Economic Reconciliation:  
Growing Canada’s Economy

Prepared for the  
National Indigenous Economic Development Board

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This paper reflects the views of the authors only  
and not necessarily those of National Indigenous Economic Development Board

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# Executive Summary

Canada is currently experiencing a historic labour shortage. It is one of the leading challenges the nation faces in its pursuit of sustained economic growth. Canadians have known about this coming challenge for decades. Shifting demographics in this country mean there are more and more workers leaving the labour force every year and fewer and fewer new workers available to fill the vacancies. Maintaining the Canadian standard of living will require significant improvements in labour force productivity.

Indigenous peoples represent a younger and faster growing segment of the population, relative to non-Indigenous Canadians. Projections show that Indigenous peoples are expected to make up a growing share of the overall Canadian population for at least the next two decades. Raising the productivity of the Indigenous labour force would greatly contribute to raising the productivity of the overall Canadian workforce. This would support sustained economic growth and enable the Canadian living standard to be maintained, or even improved.

Numerous different groups have identified a focus on Indigenous workers, and specifically Indigenous youth, as an important element to address labour force productivity challenges. Statistics Canada data shows that labour productivity of Indigenous workers that have completed apprenticeships, trade certificates or diplomas exceeds that of non-Indigenous workers with the same post-secondary training, as demonstrated by slightly higher average employment incomes. This demonstrates that with improved education, training, and other investments, the labour productivity gap can be closed, and equivalent average employment incomes between Indigenous and non-Indigenous workers can be achieved.

But currently, there are serious gaps in economic outcomes between the Indigenous and non-Indigenous populations in Canada. This has previously been discussed by the National Indigenous Economic Development Board, among others, in numerous studies and reports.

What if these gaps were closed? What if education and training opportunities were expanded? What if Indigenous workers enjoyed the same access to economic opportunities as non-Indigenous workers? Just how much more could the Indigenous labour force contribute to the Canadian economy, if gaps in average employment income and employment rate were eliminated?

A March 2022 study by the Conference Board of Canada found the current labour shortage cost the Canadian economy $25 billion in 2020. In this report, the NIEDB estimates that closing economic gaps between the Indigenous and non-Indigenous workforces could raise Canadian GDP by $26.7 billion. This paper describes the methodology for this estimate.

## Potential Economic Impacts

Closing the productivity gap between the Indigenous and non-Indigenous labour forces would have a significant and ongoing economic impact benefiting all of Canada. With the right investments in education and training and with equal access to economic opportunities, the gaps in average employment income and employment rate could be closed. The resulting increase in Canadian GDP is estimated to be $26.7 billion, based on Census 2021 data. The graphic below breaks down this estimated increase in GDP by province and territory.



## Potential Fiscal Impacts

Closing the average employment income gap and the employment rate gap would contribute to closing the poverty rate gap between the Indigenous and non-Indigenous populations as well. This would mean an estimated 151,252 fewer Indigenous persons living in low income. There is a significant fiscal savings to all governments associated with fewer persons living in low income. Further, additional revenues would be collected by all governments associated with the increased employment income earned. The net impact on all government budgets is estimated to be an increase of $6.7 billion. The graphic below breaks down this estimate by province and territory.



# Interpretation of Estimates

The authors had the opportunity to present estimates and an early draft of this report to the National Indigenous Economic Development Board (NIEDB) in February 2024. The NIEDB asked that additional clarity be added in three areas. In response, this section, called Interpretation of Estimates, has been included in this revised version to assist readers in understanding estimates contained in this report.

1. **Other Estimates of Total Economic Contribution vs This Estimate of Potential Additional Economic Contribution**

A number of studies have estimated the total Indigenous contribution to the economy. Three are highlight below:

* In 2022, Statistics Canada published a feasibility study authored by Catherine Ayotte and Jeremy Bridger titled, Indigenous Peoples Economic Account: Methodology and Preliminary Results.[[1]](#footnote-1) The Indigenous Peoples Economic Account (IPEA) is a pilot project developed by Statistics Canada with support from Indigenous Services Canada and the first attempt by Statistics Canada to produce macroeconomic estimates pertaining to a specific demographic, namely, Indigenous peoples. The paper provides preliminary national results that focus not on the contribution of an industry, but rather on the contribution to the national economy of individuals with similar demographic characterises. The study estimates that in 2020, in Canada, Gross Domestic Product (GDP) attributable to Indigenous peoples was $48.9 billion.[[2]](#footnote-2)
* In 2019, Manitoba Keewatinowi Okimakanak Inc., the Southern Chiefs Organization Inc., and the Brandon University’s Rural Development Institute collaborated on a study estimating Indigenous contributions to the Manitoba economy in 2016.[[3]](#footnote-3) Their methodology included estimates of economic impacts generated by spending by Indigenous people, Indigenous government spending and impacts, infrastructure spending and impacts, Indigenous business spending and impacts, Indigenous household spending and impacts, and Indigenous spending impact on government revenues (federal and provincial). The authors estimate the Indigenous contribution to the provincial GDP in Manitoba in 2016 was about $2.3 billion.
* In 2023, Fred Bergman, a Senior Policy Analyst with the Atlantic Economic Council, provided an interim report on The Significant Economic Contributions of Atlantic Indigenous Businesses and Communities.[[4]](#footnote-4) The interim report estimates the total economic contribution of Indigenous people in the Atlantic region to be $5.6 billion in GDP, including $2.3 billion in Newfoundland and Labrador, $110 million in Prince Edward Island, $2.0 billion in Nova Scotia, and $1.2 billion in New Brunswick.

The NIEDB report offers a different type of estimate from these other studies. In November 2016, the National Indigenous Economic Development Board (NIEDB) published an infographic and methods paper prepared by Fiscal Realities Economists. That work estimated the potential economic impact for Canada from immediately closing employment rate and average annual income gaps between the Indigenous and non-Indigenous populations. The report, entitled *Reconciliation: Growing Canada’s Economy by $27.7 billion*, is available on the NIEDB’s website on the publications page.[[5]](#footnote-5) The report offers an estimate of the economic impact that could potentially be generated by immediately closing gaps in employment rate and average employment income. For clarity, this would be additional economic impact beyond the economic contribution already generated by Indigenous people.

In 2022, the NIEDB asked Fiscal Realities to update the estimates in *Reconciliation: Growing Canada’s Economy by $27.7 billion* using Statistics Canada data for 2016, the most recently available at the time of the update. Then in 2024, the NIEDB undertook the work to update the estimate again, this time using 2021 Census data from Statistics Canada, which became available in the Fall of 2022.[[6]](#footnote-6)

1. **Differences Between the NIEDB’s Current Potential Economic Impact Estimate and the Prior Estimate**

Before drawing any comparisons between the current potential economic impact estimate and the estimate the 2016 work, readers should be aware of key differences in the datasets upon which estimates are based.

The potential economic impact estimate in the 2016 work was based on 2011 data. The potential economic impact estimate in the current work relies on 2021 data. It is very important to point out the change in survey methodology employed by Statistics Canada in generating the 2011 dataset and the 2021 dataset. The 2016 work relied on data from the 2011 National Household Survey. The dataset was derived from a voluntary survey with a response rate below 70%. The current work relies on Census 2021 data. This dataset was derived from a mandatory survey with an overall response rate of 98%. Estimates based on the two different datasets are not necessarily directly comparable because they are derived from surveys with very different response rates.

The 2016 Census also relied on a mandatory survey, like the 2021 Census, and at that time Statistics Canada produced a document cautioning against the comparison of the 2011 and 2016 datasets. These cautions apply equally to comparisons of 2011 and 2021 datasets. In its “Guide to the Census of Population, 2016,” Statistics Canada discusses the comparability of estimates from the 2016 Census long-form questionnaire with estimates from the 2011 National Household Survey. In that discussion, Statistics Canada notes at least three considerations to keep in mind when comparing the 2011 and 2016 datasets, including:[[7]](#footnote-7)

1. non-response error may be greater for estimates from the 2011 NHS than for estimates derived from the 2016 Census, particularly for smaller domains of interest;
2. estimates from the 2011 NHS can contain inaccuracies because of a lower response rate (particularly in smaller communities) than the 2016 Census, and comparisons for a given geographic area must take into account the differences in observed response rates; and
3. the imputation rate was greater for the 2011 NHS than for the 2016 Census long-form questionnaire and comparisons of estimates from the 2011 NHS and from the 2016 Census must take into account the differences in imputation rates.

These cautions should also be considered and kept in mind when considering estimates of potential GDP impact based on 2011 NHS data and based on Census 2021 data. With these cautions in mind, estimates must first be adjusted for inflation and for change in population size, at a minimum, before drawing any comparisons between the NIEDB’s 2016 estimate and the current estimate.

Further, both the NIEDB’s 2016 report and the current study include estimates of net fiscal impacts, in which reduced government expenditure, associated with fewer people living in low income, are estimated. Before drawing any comparisons between these estimates, readers should review Appendix A for a discussion on change in methodology.

1. **Current NIEDB Estimate Is Not Necessarily Reflective of Current Conditions**

This report relies on 2021 Census data from Statistics Canada. Readers should understand that Census questionnaires asked respondents to provide information reflective of their situation as of May 11, 2021 (unless otherwise specified). Based on this reference date, a variety of public health measures implemented in response to the COVID-19 pandemic likely had a significant impact on the response of many people, including Indigenous respondents. In particular, responses to questions about employment and income were likely impacted for many people, both Indigenous and non-Indigenous. As such, employment and income data from the 2021 Census may not accurately reflect employment and income conditions of respondents during other time periods, including currently. Employment and income data based on these responses is the type of data relied on to produce the estimates in this report. Therefore, estimates of potential economic impacts from closing gaps between the Indigenous and non-Indigenous populations presented in this report may not accurately reflect current conditions.

