209.61	329.91	167.38	182.34	172.41
	Non-Res-	2000	124,718	7,454	2,282	275	2,561	2,336
	idential Investment	2008	181,356	9,243	2,735	423	2,497	3,588
	(2012	2015	199,345	13,096	7,946	288	2,652	2,210
	dollars)	2020	175,726	7,700	3,109	370	2,092	2,129
Innovation and Investment	Non-	2000	4,064.36	3,173.57	4,322.25	2,015.09	2,742.50	3,112.52
	Residential Investment	2008	5,454.79	3,961.68	5,346.17	3,048.67	2,668.03	4,804.00
	per Capita (2012	2015	5,583.44	5,530.34	15,045.91	1,992.45	2,831.75	2,912.33
	dollars)	2021	4,596.97	3,121.55	5,973.65	2,245.72	2,110.75	2,693.58
	Non-Emit-	2005	360,025,505	45,602,130	40,498,238	40,104	1,188,456	3,875,332
	ting Energy	2008	377,588,390	46,741,708	41,798,207	141,666	1,258,722	3,543,113
	Production (megawatt	2015	406,756,801	45,701,116	39,858,254	606,094	1,829,565	3,407,203
	hours)	2021	416,273,793	45,615,265	39,573,778	599,844	2,046,361	3,395,282
	Non-	2005	11.166	19.502	78.739	0.290	1.267	5.181
	Emitting Energy Production per Capita (megawatt	2008	11.357	20.034	81.704	1.021	1.345	4.744
		2015	11.393	19.299	75.472	4.193	1.954	4.490
	hours)	2021	10.890	18.492	76.037	3.641	2.065	4.296

		Year	Canada	Atlantic Canada	NL	Prince Edward Island	Nova Scotia	New Brunswick
	Gini	2000	0.317	0.295	0.302	0.285	0.295	0.291
	Coefficient (adjusted	2008	0.314	0.289	0.301	0.263	0.294	0.279
	after-tax	2015	0.314	0.295	0.314	0.282	0.297	0.273
	income)	2020	0.281	0.264	0.270	0.257	0.260	0.265
	Housing	2000	4.9421	4.1213	2.7634	5.2026	4.7461	4.1025
	Starts per	2008	6.3481	5.2415	6.3744	5.1316	4.2547	5.7225
	Thousand People	2015	5.4767	3.4100	3.2133	3.8604	4.0842	2.6290
	People	2022	6.7262	5.1775	2.6218	7.7217	5.6035	5.7631
		2001	87.7	92.6	86.2	93.6	94.4	94.6
	Physician Access	2009	84.7	91.2	87.0	90.4	93.0	92.1
	(%)	2015	83.2	89.2	88.1	88.7	88.7	90.8
Quality		2021	85.5	87.3	87.5	80.5	86.3	89.8
of Life	Life	2003	91.3	92.7	93.9	94.3	92.7	91.7
	Satisfaction: Answered	2008	91.4	92.9	93.4	93.9	92.3	93.2
	satisfied or very satisfied	2015	93.2	91.3	90.8	94.2	92.3	90.0
	(%)	2021	92.2	92.3	92.1	93.1	92.4	92.2
	Community	2003	63.9	73.5	79.9	73.7	70.9	72.3
	Belonging: Answered	2008	65.0	74.6	81.3	75.9	73.3	71.3
	somewhat strong or very strong	2015	68.0	75.3	79.1	77.6	76.4	70.9
	(%)	2021	69.5	77.2	80.5	78.1	75.8	76.7

Appendix Table 2:

Growth Rates of Indicators, 2008-2015, 2015-2021/22 and Change Between Periods

		Growth Rate (GR)	Period	Canada	Atlantic Canada	NL	Prince Edward Island	Nova Scotia	New Brunswick
		CD.	2008 - 2015	1.54	0.08	-0.61	1.26	0.58	0.03
	Real GDP	GR	2015 - 2021	1.39	1.28	0.02	3.19	1.86	1.47
		Difference		-0.15	1.20	0.63	1.92	1.29	1.44
	D I	GR	2008 - 2015	0.51	-0.13	-1.06	0.67	0.57	-0.20
Macro Economy	Real GDP per		2015 - 2021	0.24	0.59	0.26	0.96	0.90	0.79
	capita	Difference		-0.27	0.72	1.32	0.29	0.34	0.98
		CD	2008 - 2015	1.73	-2.42	-5.22	1.04	-1.53	-0.44
	Real Exports		2015 - 2021	0.22	1.17	3.54	2.19	0.35	-0.62
		Difference		-1.50	3.60	8.76	1.15	1.88	-0.18

		Growth Rate (GR) or Absolute Difference (AD)	Period	Canada	Atlantic Canada	NL	Prince Edward Island	Nova Scotia	New Brunswick
		CD.	2008 - 2015	1.02	0.21	0.46	0.59	0.01	0.23
	Population	GR	2015 - 2022	1.24	0.94	-0.06	2.40	1.22	0.97
		Difference		0.22	0.73	-0.51	1.82	1.21	0.75
		CD	2008 - 2015	0.46	0.94	0.95	0.84	0.89	1.02
	Median Age	GR	2015 - 2022	0.10	0.11	0.80	-0.73	-0.19	0.19
		Difference		-0.36	-0.84	-0.15	-1.57	-1.08	-0.83
		GR nigration	2008/09 - 2015/16	4.02	10.43	13.90	2.26	12.10	12.80
	Immigration		2015/16 - 2021/22	7.29	13.49	12.27	9.30	16.80	11.14
		Difference		3.27	3.06	-1.63	7.04	4.70	-1.67
		GR	2010 - 2015	-0.75	-0.95	-1.46	12.66	-3.93	-1.54
Human Capital	Immigrant Retention		2015 - 2019	-0.06	3.07	-0.74	0.09	4.14	3.50
	Rate (%)	Difference		0.70	4.02	0.73	-12.58	8.07	5.05
		6.0	2008 - 2015	1.15	-0.47	-1.58	0.00	-1.05	0.93
	Proportion of NEET	GR	2015 - 2021	1.24	0.29	1.87	-3.65	1.24	-1.07
		Difference		0.09	0.76	3.45	-3.65	2.30	-2.00
	Proportion		2008 - 2015	1.66	2.03	1.88	2.37	2.75	1.20
	of Pop- ulation (15+) with Tertiary	GR	2015 - 2021	2.02	3.12	4.70	2.37	2.70	2.80
	Education	Difference		0.35	1.09	2.82	0.01	-0.06	1.60

		Growth Rate (GR)	Period	Canada	Atlantic Canada	NL	Prince Edward Island	Nova Scotia	New Brunswick
		C.D.	2008 - 2015	-0.20	0.13	1.07	0.20	0.00	-0.14
	Employ- ment Rate	GR	2015 - 2022	0.54	0.56	0.39	0.41	0.61	0.55
	(15-64)	Difference		0.74	0.42	-0.59	0.25	0.65	0.73
	Formula	CD.	2008 - 2015	-0.22	0.45	6.22	-1.86	-0.64	0.22
Labour Market Performance	Employ- ment	GR	2015 - 2020	-0.31	-0.64	-3.80	1.27	0.15	-0.95
Performance	Income	Difference		-0.10	-1.08	-10.02	3.13	0.79	-1.17
	Labour Produc-	GR	2008 - 2015	1.16	-0.42	-2.87	0.83	1.02	0.32
			2015 - 2021	0.91	1.84	2.48	2.75	1.94	1.70
	tivity	Difference		-0.25	2.25	5.34	1.92	0.92	1.39
		GR	2008 - 2015	1.09	2.48	3.69	5.62	6.67	-4.14
	BERD Spending		2015 - 2020	4.75	5.47	8.20	4.18	1.64	8.45
		Difference		3.66	2.99	4.50	-1.44	-5.03	12.59
			2008 - 2015	1.36	5.10	16.46	-5.34	0.86	-6.69
Innovation and Investment	Non- Residential	GR	2015 - 2021	-2.08	-8.47	3.96	-4.52	-0.57	0.87
investment	Investment	Difference		-3.44	-13.57	-14.48	4.26	-3.88	-0.62
			2008 - 2015	1.07	-0.32	-0.68	23.08	5.49	-0.56
	Non- Emitting	GR	2015 - 2021	0.46	-0.04	-0.14	-0.21	2.26	-0.07
	Energy	Difference		-0.61	0.28	0.53	-23.29	-3.22	0.49

