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THE HUMAN DEVELOPMENT INDEX IN  
CANADA: RANKING THE PROVINCES AND  
TERRITORIES INTERNATIONALLY, 2000-2014

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# **The Human Development Index in Canada: Ranking the Provinces and Territories Internationally, 2000-2014**

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## **Abstract**

We develop internationally comparable estimates of the Human Development Index (HDI) for the Canadian provinces and territories over the 2000-2014 period. The HDI is a composite index composed of three dimensions (life expectancy, education and income) measured by four indicators (life expectancy at birth, average years of education, expected years of schooling and GNI per capita). We first replicate the Canadian estimates from the most recent Human Development Report (HDR) using data from Statistics Canada. Next, we generate estimates for the provinces and territories following the same methodology and using the same Canadian data sources. We make these estimates internationally comparable by scaling each province or territory's estimate to Canada's in the most recent HDR. This allows the provinces and territories to be ranked in the most recent HDR international rankings for all four component variables as well as the overall HDI. The highest HDI score in 2014 among the provinces and territories belongs to Alberta, which would be fourth in the international rankings, while the lowest ranking region is Nunavut, which would be in 46th place. Overall, our report highlights the diverse human development experiences of Canadians that are concealed by Canada's overall HDI.

# The Human Development Index in Canada: Ranking the Provinces and Territories Internationally, 2000-2014

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# The Human Development Index in Canada: Ranking the Provinces and Territories Internationally, 2000-2014

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## Executive Summary

The Human Development Index (HDI) is an internationally recognized measure of socio-economic well-being. It is a composite index composed of three dimensions: life expectancy, education and income. In the most recent Human Development Report (HDR) produced by the United Nations Development Program, life expectancy is measured by life expectancy at birth, education is measured by average educational attainment and expected years of schooling, and income is measured by Gross National Income (GNI) per capita. Although the HDI is by no means a comprehensive measure of human development, it is a substantial improvement over the standard income-based metrics.

Canada falls into an impressive ninth place in the international 2014 HDI rankings published in the most recent HDR. However, this ranking hides significant regional variations among the Canadian provinces and territories. This report aims to calculate an internationally comparable HDI for each of the Canadian provinces and territories in order to evaluate their respective levels of human development relative not only to each other and the Canadian average, but also to the rest of the world.

To estimate the provincial and territorial HDIs, the Centre for the Study of Living Standards (CSLS) employs data sources that allow a breakdown by province and territory and used the methodology of the most recent HDR to replicate the estimates:

- In terms of the HDI, Alberta ranked first among the provinces and territories in 2014 and Nunavut last;
- For life expectancy, British Columbia was the top jurisdiction and Nunavut again ranked last;
- For average educational attainment, Yukon ranked first while Nunavut ranked last;
- For expected years of schooling, Quebec ranked at the top and Nunavut came in last;
- For GNI per capita, the Northwest Territories ranked first and Prince Edward Island came last.

Using internationally comparable index values for the Canadian provinces and territories, we can then rank the provinces against the index values of other countries. Of the 188 countries in the most recent HDR rankings, Canada's provinces and territories ranked between:

- Fourth and 46th place in overall HDI;
- Sixth and 103<sup>rd</sup> in life expectancy;
- First and 35<sup>th</sup> in average educational attainment;
- 14<sup>th</sup> and 107<sup>th</sup> in expected years of schooling;
- Third and 34<sup>th</sup> in GNI per capita.

Although most Canadian provinces and territories achieve impressive ranks in the international context, evidently Canada's overall HDI masks substantial variation among the different regions. For example, according to overall HDI Canadians living in Alberta enjoy a quality of life similar to that of Switzerland or Denmark while Canadians in Nunavut face a quality of life similar to Latvia or Croatia.

All provinces and territories experienced improvements in the HDI between 2000 and 2014, with the HDI in advancing between 0.3 per cent per year and 0.6 per cent per year. The two jurisdictions with the greatest improvement were Newfoundland and Labrador and Nunavut, which experienced HDI growth of 0.58 per cent per year and 0.50 per cent per year respectively. This fast growth boosted Newfoundland and Labrador from eleventh to sixth place among the Canadian provinces and territories. On the other hand, despite its rapid HDI growth, Nunavut remained the lowest ranked jurisdiction in both 2000 and 2014.