This report utilizes Census 2021 employment and income data. Readers should understand that various public health measures imposed during this this time impacted employment and income data in Census 2021. Four examples of provincial governments extending or implementing new COVID-19 public health restrictions effective on the May 11 Census date are provided for consideration below:

* Nova Scotia entered a province-wide shutdown in April 2021. This included the closure of most retail businesses, as well as public and private schools, and limited gatherings to household bubbles. Retail businesses providing essential services were only able to operate at limited capacity and all unnecessary travel between communities was prohibited. These, and other public health measures continued to remain in effect during the May 11 Census date and had a impacted employment status for many in Nova Scotia.
* The Government of Ontario issued a stay-at-home order, imposed new travel restrictions, and enhanced enforcement measures in April 2021. These public health measures, which included reduced capacity in all retail settings, prohibition on outdoor gatherings and closure of some non-essential workplaces, among other measures, were still in place on the May 11 Census date. Public health measures had a significant impact on employment status and Census responses in Ontario.
* In April 2021, the Government of Alberta reverted to Stage 1 of its recovery plan, which included limited capacity for retail businesses and prohibition on indoor dining, among other restrictions and closures. These restrictions were still in place during the Census date of May 11 and certainly had an impact on employment status and Census responses for many people in Alberta’s labour force.
* In late April 2021, the Manitoba provincial government implemented new public health orders limiting capacity at restaurants and bars, gyms and fitness centres, and retail and personal service businesses, in addition to complete closures of casinos, theatres, and other businesses. Restrictions remained in place through the May 11 Census date. The employment status of many in the Manitoba labour force was affected, which is reflected in Census 2021 data.

Other provinces and territories had various levels of public health measures in place at this time as well, impacting Census 2021 employment and income data. This report is based on Census 2021 employment and income data.

# Data Quality Considerations

Due to the COVID-19 pandemic, government agencies had difficulty collecting data with the same response rate as in previous years. These challenges influenced data collection, data quality, data accuracy, and the representation of societal dynamics exhibited by the data. The pandemic led to disruptions in collection methodology leading to remote and online methods replacing face-to-face surveys or in-person interviews. This change may have affected response rates and excluded certain demographics (those with limited internet access) which could introduce selection bias while households severely affected by COVID-19 may tend to not participate in the survey at the same rates as households less affected by COVID-19, which would lead to an underestimation of the effects of the pandemic. Further, the pandemic did not affect all geographic regions the same thus data may not sufficiently represent the diverse socioeconomic impacts for smaller regions. The shifting severity and geographic distribution of the pandemic might affect regional representativeness, making it challenging to generalize findings to specific areas accurately.

## Statistics Canada Data

Estimates in this report rely on Census 2021 data from Statistics Canada. It is very important to note that, like others globally, the work of Canada’s national statistical agency was profoundly affected by the COVID-19 pandemic. The pandemic affected every step of the census process from data collection to dissemination. Statistical agencies such as Statistics Canada had their resources and capacity severely affected by the pandemic, impacting the timeliness, completeness, and accuracy of both data collection and reporting.

Census questionnaires asked respondents to provide information reflective of their situation as of May 11, 2021 (unless otherwise specified). Based on this timing, the pandemic likely had an impact on the response of many people, including in answering questions about employment, income, and education – the type of data relied on in this report.

Statistics Canada’s data collection was converted into a fully contactless process for the first time. This meant that early enumeration was cancelled for First Nations communities, Metis settlements, Inuit regions and remote areas. Online and telephone methods were emphasized instead.

There were 63 reserves and settlements that were incompletely enumerated in Census 2021.[[8]](#footnote-8) This was a substantial increase compared with 14 incompletely enumerated reserves and settlement in Census 2016. For these reserves and settlements, dwelling enumeration was either not permitted or could not be completed due to health and safety restrictions put in place to slow the spread of COVID-19 or to evacuations because of wildfires.

In 2022, the CBC reported[[9]](#footnote-9) that The Canadian Press had obtained documents showing that Statistics Canada’s data collection efforts in more than 600 First Nation and Inuit communities were hampered. The documents cite a response rate of only 85% for Indigenous communities, while the response rate was 92% for Indigenous communities for Census 2016. The documents provide a number of reasons for the decline in response rate, including the COVID-19 pandemic, forest fires and heat waves. But the documents also state that Census participation rates were affected by the uncovering of burial sites at former residential school locations. On the advice of its Indigenous liaison advisers, Statistics Canada suspended collection for a period of time out of respect following the May 29, 2021 announcement of the discovery of 215 graves in Tk’emlups te Secwepemc. The documents explained that that the discovery of unmarked graves may have exacerbated negative sentiment towards the federal government, potentially leading some to reject participation in the Census process.

The impact of this missing data is more significant at the census subdivision level, and less significant at the provincial and territorial level. This report relies on data at this higher geographic level, where Statistics Canada characterizes the impact as usually very small.

Appendix B provides a discussion on a number of caveats to acknowledge and understand related to the use of 2021 data.

# Background: Demographics and Labour Force Productivity

## Shifting Canadian Demographics

The unemployment-to-job vacancy ratio is a key indicator that compares the number of unemployed workers seeking a job with the number of available jobs. Statistics Canada has reported this measure to be at a historic low.[[10]](#footnote-10) Recently, the unemployment-to-job vacancy ratio has been 1.3 (Q1 2023), 1.2 (Q4 2022), 1.1 (Q3 2022), and 1.1 (Q2 2022). For comparison, the unemployment-to-job vacancy ratio was around 4.5 in 2016.

But, the current labour shortage, widely reported in the media,[[11]](#footnote-11) is not a surprise. In fact, it is evidence of a demographic shift that has been taking place for decades. In 1971, there were almost 2.4 Canadians age 15-24 (the ‘entering the workforce’ age) for every Canadian age 55-64 (the ‘exiting the workforce’ age). But today, there are fewer Canadians entering the workforce than leaving it. In 2021, there were just 0.8 Canadians age 15-24 for every person age 55-64.[[12]](#footnote-12) This means there are fewer and fewer workers able to fill the numerous job openings, and more and more workers retiring and leaving the workforce every year.

Statistics Canada recently published a short video[[13]](#footnote-13) on Canada’s shifting demographic profile, which includes the following points:

* More than one in five working-age people – those aged 15 to 64 – is close to retirement. This proportion represents an all-time high in the history of Canadian censuses.
* From 2016 to 2021, the number of persons aged 65 and older rose 18.3%. This is the second largest increase in 75 years.
* The number of persons aged 85 and older has doubled since 2001, reaching 861,000 in 2021. This number could triple by 2046.
* From 2016 to 2021, the number of children under the age of 15 grew at a pace six times slower than the number of people aged 65 and older.

Maintaining a high standard of living is a function of labour force productivity. A highly productive labour force contributes to the sustained economic growth of a nation, which supports high living standards of its workers and citizens. Given the current demographic shift, the existing labour force must become more productive in order to maintain the Canadian standard of living.

## Indigenous Demographics

In contrast, the Indigenous population is younger and growing faster than the non-Indigenous population. Based on 2021 Census data, the median age of the Indigenous population in Canada is 30.8, while the median age of the non-Indigenous population is 41.6.[[14]](#footnote-14) In 2021, 41.2% of the Indigenous population was under age 25. For comparison, only 27.3% of the non-Indigenous population was under age 25.[[15]](#footnote-15) The Indigenous population grew by 9.4% from 2016 to 2021, almost twice the pace of growth of the non-Indigenous population over the same period (5.3%).[[16]](#footnote-16) And according to Census 2021 data, there were over 1.4 Indigenous people age 15-24 (the ‘entering the workforce’ age) for every Indigenous person age 55-64 (the ‘exiting the workforce’ age).[[17]](#footnote-17)

According to Statistics Canada projections, the Indigenous population is expected to grow faster and remain younger than the non-Indigenous population over the forecast period (to 2041). The Indigenous population’s median age is projected to be between 38.2 and 38.4 by 2041, and the non-Indigenous population’s median age is projected to be between 41.4 and 44.7 by 2041.[[18]](#footnote-18) Statistics Canada projections predict an Indigenous population in Canada of 2,848,000 by 2041, under a medium growth scenario.[[19]](#footnote-19) In 2016, the Indigenous population represented about 5.0% of the Canadian population; but this could rise to 5.4% to 6.8% by 2041, based on Statistics Canada projections.[[20]](#footnote-20)

**Raising the productivity of the Indigenous labour force would significantly contribute to improving Canadian labour force productivity and maintaining or even raising the Canadian standard of living.**[[21]](#footnote-21)

## Indigenous Labour Force Productivity

The Indigenous labour force is currently underutilized as illustrated by the gaps in economic indicators between Indigenous people and non-Indigenous people described below:

**Higher Unemployment Rate** – The Indigenous unemployment rate is higher than the non-Indigenous unemployment rate. But the Indigenous rate is improving and the gap, relative to the non-Indigenous population, is improving.[[22]](#footnote-22)

* Based on 2021 data, the Indigenous unemployment rate across Canada was 11.3%, while the rate among the non-Indigenous population was 3.9 percentage points lower at 7.4%.
* Using 2016 data, the Indigenous unemployment rate in Canada was 12.7%. And the non-Indigenous rate was 5.8 percentage points better at 6.9%.

**Lower Employment Rate** – The Indigenous employment rate is lower than the non-Indigenous rate. But, the Indigenous rate is improving and the gap, relative to the non-Indigenous population, is narrowing.[[23]](#footnote-23)

* In Canada, the Indigenous employment rate was 56.8%, based on 2021 data. But the non-Indigenous employment rate was 3.7 percentage points higher at 60.5%.
* Based on 2016 data, the employment rate among the Indigenous population was 55.9%, while the rate among the non-Indigenous population was 5.5 percentage points better at 61.4%.

**Lower Labour Force Participation Rate** – The Indigenous participation rate is lower than the participation rate among the non-Indigenous population. The Indigenous rate remained steady from 2016 to 2021, while the non-Indigenous rate fell, therefore reducing the gap slightly.[[24]](#footnote-24)

* Across Canada, the labour force participation rate was 65.3% among the non-Indigenous population in 2021, but only 64.0% among the Indigenous population. A difference of 1.3 percentage points.
* Based on 2016 data, the Indigenous labour force participation rate was 1.9 percentage points lower at 64.0% for the Indigenous population and 65.9% for the non-Indigenous population.