		Growth Rate (GR)	Period	Canada	Atlantic Canada	NL	Prince Edward Island	Nova Scotia	New Brunswick
		GR	2008 - 2015	0.00	0.29	0.61	1.00	0.15	-0.31
	Gini Coefficient	GK	2015 - 2020	-2.20	-2.20	-2.97	-1.84	-2.63	-0.59
		Difference		-2.20	-2.49	-3.58	-2.84	-2.77	-0.28
		CD	2008 - 2015	-1.09	-5.76	-8.91	-3.42	-0.57	-10.31
	Housing Starts	9	2015 - 2022	4.99	8.39	-3.40	15.40	6.92	15.27
		Difference		6.07	14.14	5.51	18.82	7.49	25.58
	A	GR	2009 - 2015	-0.30	-0.37	0.21	-0.32	-0.79	-0.24
Quality of Life	Access to Family		2015 - 2021	0.46	-0.37	-0.11	-1.60	-0.46	-0.18
	Physician	Difference		0.75	0.00	-0.32	-1.29	0.33	0.05
		GR	2007/08 - 2015	0.28	-0.24	-0.40	0.05	0.00	-0.50
	Life Satisfaction	O.K	2015 - 2021	-0.18	0.18	0.24	-0.20	0.02	0.40
		Difference		-0.46	0.42	0.64	-0.24	0.02	0.90
		GR	2007/08 - 2015	0.65	0.14	-0.39	0.32	0.59	-0.08
	Community Belonging		2015 - 2021	0.36	0.42	0.29	0.11	-0.13	1.32
		Difference		-0.28	0.28	0.68	-0.21	-0.72	1.40

**Note:** A negative change in the rate of change of the variables median age, the Gini coefficient and proportion of NEET between the two periods is indicative of positive momentum. For all other variables, positive momentum is associated with a positive change.

**Appendix Table 3:** Indicators in Atlantic Canada as a Proportion of National Average, (Canada=100)

		Year	Atlantic Canada	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick
		2000	78.62	93.69	70.74	72.74	76.78
	Real GDP per	2008	88.87	128.53	72.79	75.39	81.60
	Capita (2012 dollars)	2015	84.97	115.11	73.61	75.67	77.65
Macro		2021	86.78	115.26	76.83	78.72	80.21
Economy		2000	74.22	116.36	43.14	41.32	91.17
	Real Exports per Capita	2008	105.46	200.16	54.48	47.66	122.48
	(2012 dollars)	2015	83.35	126.92	53.56	40.72	111.33
	dollars)	2021	90.67	167.62	56.53	41.50	108.77
		2000	102.30	101.63	100.82	102.99	102.17
		2008	106.78	107.36	105.08	106.85	106.60
	Median Age	2015	110.39	111.06	107.86	110.07	110.81
		2022	110.39	116.59	101.71	107.80	111.46
	Immigration as Share of population (%)	2000/ 2001	16.84	10.24	16.83	22.73	14.15
		2008/ 2009	38.68	15.13	168.32	35.42	34.81
		2015/ 2016	62.21	29.70	154.00	64.19	64.90
		2021/ 2022	89.58	42.36	161.71	108.09	82.42
Human Capital	Immigrant	2010	72.96	76.66	79.56	83.60	37.94
Capital	Retention	2015	72.19	73.95	81.75	83.75	74.26
	Rate (%)	2019	81.64	71.96	92.67	81.68	74.86
		2001	142.18	184.62	130.77	123.08	138.46
	NEET (%)	2008	128.97	158.33	125.00	116.67	125.00
	NEET (%)	2015	115.20	130.77	115.38	100.00	123.08
		2021	108.87	135.71	85.71	100.00	107.14
	Proportion of	2000	86.17	65.00	90.00	92.50	92.50
	Population	2008	86.83	73.47	91.84	87.76	93.88
	(25-64) with Tertiary	2015	89.03	74.55	96.36	94.55	90.91
	Education	2021	94.97	87.10	98.39	98.39	95.16