There is some evidence of convergence in the HDI as three of the regions with the highest HDI in 2014 (Alberta, Ontario, and British Columbia) had below average growth in the HDI between 2000 and 2014, while the three bottom ranked regions (Nunavut, Prince Edward Island, and New Brunswick) had above average growth in the HDI.



# The Human Development Index in Canada: Ranking the Provinces and Territories Internationally, 2000-2014<sup>1</sup>

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## Introduction

The Human Development Index (HDI) is an internationally recognized measure of socio-economic well-being. It was first published by the United Nations Development Program (UNDP) in 1990 and estimates of the HDI have been released on an annual basis ever since.<sup>2</sup> The HDI has become a popular tool, particularly because its simple structure facilitates international comparisons of human development and well-being. The most recent Human Development Report contains HDI estimates for 188 of the 193 member countries of the United Nations.

Canada falls into an impressive ninth place in the international HDI rankings of the 2015 Human Development Report (HDR), which reports results up to 2014. However, this ranking glosses over regional variations among the Canadian provinces and territories. An earlier CSLS research report by Hazell *et al.* (2012) calculated an internationally comparable HDI for the provinces and territories in order to compare their respective levels of human development not only with each other and the Canadian average, but also with the rest of the world. This report reprises the work of Hazell *et al.* to update their findings.

This report is divided into three major sections. In the first section, the Human Development Index is discussed. Next, the Centre for the Study of Living Standards (CSLS) replicates the estimates for Canada in the three dimensions of the HDI (life expectancy, education and income) published in the most recent HDR. The difficulties in precisely matching these numbers are also discussed. Finally, the provincial and territorial HDIs are calculated for the 2000-2014 period and the ranking results are discussed. These estimates as well as estimates for the pre-2000 period for all variables are provided in the Appendix Tables at the end of this paper.

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<sup>1</sup> The author is an economist at the CSLS. Comments on the report are welcome and should be sent to Andrew Sharpe at [andrew.sharpe@csls.ca](mailto:andrew.sharpe@csls.ca) or James Uguccione at [james.uguccioni@csls.ca](mailto:james.uguccioni@csls.ca). The CSLS thanks the Government of Alberta for financial assistance for data development.

<sup>2</sup> All of the twenty-five annual HDR reports, containing estimates for HDI in each respective year, are available on the UNDP website. The most recent report is available at <http://hdr.undp.org/en/2015-report>.

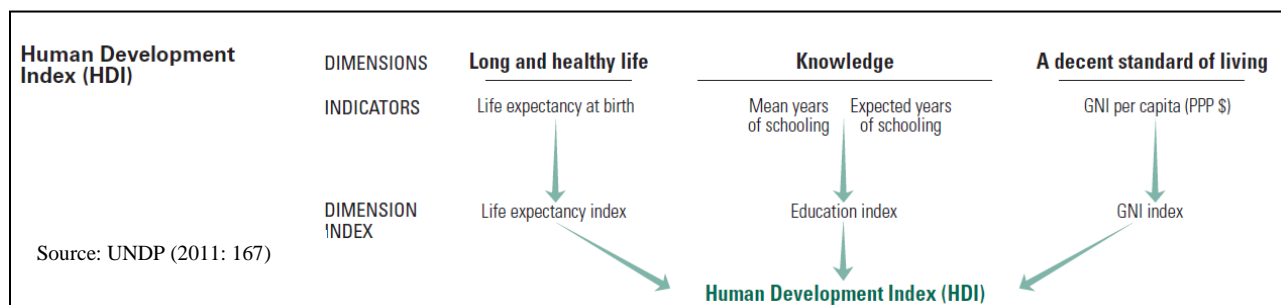
## I. The Human Development Index

In the past two decades, the HDI has become a common tool for evaluating the level of human development in a country or a region. Its popularity has arisen for two main reasons. First, it captures more elements which encompass quality of life than standard income measures do, namely education and life expectancy. In this sense, it presents a broader measure of human development than GDP per capita or other common measures of income and consumption. Second, it is relatively easy to calculate and has minimal data requirements, allowing it to be calculated for many developing countries. Thus, it is particularly useful for international comparisons of human development and well-being.

However, this measure of human development is not without its weaknesses. Its primary failing is that it only considers three elements of economic well-being: education, life expectancy and income. It does not take into account other critical elements of well-being such as income inequality, gender inequality, morbidity, political freedom, civil liberties, corruption, pollution, or economic security. To address this shortcoming, the most recent HDR supplements its HDI estimates with additional information on human development, including estimates of an Inequality-adjusted HDI, a Gender Development Index, a Multidimensional Poverty Index and data on environmental sustainability, human development effects of environmental threats, and perceptions about well-being and the environment, in addition to more detailed health and education statistics. Indeed, the authors of the HDR reports emphasize that the HDI alone is not a complete description of human development.