**Fewer People with Employment Income** – The portion of the age 15+ population with employment income is lower among the Indigenous population, compared to the non-Indigenous population. Unfortunately, the portion is declining, and the gap is widening.[[25]](#footnote-25)

* Based on 2021 data, 65.2% of the Indigenous population (age 15+) had employment income. But, 69.9% of the non-Indigenous population had employment income, some 4.6 percentage points better.
* About 67.5% of the Indigenous population (age 15+) had employment income in 2016. The rate among the non-Indigenous population in Canada was 4.0 percentage points higher at 71.5%.

**Lower Average Employment Income** – On average, the Indigenous population earns less employment income than the non-Indigenous population, but the gap is narrowing.[[26]](#footnote-26)

* Based on 2021 data, the average employment income among the Indigenous population was 83.4% of the average employment income among the non-Indigenous population.
* The average employment income among the Indigenous population was 79.1% of the average employment income among the non-Indigenous population, using 2016 Census data.

**Higher Prevalence of Low Income** – The Indigenous population has a higher prevalence of persons living in low income, based on the low income measure,[[27]](#footnote-27) than the non-Indigenous population.[[28]](#footnote-28) But the gap narrowed significantly from 2016 to 2021.

* Based on 2021 data, the prevalence of low income among the non-Indigenous population was 10.7%, but 18.8% among the Indigenous population. The gap was 8.1 percentage points.
* Based on 2016 data, the prevalence of low income among the non-Indigenous population was 9.8 percentage points higher than among the Indigenous population at 13.8% and 23.6%, respectively.

**Lower Post-Secondary Completion Rate** – The rate of post-secondary completion is lower among the Indigenous population, relative to the non-Indigenous population. The rate is slowly improving, but the gap is widening.

* Based on 2021 data, the post-secondary completion rate among the Indigenous population was 40.3%, while the rate among the non-Indigenous population was 17.6 percentage points higher at 57.9%.[[29]](#footnote-29)
* Based on 2016 data, the rate among the Indigenous population was 40.0%. And 15.9 percentage points higher among the non-Indigenous population at 55.9%.[[30]](#footnote-30)

Please see Appendix C for a slightly deeper analysis of how these gaps changed from 2016 to 2021 and to see the variability in gaps by province and territory.

For additional, and more thorough, analysis, please see the NIEDB’s Indigenous Economic Progress Report, which examines three core economic indicators, including employment (analyzing employment rate, labour force participation rate, and unemployment rate among other measures) and income (analyzing average income, median income, and source of income, among other measures) and five underlaying indicators, including education (analyzing high school completion, university completion, and trades completion, among other measures).[[31]](#footnote-31) The analysis includes an examination of gaps in these indicators between the Indigenous and non-Indigenous populations and tracks changes in these gaps over time.[[32]](#footnote-32)

### The Impact of Post-Secondary Training on Average Employment Income

In 2016, the average employment income among the Indigenous population that had completed an apprenticeship, trade certificate or diploma was only 2.5% below that of the average employment income among the non-Indigenous population (with the same level of post-secondary training).[[33]](#footnote-33) But, by 2021 that small gap had actually been eliminated. In fact, it had been reversed. Based on 2021 data, the average employment income among the Indigenous population that had completed this level of post-secondary training actually exceeded the average employment income among the non-Indigenous population by 1.9%.[[34]](#footnote-34)

This illustrates a critical piece of the strategy to close these gaps.[[35]](#footnote-35) Education and training are important components necessary to improve labour productivity and economic outcomes.[[36]](#footnote-36) This forms a vital part of the foundation supporting the analysis that follows.[[37]](#footnote-37)

What if these gaps were closed? What if the right education and training were available? What if Indigenous workers enjoyed the same access to economic opportunities as non-Indigenous workers? Just how much more could the Indigenous labour force contribute to the Canadian economy if gaps in average income and employment rate were eliminated? And what would be the impact on all government revenues? This paper seeks to answer these questions.

# Estimating Potential Economic Impacts

It is estimated that if the average employment income gap and the employment rate gap between the Indigenous and non-Indigenous labour forces were both closed, national GDP would increase $26.7 billion. This paper provides the methodology supporting this estimate, which has two main parts:

* Estimating additional labour income earned by the Indigenous labour force;
  + Improving Indigenous education and training;
  + Increasing Indigenous opportunities and participation; and
* Estimating the resulting impact on GDP associated with the additional labour income.

## Estimating Additional Labour Income Earned by the Indigenous Labour Force

This part of the estimate calculates the potential increase in employment income that would be earned by Indigenous workers, if (1) the average employment income gap between the Indigenous and non-Indigenous labour forces was closed immediately, as a result of effective investments in education and training; and (2) the employment rate gap between the Indigenous and non-Indigenous labour forces was also immediately closed, as a result of equivalent availability of economic opportunities.

### Improving Indigenous Education and Training

An underlying premise of this methodology is that with more effective education and training, the productivity of the Indigenous labour force would match that of the non-Indigenous labour force. As a result of equivalent productivity, the average employment income among Indigenous workers would rise to match that of non-Indigenous workers. We have estimated the additional employment income earned by Indigenous workers currently with employment income resulting from closing the gap in average employment income. Our methodology takes a province-by-province approach.

Described below is an example using Census 2021 data for the province of Ontario:

Using the most recently available Census data,[[38]](#footnote-38) average employment income was found to be $52,750 per year among non-Indigenous workers, but only $46,280 per year among Indigenous workers in the province. Therefore, the gap in average employment income between the two labour forces is calculated to be $6,470. The same Statistics Canada dataset shows there were 208,550 Indigenous workers with employment income in Ontario. The methodology assumes each of these Indigenous workers earns an additional $6,470 in employment income per year. This results in an additional $1,349,318,500 in employment income earned by Indigenous workers in Ontario.

This process was repeated for each province and territory, and Table 1 below summarizes the results.

Table 1: Additional Employment Income Earned by Already Employed Indigenous Workers

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Gap in Average Employment Income (2021 $)** | **Number of Indigenous Workers with Employment Income (#)** | **Potential Increase in Employment Income Earned by Indigenous Workers (2021 $)** |
| BC | $10,200 | 150,050 | $1,530,510,000 |
| AB | $10,180 | 133,260 | $1,356,586,800 |
| SK | $9,880 | 73,275 | $723,957,000 |
| MB | $8,800 | 100,580 | $885,104,000 |
| ON | $6,470 | 208,550 | $1,349,318,500 |
| QC | $7,320 | 110,560 | $809,299,200 |
| NB | $8,800 | 17,625 | $155,100,000 |
| NS | $6,600 | 27,560 | $181,896,000 |
| PE | $4,480 | 1,940 | $8,691,200 |
| NL | $4,640 | 25,860 | $119,990,400 |
| YK | $11,130 | 5,165 | $57,486,450 |
| NT | $30,250 | 11,025 | $333,506,250 |
| NU | $60,200 | 13,675 | $823,235,000 |

In the above table, the first column identifies the province or territory. The second column provides the gap in average employment income between Indigenous and non-Indigenous workers with employment income, based on Census 2021 data. The third column displays the number of Indigenous workers with employment income. And the fourth column provides the estimate of potential additional employment income that could be earned if all Indigenous workers with employment income earned average employment income equivalent to the average employment income among non-Indigenous workers with employment income. The table presents estimates in 2021 dollars. Based on this methodology, Indigenous workers in Canada could potentially earn an additional $8.3 billion annually, given sufficient investment in education and training, resulting in equivalent productivity between the two labour forces, and immediate closure of the average employment income gap.

### Increasing Indigenous Opportunities and Participation

The second underlying premise of this methodology is that with the same access to economic opportunities, the Indigenous population age 15+ would participate in the labour force at the same rate as the non-Indigenous population age 15+. As a result, the employment rate among the Indigenous population age 15+ would rise to match that of the non-Indigenous population age 15+. The employment rate is the number of employed persons as a portion of the age 15+ population. This part of the methodology also builds on the previous underlying premise and assumes these newly employed Indigenous workers would also benefit from investments in education and training resulting in equivalent labour productivity and average employment incomes that are equal to the average among non-Indigenous workers with employment income. We have estimated the additional employment income earned by Indigenous workers that would be newly employed resulting from closing the employment rate gap. Again, our methodology takes a province-by-province approach.

An example is described below, using Census 2021 data for the province of Ontario.

According to Census data, there were 6,332,125 employed non-Indigenous persons in Ontario. The age 15+ non-Indigenous population numbered 11,467,050 in the province. Therefore, the employment rate was calculated to be 55.2%. The same dataset shows the age 15+ Indigenous population in Ontario numbered 315,770 in 2021. If the employment rate among the Indigenous population were to be equivalent to the rate among the non-Indigenous population (55.2%), then 174,369 Indigenous workers would be employed. However, the data shows only 160,765 employed Indigenous workers. Therefore, closing the employment rate gap means an additional 13,604 Indigenous workers would need to be employed in Ontario. If these newly employed Indigenous workers all earned the same average employment income as the non-Indigenous population ($52,750), the resulting increase in employment income is estimated to be $717,597,521 in Ontario.

This same process was repeated for each province and territory and Table 2 below summarizes the results.

Table 2: Additional Employment Income Earned by Newly Employed Indigenous Workers

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Employment Rate Gap (%)** | **Potential Number of Newly Employed Indigenous Workers (#)** | **Estimated Increase in Employment Income among Newly Employed Indigenous Workers (2021 $)** |
| BC | 3.6% | 7,999 | $408,272,986 |
| AB | 9.9% | 20,498 | $1,166,349,047 |
| SK | 18.7% | 24,074 | $1,168,076,419 |
| MB | 13.9% | 22,895 | $1,065,975,785 |
| ON | 4.3% | 13,604 | $717,597,521 |
| QC | 5.4% | 8,681 | $402,780,578 |
| NB | 5.0% | 1,317 | $55,241,932 |
| NS | 2.1% | 863 | $37,526,265 |
| PE | 1.2% | 31 | $1,204,411 |
| NL[[39]](#footnote-39) | 0.0% | -10 | -$451,221 |
| YK | 14.2% | 961 | $57,897,632 |
| NT | 27.4% | 4,143 | $339,302,662 |
| NU | 43.8% | 8,822 | $922,762,993 |

In the above table, the first column identifies the province or territory. The second column provides the employment rate gap between the non-Indigenous population. As evident in the table, the employment rate gaps in Saskatchewan, Manitoba and the territories are particularly large. The third column displays the number of additional Indigenous workers (beyond the existing number of employed workers) required to reach the non-Indigenous employment rate. And the fourth column provides the estimate of additional employment income that would be earned if all the Indigenous workers in the third column earned the same average employment income non-Indigenous workers earned. Based on this methodology, we calculated $6,342,537,009 in additional employment income earned by these newly employed Indigenous workers. Estimates in the table are presented in 2021 dollars.