		Year	Atlantic Canada	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick
		2000	88.43	75.04	96.90	92.52	91.54
	Employment	2008	92.37	82.43	97.55	94.69	95.37
	Rate (15-64)	2015	94.49	89.50	100.00	95.72	95.44
		2022	94.57	88.56	99.07	96.14	95.48
	Employment	2001	82.26	76.62	72.64	83.91	86.07
Labour Market	Income for Economic Families (EF)	2008	81.79	78.40	80.86	83.33	81.94
Performance	and Persons not in an EF	2015	84.56	107.18	74.41	81.59	83.78
	(2020 dollars)	2020	83.20	89.70	80.51	83.52	81.14
		2000	86.45	131.63	65.61	74.52	78.13
	Labour Productivity (2012 dollars)	2008	95.71	180.98	66.08	71.57	79.22
		2015	85.72	136.17	64.56	70.89	74.68
		2021	90.53	149.32	71.92	75.34	78.25
	0500	2000	13.91	9.38	9.07	17.76	13.19
	BERD per Capita	2008	28.25	35.14	21.60	22.41	32.36
	(current dol- lars)	2015	33.00	43.68	30.27	35.04	23.58
	10.0)	2020	35.19	55.39	28.10	30.61	28.95
		2000	78.08	106.34	49.58	67.48	76.58
	Non- Residential Investment per	2008	72.63	98.01	55.89	48.91	88.07
Innovation and	Capita (2012	2015	99.05	269.47	35.68	50.72	52.16
Investment	dollars)	2021	67.90	129.95	48.85	45.92	58.59
	Non-	2005	174.66	705.19	2.60	11.35	46.40
	Emitting Energy Production per	2008	176.40	719.41	8.99	11.84	41.77
	Capita (%) (megawatts	2015	169.40	662.46	36.80	17.15	39.41
	hours)	2021	169.81	698.25	33.43	18.96	39.45

		Year	Atlantic Canada	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick
	Gini	2000	93.06	95.27	89.91	93.06	91.80
	Coefficient	2008	92.04	95.86	83.76	93.63	88.85
	(adjusted after-tax	2015	93.95	100.00	89.81	94.59	86.94
	income)	2020	93.95	96.09	91.46	92.53	94.31
		2000	83.39	55.92	105.27	96.03	83.01
	Housing Starts	2008	82.57	100.41	80.84	67.02	90.15
	per Capita	2015	62.26	58.67	70.49	74.57	48.00
		2022	76.98	38.98	114.80	83.31	85.68
		2001	105.57	98.29	106.73	107.64	107.87
	Physician	2009	107.72	102.72	106.73	109.80	108.74
Ovality	Access (%)	2015	107.26	105.89	106.61	106.61	109.13
Quality of Life		2021	102.09	102.34	94.15	100.94	105.03
	1.16	2003	101.58	102.85	103.29	101.53	100.44
	Life Satisfaction:	2008	101.67	102.19	102.74	100.98	101.97
	Answered Satisfied or Very Satisfied (%)	2015	98.01	97.42	101.07	99.03	96.57
	Satisfied (%)	2021	100.13	99.89	100.98	100.22	100.00
	Community	2003	115.03	125.04	115.34	110.95	113.15
	Community Belonging: Answered	2008	114.72	125.08	116.77	112.77	109.69
	Somewhat Strong or Very	2015	110.75	116.32	114.12	112.35	104.26
	Strong (%)	2021	111.13	115.83	112.37	109.06	110.36



# **Appendix Fact Sheets** for the Four Atlantic **Provinces**

### FACT SHEET FOR

### **New Brunswick**

Appendix Table 4 provides average annual growth rates for the 20 indicators for New Brunswick for the 2008-2015 and 2015 to 2021-22 periods and the change between periods, indicating positive or negative momentum.