Still, the HDI is a very useful tool, particularly because it is easily understood and widely used owing to its simple structure. Moreover, the UNDP is a high profile organization with significant reach across the world. As noted, the HDI is a composite index composed of three dimensions: life expectancy, education, and income. In the most recent HDR, life expectancy is measured by life expectancy at birth, education is measured by average educational attainment in years and expected years of schooling, and income is measured by Gross National Income (GNI) per capita. Exhibit 1, taken from the 2011 HDR, illustrates the fundamental structure of the HDI.

**Exhibit 1: Structure of the Human Development Index**



Before estimating the provincial and territorial HDIs, it is important to understand not only how the HDI is constructed, but also how the most recent HDR differs from

earlier reports. This is particularly important because the 2010 report instituted major changes in how the HDI is calculated in response to the concerns of researchers in economic development.<sup>3</sup>

The HDI estimates in the most recent HDR are calculated in the following manner. First, the estimates for the life expectancy, average educational attainment, expected years of schooling and GNI per capita data for each country are scaled into indices using the following equation:

$$Index = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}} \quad (1)$$

The maximum and minimum values for each dimension are taken from the most recent HDR, and follow a simple rationale. The minimum values are based on the concept of subsistence, that is, they are set at the lowest value needed in that indicator for a society to function, or, in the case of income, the lowest value in recorded history. The maximum values are set as “aspirational goals” which allow for this standardization to take place.<sup>4</sup>

The life expectancy index calculation is a straightforward application of equation (1), while the income index requires taking the natural logarithm (ln) of each income statistic before applying it in equation (1). The education index is slightly more complicated to calculate, as it involves creating two sub-indices and then combining them to create the dimension index. The two education sub-indices are constructed for mean years of schooling and expected years of schooling, respectively, using equation (1). The education index is then created by taking the arithmetic mean of the two sub-indices. Notably, prior to the 2014 HDR the education index was created by taking the geometric mean of the two sub-indices and rescaling the number that results by using the maximum and minimum values listed for this purpose in the technical notes of the HDR (e.g. the technical notes of the 2013 HDR).<sup>5</sup>

The HDI itself is calculated as the geometric mean<sup>6</sup> of the three indices already discussed, i.e.:

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<sup>3</sup> For critiques of earlier versions of the HDI, see Srinivasan (1994), Sagar and Najam (1998) and McGillivray (1991). As a result of the changes, HDI estimates presented in HDR reports from 2010 onwards are not comparable to those published in previous HDR reports, but represent an improvement in methodology in many respects. Naturally, the current methodology has been used to generate estimates prior to 2010 which are comparable to the current methodology.

<sup>4</sup> **Life Expectancy:** minimum=20.0 years based on long-run historical evidence from Maddison (2010) and Riley (2005), maximum=85.

**Education:** minimum=0 years for both average educational attainment and expected years of schooling since survival is possible without education, maximum=15 years for average educational attainment and maximum=18.0 years for expected years of schooling.

**Income** (PPP adjusted 2011 US\$): maximum= \$75,000 per capita as Kahneman and Deaton (2010) showed that there is essentially no gain in human development and well-being beyond an annual income of \$75,000, minimum= \$100.

For more information see *Technical notes* in the most recent HDR

<sup>5</sup> Available at: [http://hdr.undp.org/sites/default/files/hdr\\_2013\\_en\\_technotes.pdf](http://hdr.undp.org/sites/default/files/hdr_2013_en_technotes.pdf).

<sup>6</sup> A geometric mean is calculated by multiplying  $n$  numbers and then taking the  $n^{\text{th}}$  root of that product. The HDI used to be calculated with an arithmetic mean (or average), which is the sum of  $n$  numbers divided by  $n$ . This was changed because geometric means allow less substitutability between measures or dimension indices, so poor performances in one

$$HDI = I_{life}^{1/3} \times I_{education}^{1/3} \times I_{income}^{1/3}$$

This results in a number between 0 and 1, where 1 represents the highest possible human development score. A country achieves a score of 1 only if it matches the highest observed outcomes to date in all categories. The highest HDI score for 2014 belongs to Norway (0.944), and the lowest belongs to Niger (0.348) (Appendix Table 17).