### Combined

To summarize, the estimate of additional employment income from closing the average employment income gap is about $8.3 billion, and the estimate of additional employment income from closing the employment rate gap is about $6.3 billion. Combined, the increase in employment income earned by Indigenous workers is estimated to be about $14.7 billion. These estimates are reported in 2021 dollars.

Table 3 below summarizes the results.

Table 3: Additional Employment Income Earned by Indigenous Workers

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Estimated Increase in Employment Income Earned by Already Employed Indigenous Workers (2021 $)** | **Estimated Increase in Employment Income Earned by Newly Employed Indigenous Workers (2021 $)** | **Combined Impact: Estimated Increase in Employment Income Earned by Indigenous Workers (2021 $)** |
| BC | $1,530,510,000 | $408,272,986 | $1,938,782,986 |
| AB | $1,356,586,800 | $1,166,349,047 | $2,522,935,847 |
| SK | $723,957,000 | $1,168,076,419 | $1,892,033,419 |
| MB | $885,104,000 | $1,065,975,785 | $1,951,079,785 |
| ON | $1,349,318,500 | $717,597,521 | $2,066,916,021 |
| QC | $809,299,200 | $402,780,578 | $1,212,079,778 |
| NB | $155,100,000 | $55,241,932 | $210,341,932 |
| NS | $181,896,000 | $37,526,265 | $219,422,265 |
| PE | $8,691,200 | $1,204,411 | $9,895,611 |
| NL[[40]](#footnote-40) | $119,990,400 | -$451,221 | $119,539,179 |
| YK | $57,486,450 | $57,897,632 | $115,384,082 |
| NT | $333,506,250 | $339,302,662 | $672,808,912 |
| NU | $823,235,000 | $922,762,993 | $1,745,997,993 |

In the above table, the first column identifies the province or territory. The second column provides estimates of the additional employment income potentially earned by already employed Indigenous workers from Table 1. The third column provides estimates of the additional employment income potentially earned by newly employed Indigenous workers from Table 2. The fourth column, the sum of columns 2 and 3, provides the combined estimate of additional employment income. Based on this methodology, we calculated $14,677,217,809 in additional employment income earned by Indigenous workers. Estimates in the table are presented in 2021 dollars.

## Estimating the GDP Impact Associated with Additional Labour Income

In the next step of the methodology, a ratio of economic multipliers are applied to the additional employment income figures from the previous step to estimate the potential impact on Canada’s economy, as measured by a potential change in gross domestic product (GDP).[[41]](#footnote-41)

An economic multiplier is a quantitative measure derived from the Statistics Canada input-output tables. The input-output tables represent a comprehensive framework of the economy and are used to track economic activity generated by changes in consumption or production. Multipliers are used to measure or quantify how a particular shock to the economy is expected to affect the levels of key industry variables. How a shock (change in output) transmits throughout the economy is not the same in each part of the country. Therefore, this methodology uses provincial and territorial level data. This methodology uses the most recently available multiplier data, which is for 2019.[[42]](#footnote-42)

For a given change in economic output, there will also be proportional changes in other associated economic variables, such as labour income and gross domestic product. Our methodology uses a ratio of these economic multipliers to estimate the change in GDP associated with the previously estimated change in employment income.[[43]](#footnote-43)

An example is described below, again using data for Ontario.

According to Statistics Canada data,[[44]](#footnote-44) the simple[[45]](#footnote-45) GDP (at basic prices)[[46]](#footnote-46) multiplier in Ontario in 2019 was 0.800, and the simple labour income multiplier was 0.474.[[47]](#footnote-47) In this case, for any change in output, the expected change in GDP is 1.69 times greater than the expected change in labour income. The methodology assumes employment income (previously estimated) is equivalent to labour income. Therefore, for a given change in labour income in Ontario, the expected change in GDP is 1.69 times larger. It was previously estimated that additional employment income associated with closing economic gaps between the Indigenous and non-Indigenous populations was $2,016,900,750.[[48]](#footnote-48) Therefore, the change in GDP, associated with closing the economic outcome gaps between the Indigenous and non-Indigenous populations, is estimated to be $3,488,465,858 in Ontario in 2021.

This process was repeated, and Table 4 summarizes estimates for all provinces and territories.

Table 4: Estimates of GDP Impact associated with Additional Employment Income

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Estimate of Increased Employment Income Earned by Indigenous Workers (2021 $)** | **Ratio of Economic Multipliers (GDP to Labour Income)** | **Estimate of Potential GDP Impact (2021 $)** |
| BC | $1,938,782,986 | 1.77 | $3,437,841,996 |
| AB | $2,522,935,847 | 1.95 | $4,921,142,281 |
| SK | $1,892,033,419 | 2.17 | $4,112,082,682 |
| MB | $1,951,079,785 | 1.76 | $3,433,577,261 |
| ON | $2,066,916,021 | 1.69 | $3,488,465,858 |
| QC | $1,212,079,778 | 1.66 | $2,016,900,750 |
| NB | $210,341,932 | 1.71 | $359,475,818 |
| NS | $219,422,265 | 1.67 | $367,143,554 |
| PE | $9,895,611 | 1.72 | $17,062,075 |
| NL | $119,539,179 | 2.14 | $255,707,168 |
| YK | $115,384,082 | 1.56 | $179,643,518 |
| NT | $672,808,912 | 1.70 | $1,143,775,151 |
| NU | $1,745,997,993 | 1.70 | $2,959,634,125 |

In the above table, the first column identifies the province or territory. The second column provides the estimate of increased employment income earned by Indigenous workers (described previously). The third column shows the ratio of economic multipliers, with the simple GDP (at basic prices) multiplier as the numerator and the simple labour income multiplier as the denominator. The fourth column provides the estimate of potential GDP impact, which is the product of columns 2 and 3. Estimates in the table are shown in 2021 dollars. The sum of estimates for all provinces and territories is $26,692,452,236.

As evident in Table 4, closing the productivity gap between the Indigenous and non-Indigenous labour forces would have a significant and ongoing economic impact benefiting all of Canada. With the right investments in education and training and with equal access to economic opportunities, the gaps in average employment income and employment rate could be closed. The resulting increase in Canadian GDP is estimated to be about $26.7 billion. The graphic below illustrates this potential increase by province and territory.

Figure 1: Potential Increase in GDP by Province / Territory



Please see Appendix A for a discussion on key differences in the datasets upon which these estimates are based and those estimates contained in the NIEDB’s 2016 paper entitled *Reconciliation: Growing Canada’s Economy by $27.7 billion*

Note that a March 2022 study by the Conference Board of Canada found the labour shortage cost the Canadian economy $25 billion in 2020.[[49]](#footnote-49) The potential economic contribution to the Canadian economy from immediately closing productivity and economic opportunity gaps between the Indigenous and non-Indigenous workforces could offset the economic cost of the current labour shortage, allowing the Canadian standard of living to be maintained.

# Estimating Potential Fiscal Impacts

The potential net impact on all government budgets associated with the additional employment income calculated in the previous sections is estimated to be an increase of $6.7 billion. This section describes the methodology for this estimate.

Increased employment income, associated with closing the average employment income gap and the employment rate gap, will mean fewer people living in low income. This will lower costs for governments (those costs attributable to addressing poverty) and will also increase revenues for governments (tax revenues associated with additional employment income).

## Lower Costs for Governments

The analysis in this section focuses on poverty and Canadians living in low income.[[50]](#footnote-50) It is important to point out this isn’t specifically an Indigenous issue. Poverty can affect all Canadians, and the approach followed here can be applied to any group of Canadians living in low income. Fewer Canadian households living in low income results in a net fiscal benefit for all governments, whether the members of those households are Indigenous persons or non-Indigenous persons. However, our analysis here specifically considers a reduction in the number of Indigenous persons living in low income resulting from closing the gaps in average employment income and employment rate, as discussed in the previous section.

Closing productivity and economic opportunity gaps between the Indigenous and non-Indigenous populations will result in a reduction in the number of Indigenous people living in low income. The methodology assumes the prevalence of Indigenous people living in low income will improve to match the rate among the non-Indigenous population.

An example using data for Ontario is presented below.

Based on Census 2021 data, 17.1% of Indigenous people, but only 9.9% of non-Indigenous people were living in low income in Ontario. If the prevalence of low income among the Indigenous population were to improve to match that of the non-Indigenous population, there would be 28,693 fewer Indigenous people living in low income in Ontario.[[51]](#footnote-51) The methodology then applies the estimated cost of poverty, per person living in low income, which was derived from the first component of the approach developed by Charles Plante,[[52]](#footnote-52) to the estimated number of Indigenous people no longer living in low income in Ontario. The result is an estimated decrease in costs for all governments of $63,488,689 associated with fewer Indigenous people living in low income in Ontario.

This process was followed for every province and territory, and Table 5 below provides the estimates.