Of the four Atlantic provinces, New Brunswick had the largest number of indicators showing momentum in 2015 to 2021-22 compared to 2008-2015. A total of 17 of 20 indicators experienced positive momentum, shown in green and defined as an acceleration or improvement in the rate of growth of the variable. The greatest momentum was in housing starts (26 percentage points

per year), followed by BERD spending (13 points), and the immigration retention rate (five points).

In the 2015 to 2021-22 period, 14 of 20 indicators showed momentum. The strongest growth was in housing starts (15.3 percent per year), followed by immigration (11.1 percent), and BERD spending (8.5 percent). Five indicators had negative growth: real exports (-0.6 percent per year); employment income (-1.0 percent); non-residential investment (-0.6 percent); non-emitting energy production (-0.1 percent); and access to a family doctor (-0.2 percent).

### **New Brunswick**

Appendix Table 4:

New Brunswick Momentum Index (average annual rate of change)

		2008-2015	2015-2021/22	Difference in Growth Rate
	Real GDP	0.03	1.47	1.44
Macro Economy	Real GDP per Capita	-0.20	0.79	0.99
-	Real Exports	-0.44	-0.62	-0.18
	Population	0.23	0.97	0.74
	Median Age	1.02	0.19	-0.83
Human	Immigration	12.80	11.14	-1.66
Capital	Immigrant Retention Rate	-1.54	3.50	5.04
	Proportion of NEET	0.93	-1.07	-2.00
	Proportion of Population with Tertiary Education	1.20	2.80	1.60
Labour	Employment Rate	-0.18	0.55	0.73
Market	Employment Income	0.22	-0.95	-1.17
Performance	Labour Productivity	0.32	1.70	1.38
	BERD Spending	-4.14	8.45	12.59
Innovation and Investment	Non-Residential Investment	-6.69	-0.62	6.07
	Non-Emitting Energy	-0.56	-0.07	0.49
	Gini Coefficient	-0.31	-0.59	-0.28
	Housing Starts	-10.31	15.27	25.58
Quality of Life	Access to Family Physician	-0.24	-0.18	0.06
	Life Satisfaction	-0.50	0.40	0.90
	Community Belonging	-0.08	1.32	1.40

<sup>\*</sup>Note: A negative change in the rate of change of the variables median age, the Gini coefficient and proportion of NEET between the two periods is indicative of positive momentum. For all other variables, positive momentum is associated with a positive change.

<sup>\*\*</sup>Indicators in green exhibit momentum.

### **Nova Scotia**

Appendix Table 5 provides average annual growth rates for 20 Nova Scotia indicators in the 2008-2015 and 2015 to 2021-22 periods, as well as the change between periods that indicate positive or negative momentum.

Nova Scotia had the second largest number of indicators that showed momentum in 2015 to 2021-22 compared to 2008-2015. A total of 14 of 20 indicators experienced positive momentum (shown in green), with the greatest seen in immigration retention rate (8.1 percentage points per year), followed by housing starts (7.5 points) and immigration (4.7 points). Lack of momentum was particularly notable for BERD spending (-5 points) and non-residential investment (-4.7 points).

In the 2015 to 2021-22 period, 16 of 20 indicators experienced an improvement in Nova Scotia, the second strongest performance among the Atlantic provinces after Prince Edward Island. The strongest growth was in immigration (16.8 percent), followed by housing starts (6.9 percent). Four indicators deteriorated: the proportion of NEET (1.2 percent): non-residential investment (-3.9 percent); access to a family doctor (-0.5 percent); and community belonging (-0.1 percent).