This methodology of the post-2010 HDR reports departs from prior reports in three main ways.

- First, the education index is constructed using average educational attainment and expected years of schooling, instead of literacy and the gross enrolment rate (which combines primary, secondary and tertiary enrolment rates), to offer a more complete picture of education.
- Second, income per capita is measured by GNI per capita instead of Gross Domestic Product (GDP) per capita. This switch occurred because GDP measures the amount produced in a country without capturing where the income from this production goes. In contrast, GNI reflects the income of the residents of a country regardless of where the income is generated, and is therefore a better measure of domestic purchasing power than GDP.
- Finally, the geometric mean has replaced the arithmetic mean for calculating the overall index. This reduces the substitutability of improvements across measures, so a country cannot linearly trade off performing poorly in one dimension by performing well in another. In other words, a country cannot receive a very high human development score without impressive scores in all dimensions.

One criticism that remains of the HDI is the arbitrarily determined equal weights applied to each dimension. Lind (2010) instead proposes a Calibrated Human Development Index (CDI) that employs revealed preferences to justify the weights applied to each dimension, and in doing so better reflects the relative roles of education and consumption in determining quality of life. However, the CDI is tailored to accurately rank highly developed countries, and in that way is not as useful for international comparisons as the original HDI.

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dimension is not linearly compensated for by better performances in other dimensions. For more information, see <http://hdr.undp.org/en/statistics/hdi/>.

## II. Replicating the most recent HDR's Estimates for Canada

In order to develop an internationally comparable HDI for the Canadian provinces and territories, the CSLS sought to employ methodologies and data sources that were as consistent as possible with those used in the most recent HDR. We use Statistics Canada data that have national, provincial, and territorial estimates for each indicator, and used these data first to replicate the official HDI results for Canada and then to develop estimates for the provinces and territories using the same methodology. This section will outline the process of replicating the most recent HDR official estimates for life expectancy, education (which includes both average educational attainment and expected years of schooling) and income for Canada. The difficulties in precisely matching the most recent HDR results are also discussed.

### A. Life Expectancy

In the most recent HDR, Canada's life expectancy at birth was estimated to be 82.0 years for 2014, which ranked at 12<sup>th</sup> place internationally. The source given for the HDR's estimate is the *World Population Prospects Database* (United Nations Department of Economic and Social Affairs (UNDESA), 2015), which states that life expectancy at birth is "based on official estimates of life expectancy available through 2009," where "the age pattern of mortality is based on life tables through 2007 from the Human Mortality Database."

**Table 1: Life Expectancy at Birth, Canada, 1980, 1990, 2000-2014**

Year	UNDP – HDR	Statistics Canada
1980	75.0	75.2
1990	77.2	77.6
2000	79.1	79.4
2001	-	79.6
2002	-	79.7
2003	-	79.9
2004	-	80.2
2005	80.1	80.4
2006	80.3	80.8
2007	80.5	80.9
2008	80.6	81.0
2009	80.8	<b>81.4</b>
2010	81.0	<i>81.6</i>
2011	81.2	<i>81.8</i>
2012	81.3	<i>82.0</i>
2013	81.5	<i>82.2</i>
2014	82.0	<i>82.4</i>

**Sources:** The UNDP - HDR data taken from the International Human Development Indicators website (<http://hdr.undp.org/en/69206>). Statistics Canada data from CANSIM Table 102-0025 for 1980 and 1990, Table 102-0511 for 2000-2006; Table 102-0512 for 2007-2009; the italicized values (2010-2014) are estimated by the CSLS by applying the compound annual growth rate for 1991-2009 (0.25 per cent) to each year.

Note: Statistics Canada modified their life expectancy at birth methodology to include three years of data with CANSIM Table 102-0512. An annual time series can be derived from these data.

Statistics Canada’s official estimates of annual Canadian life expectancy are available for 1979-2009, and they are very similar to the estimates in the most recent HDR, as shown in Table 1. While the two estimates differ due to rounding, the possibility of minor data revisions by Statistics Canada since the data were extracted by UNDESA, and the forecasting methods employed by UNDESA after 2009, the differences are miniscule. Both sets of estimates show that Canada had a life expectancy of around 82 years in 2014 (Table 1).<sup>7</sup>

## **B. Education**

As mentioned earlier, the HDR reports following 2010 differ from all earlier reports in that the education indicators employed to generate the education index are average and expected years of schooling, instead of literacy and gross enrolment rates. These new measures of education are used because they offer a more complete picture of education. However, the estimates of average years of schooling, calculated using the Barro and Lee (2010) methodology, are difficult to replicate. In addition, the most recent HDR extrapolates expected years of school estimates from 2002 to generate their 2014 value. Although these new measures of education may represent an improvement in theory, employing them makes the HDI’s results difficult to replicate and the official estimates in the most recent HDR may not accurately reflect the situation of Canada’s educational attainment in 2014.