Table 5: Estimates of Reduced Expenditures of All Governments Associated with Fewer People Living in Low Income

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Prevalence of Low Income Gap** | **Estimated Number of Fewer Indigenous People Living in Low Income** | **Estimated Savings for All Governments** |
| BC | 5.0% | 14,384 | $31,826,914 |
| AB | 8.5% | 24,042 | $53,198,168 |
| SK | 16.1% | 30,289 | $67,021,198 |
| MB | 14.7% | 34,916 | $77,257,631 |
| ON | 7.1% | 28,693 | $63,488,689 |
| QC | 3.9% | 7,985 | $17,667,656 |
| NB | 5.3% | 1,751 | $3,875,532 |
| NS | 5.4% | 2,808 | $6,214,109 |
| PE | 4.2% | 142 | $314,439 |
| NL[[53]](#footnote-53) | -0.4% | -178 | -$393,076 |
| YK | 5.4% | 479 | $1,059,879 |
| NT | 8.7% | 1,749 | $3,869,499 |
| NU | 13.4% | 4,191 | $9,272,868 |

In the above table, the first column identifies the province or territory. The second column provides the gap in the prevalence of people living in low income between the Indigenous and non-Indigenous populations. It is worth noting the prevalence of low income rate gaps in Saskatchewan and Manitoba are particularly large. The third column provides estimates of the number of Indigenous people that would no longer be living in low income when the gap identified in the second column is closed. The fourth column provides estimates of the decrease in all government expenditures attributable to poverty associated with the estimated reduction in the number of persons living in low income identified in the third column. The values are shown in 2021 dollars.

## Higher Revenues for Governments

This methodology assumes the s.87 (Indian Act) tax exemption is maintained in its current form and therefore assumes the various components of the Indigenous population do not generate the same government revenues per dollar of additional employment income. In this methodology, additional employment income earned by First Nations workers residing on reserve is assumed to generate no additional income tax revenue, but is assumed to generate increases in other government revenues. Additional employment income earned by other Indigenous workers,[[54]](#footnote-54) is assumed to generate additional income tax and other tax revenues.

The methodology follows a province-by-province approach. An example using data for Ontario is described below.

As demonstrated in the first part of this report, closing productivity and economic opportunity gaps could potentially result in increased employment income of $2,066,916,021 earned by Indigenous workers. A portion of this would be earned by First Nations workers residing on reserve. And a portion would be earned by other Indigenous workers, regardless of residency. Based on Census 2021 data, there were 315,770 Indigenous people living in Ontario, including 35,155 First Nations persons living on reserves in the province (11.1%). Accordingly, the methodology assumes that 11.1% of the estimated additional employment income, or $230,111,894, is earned by First Nations workers residing on reserve; and the remaining 88.9%, or $1,836,804,127, is assumed to be earned by other Indigenous workers.

The Fraser Institute maintains the Canadian Consumer Tax Index, which tracks the total tax bill of the average Canadian family from 1961 to the current year. In compiling the index annually, the Fraser Institute adds up the various taxes the average family pays to federal, provincial, and local governments, including income taxes, payroll taxes, health taxes, sales taxes, property taxes, fuel taxes, carbon taxes, motor vehicle licenses, import duties, alcohol taxes, tobacco taxes, amusement taxes, natural resource taxes and other taxes. Ultimately, average Canadians also pay the taxes levied on businesses. Although businesses pay these taxes directly, the cost of business taxation is ultimately passed onto ordinary Canadians. These are included in the Fraser Institute’s Canadian Consumer Tax Index. Based, on the most recent Consumer Tax Index figures,[[55]](#footnote-55) one additional dollar of employment income can be expected to generate ¢45.3 in taxes, including income taxes, or ¢31.1 in taxes, excluding income taxes.

Therefore, the additional employment income potentially earned by First Nations workers residing on reserves in Ontario, could be expected to generate $71,613,353 in government revenues. And the additional employment income potentially earned by other Indigenous workers in Ontario, could be expected to generate $832,072,269 in government revenues.

This process was repeated, and Table 6 below summarizes estimates for all provinces and territories.

Table 6: Estimates of New Government Revenues associated with Additional Employment Income

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Estimate of Additional Employment Income Earned by Indigenous Workers (2021 $)** | **New Government Revenues Associated with Additional Employment Income Earned by First Nations Workers Residing On Reserve (2021 $)** | **New Government Revenues Associated with Additional Employment Income Earned by Other Indigenous Workers (2021 $)** |
| BC | $1,938,782,986 | $108,540,102 | $720,277,277 |
| AB | $2,522,935,847 | $109,016,872 | $984,204,536 |
| SK | $1,892,033,419 | $161,840,794 | $621,515,019 |
| MB | $1,951,079,785 | $143,290,522 | $675,264,875 |
| ON | $2,066,916,021 | $71,613,353 | $832,072,269 |
| QC | $1,212,079,778 | $58,383,959 | $464,088,211 |
| NB | $210,341,932 | $14,430,718 | $74,279,483 |
| NS | $219,422,265 | $11,164,451 | $83,147,265 |
| PE | $9,895,611 | $435,683 | $3,848,530 |
| NL | $119,539,179 | $1,702,852 | $51,672,569 |
| YK | $115,384,082 | $0 | $52,268,989 |
| NT | $672,808,912 | $2,564,470 | $301,049,584 |
| NU | $1,745,997,993 | $0 | $790,937,091 |

In the above table, the first column identifies the province or territory. The second column provides the estimate of increased employment income earned by Indigenous workers (described previously). This is the sum of the additional employment income expected to be earned by already employed Indigenous workers and the new employment income expected to be earned by newly employed Indigenous workers. The third column shows the estimate of additional government revenues associated with that portion of increased employment income assumed to be earned by First Nations workers residing on reserve. The fourth column provides the estimate of additional government revenues associated with that portion of increased employment income assumed to be earned by other Indigenous workers, regardless of residency. Estimates in the table are shown in 2021 dollars. The sum of estimates for all provinces and territories, including government revenues associated with additional employment income earned by First Nation workers residing on reserve and that associated with additional employment income earned by other Indigenous workers is $6,337,609,475.

## Net Fiscal Impacts

The net impact on all government budgets, resulting from lower fiscal costs (associated with fewer people living in low income) and higher revenues (associated with all taxes generated by additional employment income earned) was estimated to be $6,672,282,981.

Closing the average employment income and employment rate gaps would contribute to closing the poverty rate gap between the Indigenous and non-Indigenous populations. This would mean an estimated 151,252 fewer Indigenous persons living in low income. As a result, all government budgets would see an estimated improvement of $6.7 billion.

Estimates by province and territory are summarized in Table 7 below.

Table 7: Estimates of Net Fiscal Impacts on All Government Budgets

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Estimated Decrease in the Number of People Living in Low Income** | **Estimate of New Government Revenues Associated with Additional Employment Income (2021 $)** | **Estimate of Net Fiscal Impacts on All Government Budgets (2021 $)** |
| BC | 14,384 | $828,817,380 | $860,644,294 |
| AB | 24,042 | $1,093,221,408 | $1,146,419,575 |
| SK | 30,289 | $783,355,813 | $850,377,012 |
| MB | 34,916 | $818,555,397 | $895,813,028 |
| ON | 28,693 | $903,685,622 | $967,174,311 |
| QC | 7,985 | $522,472,170 | $540,139,825 |
| NB | 1,751 | $88,710,201 | $92,585,733 |
| NS | 2,808 | $94,311,717 | $100,525,826 |
| PE | 142 | $4,284,213 | $4,598,652 |
| NL | -178 | $53,375,422 | $52,982,345 |
| YK | 479 | $52,268,989 | $53,328,868 |
| NT | 1,749 | $303,614,054 | $307,483,553 |
| NU | 4,191 | $790,937,091 | $800,209,959 |

In the above table, the first column identifies the province or territory. The second column provides estimates of the number of people no longer living in low income, owing to additional employment income earnings, resulting from closing average employment income and employment rate gaps. The third column provides estimates of increased government revenues associated with the additional employment income earned by Indigenous workers. The fourth column provides estimates of the net fiscal impacts on all government budgets, including the reduction of costs associated with poverty and the added tax revenues associated with the increase in employment income.

The graphic below depicts these estimates of net fiscal impacts by province and territory.

Figure 2: Potential Net Impacts on All Government Budgets



Please see Appendix A for a discussion on key differences in the methodology followed to develop these estimates and those fiscal impact estimates contained in the NIEDB’s 2016 paper entitled *Reconciliation: Growing Canada’s Economy by $27.7 billion*.

# Appendix A: Previous Estimate and Current Estimate

In November 2016, the NIEDB published an infographic on its website called *Reconciliation: Growing Canada’s Economy by $27.7 Billion*. Estimates in the infographic were supported by a methods paper also published on the NIEDB’s website. Before drawing any comparisons between current potential economic impact estimates and those in the 2016 work, readers should be aware of key differences in the datasets upon which estimates are based. Similarly, prior to making comparisons between current fiscal impact estimates and those in the 2016 work, readers should understand key differences in methodology upon which estimates are based.

## Change in Survey Methodology Supporting Economic Impact Estimates

Economic impact estimates in the 2016 work were based on 2011 data. And economic impact estimates in the current work follow a similar, but not identical, methodology and rely on 2021 data. However, it is very important to point out the change in survey methodology employed by Statistics Canada in generating the 2011 dataset and the 2021 dataset. The 2016 work relied on data from the 2011 National Household Survey. The dataset was derived from a voluntary survey with a response rate below 70%. The current work relies on Census 2021 data. This dataset was derived from a mandatory survey with an overall response rate of 98%. Estimates based on the two different datasets are not necessarily directly comparable because they are derived from surveys with very different response rates.

The 2016 Census also relied on a mandatory survey, like the 2021 Census, and at that time Statistics Canada produced a document cautioning against the comparison of the 2011 and 2016 datasets. These cautions apply equally to comparisons of 2011 and 2021 datasets.

In its “Guide to the Census of Population, 2016,” Statistics Canada discusses the comparability of estimates from the 2016 Census long-form questionnaire with estimates from the 2011 National Household Survey. In that discussion, Statistics Canada notes at least three considerations to keep in mind when comparing the 2011 and 2016 datasets, including:[[56]](#footnote-56)

1. non-response error may be greater for estimates from the 2011 NHS than for estimates derived from the 2016 Census, particularly for smaller domains of interest;
2. estimates from the 2011 NHS can contain inaccuracies because of a lower response rate (particularly in smaller communities) than the 2016 Census, and comparisons for a given geographic area must take into account the differences in observed response rates; and
3. the imputation rate was greater for the 2011 NHS than for the 2016 Census long-form questionnaire and comparisons of estimates from the 2011 NHS and from the 2016 Census must take into account the differences in imputation rates.

These cautions should also be considered and kept in mind when considering estimates of potential GDP impact based on 2011 NHS data and based on Census 2021 data.