#### **Appendix Table 5:**

Nova Scotia Momentum Index (average annual rate of change)

		2008-2015	2015-2021/22	Difference in Growth Rate
	Real GDP	0.58	1.86	1.28
Macro Economy	Real GDP per Capita	0.57	0.90	0.33
	Real Exports	-1.53	0.35	1.88
	Population	0.01	1.22	1.21
	Median Age	0.89	-0.19	-1.08
	Immigration	12.10	16.80	4.70
Human Capital	Immigrant Retention Rate	-3.93	4.14	8.07
	Proportion of NEET	-1.05	1.24	2.29
	Proportion of Population with Tertiary Education	2.75	2.70	-0.05

### FACT SHEET FOR **Nova Scotia**

		2008-2015	2015-2021/22	Difference in Growth Rate
Labour	Employment Rate	-0.04	0.61	0.65
Market Performance	Employment Income	-0.64	0.15	0.79
	Labour Productivity	1.02	1.94	0.92
	BERD Spending	6.67	1.64	-5.03
Innovation and Investment	Non-Residential Investment	0.86	-3.88	-4.74
	Non-Emitting Energy	5.49	2.26	-3.23
	Gini Coefficient	0.15	-2.63	-2.78
	Housing Starts	-0.57	6.92	7.49
Quality of Life	Access to Family Physician	-0.79	-0.46	0.33
	Life Satisfaction	0.00	0.02	0.02
	Community Belonging	0.59	-0.13	-0.72

\*Note: A negative change in the rate of change of the variables median age, the Gini coefficient and proportion of NEET between the two periods is indicative of positive momentum. For all other variables, positive momentum is associated with a positive change.

<sup>\*\*</sup>Indicators in green exhibit momentum.

### **Newfoundland & Labrador**

Appendix Table 6 provides average annual growth rates for Newfoundland and Labrador's 20 indicators for the 2008-2015 and 2015 to 2021-22 periods, as well as positive or negative momentum.

Newfoundland and Labrador showed momentum in 13 of 20 indicators across the two periods (shown in green), tying Prince Edward Island for the smallest number. The greatest momentum was in real exports (8.8 percentage points), followed by housing starts (5.5 points per year), labour productivity (5.4 points) and BERD spending (4.5

points). Lack of momentum was particularly notable for non-residential investment (-30.9 points) and employment income (-10 points).

In the 2015 to 2021-22 period, 11 of 20 indicators experienced an improvement in Newfoundland and Labrador, the weakest performance among the Atlantic provinces. The strongest growth was in immigration (12.3 percent), followed by BERD spending (8.2 percent), while eight indicators deteriorated, including non-residential investment (-14.5 percent) and employment income (-3.8 percent).

#### **Appendix Table 6:** Newfoundland and Labrador Momentum Index (average annual rate of change)

		2008-2015	2015-2021/22	Difference in Growth Rate
	Real GDP	-0.61	0.02	0.63
Macro Economy	Real GDP per Capita	-1.06	0.26	1.32
	Real Exports	-5.22	3.54	8.76
	Population	0.46	-0.06	-0.52
	Median Age	0.95	0.80	-0.15
	Immigration	13.90	12.27	-1.63
Human Capital	Immigrant Retention Rate	-1.46	-0.74	0.72
	Proportion of NEET	-1.58	1.87	3.45
	Proportion of Population with Tertiary Education	1.88	4.70	2.82

## **Newfoundland & Labrador**

		2008-2015	2015-2021/22	Difference in Growth Rate
Labour	Employment Rate	0.99	0.39	-0.60
Market	Employment Income	6.22	-3.80	-10.02
Performance	Labour Productivity	-2.87	2.48	5.35
	BERD Spending	3.69	8.20	4.51
Innovation and Investment	Non-Residential Investment	16.46	-14.48	-30.94
	Non-Emitting Energy	-0.68	-0.14	0.54
	Gini Coefficient	0.61	-2.97	-3.58
	Housing Starts	-8.91	-3.40	5.51
Quality of Life	Access to Family Physician	0.21	-0.11	-0.32
	Life Satisfaction	-0.40	0.24	0.64
	Community Belonging	-0.39	0.29	0.68

\*Note: A negative change in the rate of change of the variables median age, the Gini coefficient and proportion of NEET between the two periods is indicative of positive momentum. For all other variables, positive momentum is associated with a positive change.