## Change in Cost of Poverty Approach Supporting Fiscal Impact Estimates

Both the NIEDB’s 2016 report and the current study include estimates of net fiscal impacts, in which reduced government expenditure, associated with fewer people living in low income, are estimated. The 2016 work relied on estimates from Nathan Laurie, while the current work relies on estimates from the work of Charles Plante.

In 2008, working with the Ontario Association of Food Banks (now called Feed Ontario), Nathan Laurie estimated the costs to all governments of poverty in Ontario. Since that time, a similar cost of poverty study has been commissioned in almost every province and territory, including a 2010 study by Othmar F. Arnold on the cost of poverty in the Yukon that was never released; a 2011 study by Iglika Ivanova, ‘The Cost of Poverty in BC;’ a 2012 study by Alexa Briggs and Celia R. Lee, ‘Poverty Costs – An Economic Case for a Preventative Poverty Reduction Strategy in Alberta;’ a 2012 study by Athanase Barayandema and Guy Fréchet, ‘The Costs of Poverty in Quebec – According to the Model Proposed by Nathan Laurie;’ a 2014 study by Charles Plante and Keisha Sharp, ‘Poverty Costs Saskatchewan: A New Approach to Prosperity for All;’ a 2019 study by Celia R. Lee and Alexa Briggs, ‘The Cost of Poverty in Ontario – 10 Years Later;’ and a 2021 study by Christine Saulnier and Charles Plante, ‘The Cost of Poverty in the Atlantic Provinces,’ which provided estimates for each of New Brunswick, Nova Scotia, Prince Edward Island, and Newfound and Labrador.

As this work advanced, through each of these studies, improvements and enhancements were made or recommended to Laurie’s original methodology. In 2020, Charles Plante wrote a paper entitled, ‘How to Calculate the Costs of Poverty in Canada: Comment on the Nathan Laurie Approach and Recommended Improvements.’ In this paper, Plante follows an improved methodology and estimates the cost of poverty in Canada in 2020. The first component of Plante’s methodology estimates the direct costs to governments associated with treating the damage caused by poverty. Specifically, his methodology looks at the added health care system costs and added criminal justice system costs attributable to poverty. This is based on the large body of evidence that concludes poverty places a disproportionate burden on the health of the poor and the health system and that the poor are more likely to be victims of crime and more likely to be involved in the criminal justice system. This is only the first component of Charles Plante’s approach.

The methodology utilized in the current NIEDB study uses estimates for Canada from this part of Charles Plante’s approach. This is a departure from the methodology followed in the NIEDB’s 2016 report, following the improvements in approaches in these cost of poverty studies, and incorporating the most recently available national estimates. As a result of this change in methodology, comparisons between fiscal impact estimates in the current work and the 2016 work are not appropriate.

# Appendix B: Census 2021 Data Quality Issues

This short appendix discusses the potential limitations and caveats associated with utilizing data from the year 2021, including Statistics Canada data, the Labour Force Survey, and the ramifications of the COVID-19 pandemic. The review explores various challenges posed by the exceptional circumstances of 2021 and highlights their implications on data accuracy, representativeness, and interpretation.

The year 2021 was marked by unprecedented global challenges, primarily driven by the ongoing COVID-19 pandemic. These challenges significantly influenced data collection, quality, and the representation of societal dynamics, thus necessitating the highlighting of the following potential caveats when utilizing 2021 data.

1. **Limitations in Data Collection**
2. Data Collection Disruptions – The pandemic led to disruptions in traditional data collection methodologies, such as face-to-face surveys or in-person interviews. This shift to remote and online methods might introduce selection biases and limit the inclusion of certain demographics. For the Labour Force Survey, data for the second and third quarters of 2020 are unavailable due to some Statistics Canada operations being temporarily suspended during the COVID-19 pandemic.
3. Response Rate Variability – COVID-19-related disruptions may have affected the response rates, leading to inconsistent and non-representative datasets. Some groups may be overrepresented due to heightened engagement with online surveys, while others, with limited internet access or digital literacy, might be underrepresented.
4. **Data Quality and Reliability**
5. Temporal Variability: The rapidly evolving nature of the pandemic throughout 2021 may have caused fluctuations in responses and behaviors over time, making it challenging to capture an accurate snapshot of societal trends.
6. Non-Response Bias: Individuals and households severely impacted by the pandemic might be less likely to participate in surveys, resulting in a potential underestimation of the pandemic's true effects.
7. **Representativeness and Generalizability**
8. Socioeconomic Disparities – The economic repercussions of the pandemic were not evenly distributed across society. Data collected during 2021 may not adequately represent the diverse socioeconomic impacts, potentially skewing analyses and policy recommendations for smaller geographic regions.
9. **Specific Focus on Statistics Canada Data**
10. Data Suppression: Statistics Canada suppresses data under a certain threshold. For Canada, Quebec, Ontario, Alberta and British Columbia suppression is applied to all data below 1,500. The threshold level for Newfoundland and Labrador, Nova Scotia, New Brunswick, Manitoba and Saskatchewan is 500, while in Prince Edward Island, estimates under 200 are suppressed. Estimates are based on smaller sample sizes the more detailed the table becomes, which could result in lower data quality.
11. Resource Constraints: The pandemic strained the resources and capacity of statistical agencies like Statistics Canada, impacting the timeliness, completeness, and accuracy of data collection and reporting.
12. Methodological Adjustments: Statistics Canada may have had to adapt methodologies to adhere to health and safety guidelines, which could introduce methodological differences in data collection and analysis compared to previous years.

Acknowledging the caveats associated with utilizing 2021 data, particularly in the context of Statistics Canada and the COVID-19 pandemic, is crucial for accurate data interpretation and informed decision-making. Researchers and policymakers should understand these caveats when utilizing and extrapolating conclusions from data collected during this exceptional period.

# Appendix C: How Gaps Changed from 2016 to 2021

The Background section of this report examines a number of economic and labour force productivity indicators and compares the gaps between the Indigenous and non-Indigenous work forces on a national basis. This appendix provides a slightly deeper analysis for a few of these indicators on a province and territory level. The purpose of this additional analysis is to understand if these gaps became narrower or wider between 2016 and 2021.[[57]](#footnote-57) This provides some indication of the effectiveness of efforts and investments during this period.

**Employment Rate Gap** – The Background section stated that, at a national level, the employment rate gap improved from 5.5 percentage points (55.9% vs 61.4%) in 2016 to 3.7 percentage points (56.8% vs 60.5%) in 2021. The table below provides employment rate gaps by province and territory.

Table 8: Change in Employment Rate Gap from 2016 to 2021

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Employment Rate Gap in 2016 (percentage points)** | **Employment Rate Gap in 2021 (percentage points)** | **Direction** |
| BC | 6.7 | 3.6 | Improving |
| AB | 11.6 | 9.9 | Improving |
| SK | 19.9 | 18.7 | Improving |
| MB | 15.3 | 13.9 | Improving |
| ON | 6.1 | 4.3 | Improving |
| QC | 7.8 | 5.4 | Improving |
| NB | 6.6 | 5.0 | Improving |
| NS | 1.7 | 2.1 | Worsening |
| PE | 4.5 | 1.2 | Improving |
| NL | 1.8 | 0.0 | Improving |
| YK | 18.1 | 14.2 | Improving |
| NT | 29.0 | 27.4 | Improving |
| NU | 43.8 | 43.8 | Stable |

Between 2016 and 2021, the employment rate gap between the Indigenous and non-Indigenous work forces improved in every province, with the lone exception of Nova Scotia, and remained unchanged in Nunavut. The employment rate gap did improve between 2016 and 2021 in Alberta, Saskatchewan, and Manitoba, but it remains larger than other provinces. The situation is similar in the territories as well.

**Unemployment Rate Gap** – Nationally, the unemployment rate gap improved from 5.8 percentage points (12.7% vs 6.9%) in 2016, to 3.9 percentage points (11.3% vs 7.4%) in 2021. The table below provides unemployment rate gaps by province and territory.

Table 9: Change in Unemployment Rate Gap from 2016 to 2021

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Unemployment Rate Gap in 2016 (percentage points)** | **Unemployment Rate Gap in 2021 (percentage points)** | **Direction** |
| BC | 7.7 | 4.2 | Improving |
| AB | 7.8 | 7.4 | Improving |
| SK | 13.0 | 11.7 | Improving |
| MB | 9.3 | 7.9 | Improving |
| ON | 5.4 | 2.8 | Improving |
| QC | 6.3 | 2.5 | Improving |
| NB | 9.2 | 6.4 | Improving |
| NS | 4.8 | 3.4 | Improving |
| PE | 9.6 | 3.6 | Improving |
| NL | 6.3 | 4.9 | Improving |
| YK | 16.3 | 8.9 | Improving |
| NT | 14.5 | 10.9 | Improving |
| NU | 24.5 | 18.9 | Improving |

Between 2016 and 2021, the unemployment rate gap between the Indigenous and non-Indigenous work forces improved in every province and territory. Although moving in the right direction in all cases, the unemployment rate gap is still relatively large in Alberta, Saskatchewan, Manitoba, among the provinces, and even larger in the territories.

**Average Employment Income Gap** – At a national level, the average employment income gap improved over the time period. In 2016, the average employment income among Indigenous workers was 20.9% lower than among non-Indigenous workers. By 2021, this had fallen to 16.6% lower, an improvement of 4.3 percentage points. The table below provides average employment income gaps by province and territory.

Table 10: Change in Average Employment Income Gap from 2016 to 2021

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Average Employment Income Gap in 2016** | **Average Employment Income Gap in 2021** | **Direction** |
| BC | 22.7% | 20.0% | Improving |
| AB | 24.4% | 17.9% | Improving |
| SK | 26.0% | 20.4% | Improving |
| MB | 23.2% | 18.9% | Improving |
| ON | 22.9% | 12.3% | Improving |
| QC | 18.9% | 15.8% | Improving |
| NB | 23.6% | 21.0% | Improving |
| NS | 16.6% | 15.2% | Improving |
| PE | 11.8% | 11.4% | Improving |
| NL | 13.5% | 10.1% | Improving |
| YK | 26.9% | 18.5% | Improving |
| NT | 39.9% | 36.9% | Improving |
| NU | 59.8% | 57.6% | Improving |

Between 2016 and 2021, the average employment income gap between the Indigenous and non-Indigenous work forces improved in every province and territory. However, the average employment income among Indigenous workers is still at least 18% less than the average among non-Indigenous workers in BC, Saskatchewan, Manitoba, New Brunswick, and the territories.

**Participation Rate Gap** – Despite the fact that employment rate gaps in most provinces and territories improved, and unemployment rate gaps and average employment income rate gaps improved in all provinces and territories, there was not a significant improvement in the participation rate gap nationally. The table below provides participation rate gaps by province and territory.

Table 11: Change in Participation Rate Gap from 2016 to 2021

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Participation Rate Gap in 2016 (percentage points)** | **Participation Rate Gap in 2021 (percentage points)** | **Direction** |
| BC | 0.2 | 1.1 | Worsening |
| AB | 7.1 | 6.0 | Improving |
| SK | 13.2 | 13.4 | Worsening |
| MB | 10.5 | 10.2 | Improving |
| ON | 3.0 | 3.0 | Stable |
| QC | 4.3 | 4.2 | Improving |
| NB | 1.2 | 1.4 | Worsening |
| NS | -1.4 | 0.1 | Worsening |
| PE | -2.7 | -1.1 | Worsening |
| NL | -2.3 | -3.4 | Improving |
| YK | 7.1 | 8.9 | Worsening |
| NT | 20.8 | 22.0 | Worsening |
| NU | 29.2 | 35.2 | Worsening |

Impressively, there was a negative gap in three of the Atlantic provinces in 2016. The participation rate among the Indigenous work forces in Nova Scotia, PEI, and Newfoundland and Labrador exceeded the rate among the non-Indigenous population. By 2021, the latter two still had negative gaps, while the gap was very small, only 0.1 percentage points in Nova Scotia. The participation rate gaps in Saskatchewan and Manitoba remain quite high, relative to the other provinces, with Saskatchewan’s widening by 0.2 percentage points and Manitoba’s narrowing by 0.3 percentage points from 2016 to 2021.

**Post-Secondary Completion Rate Gap** – The data shows that average employment incomes are higher for Indigenous workers that have completed post-secondary training, than those that have not. The data also shows the gaps in average employment income between Indigenous and non-Indigenous workers with post-secondary training are smaller than for without this level of training. But despite these facts, the post-secondary completion rate gap is widening in all but two provinces.

Table 12: Change in Post-Secondary Completion Rate Gap from 2016 to 2021

|  |  |  |  |
| --- | --- | --- | --- |
| **Province** | **Post-Secondary Completion Rate Gap in 2016 (percentage points)** | **Post-Secondary Completion Rate Gap in 2021 (percentage points)** | **Direction** |
| BC | 16.1 | 18.2 | Worsening |
| AB | 18.1 | 18.4 | Worsening |
| SK | 18.5 | 19.7 | Worsening |
| MB | 19.7 | 21.4 | Worsening |
| ON | 12.0 | 13.5 | Worsening |
| QC | 11.3 | 12.6 | Worsening |
| NB | 6.1 | 7.6 | Worsening |
| NS | 4.5 | 7.7 | Worsening |
| PE | 12.1 | 10.8 | Improving |
| NL | 2.3 | 2.2 | Improving |
| YK | 21.9 | 24.3 | Worsening |
| NT | 33.5 | 33.9 | Worsening |
| NU | 53.7 | 55.8 | Worsening |

Post-secondary completion rate gaps are smallest in the Atlantic provinces, but concerningly large in all other provinces and territories. For example, the post-secondary completion rate was 32.2% among the Indigenous population, but 21.4 percentage points higher among the non-Indigenous population at 53.6%, based on Census 2021 data. This is important to note, because Census 2021 data also indicates that Indigenous workers in Manitoba that have completed an apprenticeship or trade certificate or diploma earn average employment income only 3.3% below non-Indigenous workers with this level of training; and Indigenous workers in Manitoba that have completed a university certificate, diploma or degree at the bachelor level or above actually earn average employment incomes that are 1.7% higher than non-Indigenous workers with this level of training.