<sup>\*\*</sup>Indicators in green exhibit momentum.

### **Prince Edward Island**

Appendix Table 7 provides average annual growth rates for Prince Edward Island's 20 indicators over the 2008-2015 and 2015 to 2021-22 periods, as well as positive or negative momentum.

Thirteen of 20 indicators showed momentum in 2015 to 2021-22 compared to 2008-2015 (shown in green); tying Newfoundland and Labrador for the smallest number among the Atlantic provinces. The greatest momentum was in housing starts (18.9 percentage points per year), followed by non-residential investment (9.6 points) and immigration (7.0 points). Lack of momentum was particularly

notable for non-emitting energy production (-23.3 points) and the immigrant retention rate (-12.6 points).

In the 2015 to 2021-22 period, 17 of 20 indicators experienced an improvement in P.E.I., the best performance among the Atlantic provinces. The strongest growth was in housing starts (15.5 percent), followed by immigration (9.3 percent), non-residential investment (4.3 percent) and BERD spending (4.2 percent). The indicators that experienced a deterioration were access to a family physician (-1.6 percent), non-emitting energy production (-0.2 percent) and life satisfaction (-0.2 percent).

Appendix Table 7: Prince Edward Island Momentum Index (average annual rate of change)

		2008-2015	2015-2021/22	Difference in Growth Rate
Macro Economy	Real GDP	1.26	3.19	1.93
	Real GDP per Capita	0.67	0.96	0.29
	Real Exports	1.04	2.19	1.15
Human Capital	Population	0.59	2.40	1.81
	Median Age	0.84	-0.73	-1.57
	Immigration	2.26	9.30	7.04
	Immigrant Retention Rate	12.66	0.09	-12.57
	Proportion of NEET	0.00	-3.65	-3.65
	Proportion of Population with Tertiary Education	2.37	2.37	0.00

### **Prince Edward Island**

		2008-2015	2015-2021/22	Difference in Growth Rate
Labour Market Performance	Employment Rate	0.16	0.41	0.25
	Employment Income	-1.86	1.27	3.13
	Labour Productivity	0.83	2.75	1.92
Innovation and Investment	BERD Spending	5.62	4.18	-1.44
	Non-Residential Investment	-5.34	4.26	9.60
	Non-Emitting Energy	23.08	-0.21	-23.29
Quality of Life	Gini Coefficient	1.00	-1.84	-2.84
	Housing Starts	-3.42	15.50	18.92
	Access to Family Physician	-0.32	-1.60	-1.28
	Life Satisfaction	0.05	-0.20	-0.25
	Community Belonging	0.32	0.11	-0.21

<sup>\*</sup>Note: A negative change in the rate of change of the variables median age, the Gini coefficient and proportion of NEET between the two periods is indicative of positive momentum. For all other variables, positive momentum is associated with a positive change.

<sup>\*\*</sup>Indicators in green exhibit momentum.

# **Endnotes**

- 1 Caution must be taken regarding Newfoundland and Labrador's volatile oil economy, which often makes the province an outlier (both positive and negative) to overall trends in the region.
- 2 We have summed provincial estimates of GDP categories expressed in real or inflationadjusted terms even though technically speaking these estimates are not additive. We expect the bias introduced by this procedure is small.
- **3** The Northwest Territories and Nunavut were excluded due to data limitations.
- 4 As noted earlier, results are sensitive to the dating of the periods. When the break is made at 2010 instead of 2015 and the 2000-2010 and 2010-2021 periods are used, Atlantic Canada experienced momentum in only eight of 20 indicators in the post-2010 period, compared to 13 indicators for Canada. The 2010-2015 period was not one of strong performance for Atlantic Canada.
- 5 Unlike other flow variables that are measured on a calendar year basis, the annual flow of immigrants is officially measured from July 1 to June 30.
- 6 In 2021, the province with the highest proportion of the population 12 and over satisfied or very satisfied with their lives was Quebec at 94.3 percent, and the province with the lowest proportion was Ontario at 91.3 percent, a difference of only three percentage points.