1. Please see <https://www150.statcan.gc.ca/n1/en/pub/13-604-m/13-604-m2022001-eng.pdf?st=pRVB9EqJ>. [↑](#footnote-ref-1)
2. The study also stated, “Every year prior to the COVID-19 pandemic, Indigenous GDP experienced growth, from $41.7 billion in 2012 to $54.1 billion in 2019. In 2020, the pandemic caused a 9.5% decline in GDP values. [↑](#footnote-ref-2)
3. Please see <https://scoinc.mb.ca/wp-content/uploads/2021/07/Indigenous-Economy-Report-wcag.pdf>. [↑](#footnote-ref-3)
4. Please see <https://www.apcfnc.ca/economic/research-reports/> or <https://www.atlanticaenergy.org/wp-content/uploads/2023/12/Atlantic-Economic-Council-Indigenous-Economic-Impact-Presentation.pdf>. [↑](#footnote-ref-4)
5. Please see <http://www.naedb-cndea.com/reports/naedb_report_reconciliation_27_7_billion.pdf>. [↑](#footnote-ref-5)
6. This paper relies on Census 2021 data from Statistics Canada, which uses the Statistics Canada definition of Indigenous (i.e. self-reporting on Census response). Other work of the NIEDB may use a different definition of Indigenous. It is our understanding that the NIEDB’s Indigenous Economic Progress Report uses what is known as the Indigenous Services Canada definition of Indigenous. [↑](#footnote-ref-6)
7. Please see StatsCan’s Comparability of estimates from the 2016 Census long-form questionnaire with estimates from the 2011 National Household Survey at <https://www12.statcan.gc.ca/census-recensement/2016/ref/98-304/98-304-x2016001-eng.pdf> (p. 28) for more discussion. [↑](#footnote-ref-7)
8. A Statistics Canada document called “Appendix 1.4 – Impact of the COVID-19 pandemic” within Statistics Canada’s “Guide to Census of Population, 2021” provides a short summary of some of the impacts of the pandemic on the census process from content, to collection, to analysis, to dissemination. [↑](#footnote-ref-8)
9. CBC News, Federal department questioned quality of 2021 Indigenous census data: documents, Stephanie Taylor, The Canadian Press, April 13, 2022. [↑](#footnote-ref-9)
10. See “Labour Shortage Trends in Canada,” Statistics Canada, 2022 and “Job vacancies, first quarter 2023,” Statistics Canda; released 2023-06-20. [↑](#footnote-ref-10)
11. For just a small sample, please see CBC News, “Where have all the workers gone? Don’t blame COVID, economists say” (<https://www.cbc.ca/news/canada/ottawa/ottawa-workers-covid-retirements-1.6529325>); the Globe and Mail, “Canada’s labour shortage is the country’s greatest economic threat” (<https://www.theglobeandmail.com/business/commentary/article-canadas-labour-shortage-is-the-countrys-greatest-economic-threat/>); CTV News, “Labour shortage: Food, hotel industries continue to be hardest hit by lack of workers” (<https://www.ctvnews.ca/business/labour-shortage-food-hotel-industries-continue-to-be-hardest-hit-by-lack-of-workers-1.5960328>); Canadian Business, “Canadian Businesses Are Risking Revenue Due to Labour Shortages” (https://www.canadianbusiness.com/ideas/canadian-businesses-labour-shortages/) Financial Post, “Labour shortage leading to cancelled projects in ‘superheated’ construction sector” (<https://financialpost.com/fp-work/labour-shortages-leading-to-cancelled-projects-in-superheated-construction-sector>); and RBC Economics, “Proof Point: Canada’s labour shortages will outlive a recession” (<https://thoughtleadership.rbc.com/proof-point-canadas-labour-shortages-will-outlive-a-recession/>). [↑](#footnote-ref-11)
12. Statistics Canada, Table 17-10-0005-01. [↑](#footnote-ref-12)
13. Statistics Canada, video – Canada’s shifting demographic profile, May 2022. [↑](#footnote-ref-13)
14. Statistics Canada, Catalogue Number 98-510-X2021001. [↑](#footnote-ref-14)
15. Statistics Canada, Catalogue Number 98-510-X2021001. [↑](#footnote-ref-15)
16. Statistics Canada, The Daily, “Indigenous population continues to grow and is much younger than the non-Indigenous population, although the pace of growth has slowed,” released 2022-09-21. [↑](#footnote-ref-16)
17. For comparison, there were less than 0.8 non-Indigenous people age 15-24 (the ‘entering the workforce’ age) for every one non-Indigenous person age 55-64 (the ‘exiting the workforce’ age), based on Census 2021 data. [↑](#footnote-ref-17)
18. Statistics Canada, Projections of the Indigenous populations and households in Canada, 2016 to 2041. [↑](#footnote-ref-18)
19. Statistics Canada, Projections of the Indigenous populations and households in Canada, 2016 to 2041. [↑](#footnote-ref-19)
20. Statistics Canada, Projections of the Indigenous populations and households in Canada, 2016 to 2041. [↑](#footnote-ref-20)
21. A recent study by the Atlantic Provinces Economic Council (APEC) identifies closing the employment gap for Indigenous youth as a key component in the strategy to address the labour shortage. See APEC’s “Atlantic opportunities and Prospects for Indigenous Youth” from July 2022. [↑](#footnote-ref-21)
22. Based on Statistics Canada Table 14-10-0365-01, for the population age 15 years and over. [↑](#footnote-ref-22)
23. Based on Statistics Canada Table 14-10-0365-01, for the population age 15 years and over. [↑](#footnote-ref-23)
24. Based on Statistics Canada Table 14-10-0365-01, for the population age 15 years and over. [↑](#footnote-ref-24)
25. Based on Statistics Canada Table 98-10-0281-01 for 2021 data and Catalogue Number 98-400-X2016170 for 2016 data. [↑](#footnote-ref-25)
26. Based on Statistics Canada Table 98-10-0281-01 for 2021 data and Catalogue Number 98-400-X2016170 for 2016 data. [↑](#footnote-ref-26)
27. The low income measure, sometimes called LIM, is a very commonly used, internationally comparable measure of low income. The LIM threshold is a fixed percentage (set at 50%) of the median after-tax-income, adjusted for household size. [↑](#footnote-ref-27)
28. Based on Statistics Canada Catalogue Number 98-510-X2021001 for 2021 data and Catalogue Number 98-400-X2016173 for 2016 data. [↑](#footnote-ref-28)
29. Statistics Canada Table 98-10-0291-01. [↑](#footnote-ref-29)
30. Statistics Canada Catalogue Number 98-400-X2016264. [↑](#footnote-ref-30)
31. The third core indicator examined in the Indigenous Economic Progress Report is well-being. Entrepreneurship and business development, governance, lands and resources, and infrastructure are the other four underlying indicators examined in the Indigenous Economic Progress Report. [↑](#footnote-ref-31)
32. Please see the NIEDB’s 2019 Indigenous Economic Progress Report at <http://www.naedb-cndea.com/wp-content/uploads/2019/06/NIEDB-2019-Indigenous-Economic-Progress-Report.pdf>. [↑](#footnote-ref-32)
33. Statistics Canada, Catalogue Number 98-400-X2016178. [↑](#footnote-ref-33)
34. Based on Statistics Canada table 98-10-0291-01. [↑](#footnote-ref-34)
35. This section of the report has presented 2016 and 2021 data and compared economic outcome statistics for the Indigenous and non-Indigenous populations. It is interesting to note, that between 2016 and 2021, of the eight economic outcome gaps presented, the gap between the Indigenous and non-Indigenous populations narrowed in five cases (unemployment rate, employment rate, labour force participation rate, average employment income, and prevalence of low income) and was actually eliminated in one (average employment income among workers who completed post-secondary training). [↑](#footnote-ref-35)
36. Another part of the strategy is to increase economic opportunities for Indigenous Canadians which could be partially addressed through better, faster additions to reserves (see NIEDB’s reports, *Improving the Economic Success of Urban Additions to Reserves*). [↑](#footnote-ref-36)
37. Please see Appendix C for data on post-secondary completion rate gaps by province. [↑](#footnote-ref-37)
38. Statistics Canada, Table 98-10-0281-01. [↑](#footnote-ref-38)
39. Based on Census 2021 data, the employment rate among the Indigenous population in Newfoundland and Labrador was 47.6%, while the rate among the non-Indigenous population was 47.5%. In this case, there is a very small negative gap, where the Indigenous labour force has achieved a better employment rate than the non-Indigenous labour force. The size of the very small negative gap, displayed in the table as 0.0% due to decimal place limitations, is actually 0.026%. For the Indigenous labour force to have the same employment rate as the non-Indigenous labour force, there would need to be ten fewer employed Indigenous workers. It is very important to note that adjusting investments in education and training in Newfoundland and Labrador to encourage fewer Indigenous workers is highly unlikely, and certainly not the point to take from this work. Simply to maintain methodological consistency among all provinces and territories, and only for this reason, the analysis here does include a negative impact on employment income associated with these ten fewer Indigenous workers (a reduction of about $450k in estimated employment income). [↑](#footnote-ref-39)
40. Based on Census 2021 data, the employment rate among the Indigenous population in Newfoundland and Labrador was 47.6%, while the rate among the non-Indigenous population was 47.5%. In this case, there is a very small negative gap, where the Indigenous labour force has achieved a better employment rate than the non-Indigenous labour force. The size of the very small negative gap, displayed in the table as 0.0% due to decimal place limitations, is actually 0.026%. For the Indigenous labour force to have the same employment rate as the non-Indigenous labour force, there would need to be ten fewer employed Indigenous workers. It is very important to note that adjusting investments in education and training in Newfoundland and Labrador to encourage fewer Indigenous workers is highly unlikely, and certainly not the point to take from this work. Simply to maintain methodological consistency among all provinces and territories, and only for this reason, the analysis here does include a negative impact on employment income associated with these ten fewer Indigenous workers (a reduction of about $450k in estimated employment income). [↑](#footnote-ref-40)
41. GDP, a nation’s economic snapshot or size of its economy, is a measure of the value of all goods and services produced domestically in a specified time period. GDP is a key guide tool often cited by policymakers. [↑](#footnote-ref-41)
42. It is not ideal to mix Census 2021 data for average employment income and employment rate with 2019 multiplier data. This is simply a minor limitation of this work owing to data availability. However, due to the relative stability of multiplier data over time, this is not a consequential issue, in our opinion, and should not negatively impact the key findings of this analysis. [↑](#footnote-ref-42)
43. This approach assumes a consistency between labour income and employment income. [↑](#footnote-ref-43)
44. Statistics Canada Table 36-10-0113-01. Input-Output Multipliers, Summary Level, Provincial and Territorial. [↑](#footnote-ref-44)
45. A simple multiplier is the sum of the direct and indirect multipliers. Direct impacts are those directly associated with the activities involved in the production of the additional output. This includes expenditures on labour, materials, supplies, etc. directly associated with the increase in output (i.e. processes of making those products or services that account for the increase in output). Indirect impacts are often thought of as the second round of impacts. These include additional expenditures made by the array of businesses supplying goods and services to those enterprises directly responsible for the production of additional output, that would not have otherwise occurred. This includes suppliers’ expenditures on labour, materials, supplies, services, etc. required to meet the demand associated with those initial enterprises that are directly responsible for the additional output. [↑](#footnote-ref-45)
46. When GDP is measured at basic prices, taxes and subsidies are excluded. [↑](#footnote-ref-46)
47. This means for every $1 increase in output, GDP (at basic prices) would be expected to increase by ¢80.0 and labour income would be expected to increase by ¢47.4. [↑](#footnote-ref-47)
48. This is sum of the estimates previously described, including $1,349,318,500 (the estimated increase in employment income among already employed Indigenous workers, resulting from closing the average employment income gap) and $717,597,521 (the estimated increase in employment income associated with newly employed Indigenous workers, resulting from closing the employment rate gap). [↑](#footnote-ref-48)
49. The Conference Board of Canada in partnership with Future Skills Centre, Lost Opportunities – Measuring the Unrealized Value of Skill Vacancies in Canada. March 2, 2022. [↑](#footnote-ref-49)
50. This analysis uses the low income measure, which is a relative measure of low income. With this indicator, a household is considered to be living in low income if its income is below 50% of the median household income. Many countries report low income on this basis. [↑](#footnote-ref-50)
51. This was found by applying the portion of non-Indigenous people living in low income (9.9%) to the Indigenous population in Ontario (406,585), which yields 40,337 people. There were however, 69,030 Indigenous people living in low income in Ontario, based on the 2021 data. The difference is 28,693 people. This is the number of Indigenous people in Ontario required to no longer be living in low income to achieve parity with the non-Indigenous population. [↑](#footnote-ref-51)
52. In 2008, working with the Ontario Association of Food Banks, Nathan Laurie estimated the costs to all governments of poverty in Ontario. The prior NIEDB report from 2016 used Laurie’s estimates. Since that time, a cost of poverty study has been commissioned in almost every province and territory. As this work advanced, through each of these studies, improvements and enhancements were made or recommended to Laurie’s original methodology. In 2020, Charles Plante wrote a paper entitled, ‘How to Calculate the Costs of Poverty in Canada: Comment on the Nathan Laurie Approach and Recommended Improvements.’ In this paper, Plante follows an improved methodology and estimates the cost of poverty in Canada in 2020. The first component of Plante’s methodology estimates the direct costs to governments associated with treating the damage caused by poverty. Specifically, his methodology looks at the added health care system costs and added criminal justice system costs attributable to poverty. The methodology utilized in the current NIEDB study uses estimates for Canada from Charles Plante’s work. This is a departure from the methodology followed in the NIEDB’s 2016 report, following the improvements in approaches in these cost of poverty studies, and utilizing the most recently available estimates. The methodology for the current NIEDB study takes Plante’s estimated costs and calculates a cost of poverty per person living in low income. This is an estimate of direct costs borne by all governments, attributable to poverty, associated with added expenditures on the health care and criminal justice systems. This estimate was then adjusted to 2021 dollars using national CPI. [↑](#footnote-ref-52)
53. Based on Census 2021 data, the prevalence of persons living in low income among the Indigenous population in Newfoundland and Labrador was 14.8%, while the rate among the non-Indigenous population was 04 percentage points higher at 15.2%. In this case, there is a small negative gap, where the Indigenous population has achieved a better poverty rate than the non-Indigenous population. For the Indigenous population to have the same prevalence of low income as the non-Indigenous population, there would need to be 178 more Indigenous people living in low income in the province. It is very important to note that adjusting policies and investments to increase the number of Indigenous persons living in low income is certainly not the point to take from this work. Simply to maintain methodological consistency among all provinces and territories, and only for this reason, the analysis here does include an increase in expenditures of all governments associated with 178 additional people living in low income in Newfoundland and Labrador. This lowers the estimate of fiscal savings by about $393,000. [↑](#footnote-ref-53)
54. Including First Nation workers residing off reserve, and Metis and Inuit workers. [↑](#footnote-ref-54)
55. Fraser Institute, Fraser Research Bulletin, The Canadian Tax Index, 2023 Edition. [↑](#footnote-ref-55)
56. Please see StatsCan’s Comparability of estimates from the 2016 Census long-form questionnaire with estimates from the 2011 National Household Survey at <https://www12.statcan.gc.ca/census-recensement/2016/ref/98-304/98-304-x2016001-eng.pdf> (p. 28) for more discussion. [↑](#footnote-ref-56)
57. Section #2 of the Interpretation of Estimates section describes the differences between the NIEDB’s current potential economic impact estimate and the prior estimate to keep in mind. It explains that although tempting to draw comparisons, estimates should, at a minimum, be adjusted for inflation and for population change.  
    However, gap comparisons in this appendix are possible because the datasets – Census 2016 and Census 2021 – use similar methodologies, but the data quality considerations related to the COVID-19 pandemic described in Appendix B should still be kept in mind. Further, adjustments for inflation aren’t necessary, because average employment income gaps are described within this appendix in terms of a percentage (rather than nominal dollars) of the average employment income of non-Indigenous workers. [↑](#footnote-ref-57)