### **i. Average Educational Attainment**

Overall, Canada performs well in the category of average educational attainment relative to many other nations. According to the most recent HDR, Canadians aged 25 and over have obtained, on average, 13.0 years of schooling, or sixth place in the international rankings for this measure. This estimate of average years of schooling updates the Barro and Lee (2010) estimates using UNESCO (United Nations Educational, Scientific and Cultural Organization) Institute for Statistics data on educational attainment. The HDR estimates for 1980, 1990, 2000, 2005, and 2010 to 2014 are presented in Table 2.<sup>8</sup>

Although Barro and Lee (2010) do not describe how average educational attainment is calculated for Canada specifically, their general methodology is straightforward. They first multiply the duration of each schooling level in years by the proportion of individuals in different age brackets that have achieved that level as their highest level of schooling, where “level of schooling” refers to primary, secondary and tertiary (or post-secondary) schooling levels.<sup>9</sup> The age brackets used for the average education of those 25 and older are defined by 5 year intervals (i.e. 25-29, 30-34) until age 74, with the final age category being 75 and older. Summing these results across schooling levels for each age group yields the average schooling level for each age group. The

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<sup>7</sup> CSLS’s projected estimate of 82.4 years for 2014, which is estimated using historical growth rates, is 0.4 years above the most recent HDR’s estimate (82.0 years). Inserting CSLS’s estimate into the most recent HDR international life expectancy rankings would move Canada into eighth place, instead of its actual ranking of ninth place.

<sup>8</sup> In 2014, Barro and Lee last revised their estimates for average years of schooling in 2010. The revised dataset estimates that average educational attainment in Canada was 12.3 years in 2010.

<sup>9</sup> Specifically, 8 years for those with at most a primary education, 12 years for those with at most a secondary education, and 14 years for those with at most tertiary schooling.

average educational attainment for the entire population is then calculated by adding together these age group average educational attainments once they have been weighted by the share of that age group in the total population aged 25 and older.

**Table 2: Estimated Average Educational Attainment, Canada, Persons aged 25 and over, 1980-2014**

Year	UNDP – HDR	LFS data
1980	9.8	-
1990	10.0	10.5
2000	11.0	11.9
2005	12.2	12.2
2010	12.7	12.5
2011	13.0	12.5
2012	13.0	12.5
2013	13.0	12.6
2014	13.0	12.6

Notes: CSLS allocates 8 years for those with at most primary, 12 years for those with at most secondary and 14 years for those with tertiary schooling.

Sources: LFS data underlying the CSLS calculation from CANSIM Table 282-0004; HDR estimates can be found on the International Human Development Indicators website ([http://hdr.undp.org/sites/all/themes/hdr\\_theme/country-notes/CAN.pdf](http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/CAN.pdf)).

To develop an estimate of average years of schooling, the CSLS aggregates data on all educational attainment categories to create three broad schooling level categories, and allocates individuals into these categories according to the highest level of schooling they have attained, similar to what is done in Barro and Lee (2010). Individuals are considered to have attained a certain level of schooling only if they have a certificate or diploma indicating that they have completed that program. For example, an individual is placed in the secondary school category if they have a high school diploma or certificate but no certificates, diplomas or degrees from any further education, such as a university degree, regardless of whether they attended a post-secondary institution or not.<sup>10</sup> Individuals are placed in the primary schooling category if they do not have a high school certificate or diploma or if they have no formal education.<sup>11</sup>

However, an earlier publication by the same authors (Barro and Lee, 2001), which performs almost identical calculations, does state that duration data vary between countries and are taken from the UNESCO (United Nations Educational, Scientific and Cultural Organization) statistical year book for various years. Examining the data on duration of

<sup>10</sup> Calver (2015) discusses some of the issues with this methodology. First, there is the issue of completion of a degree – if an individual begins but does not complete some post-secondary program, none of their schooling is counted. Second, there is the issue of underassigning tertiary schooling. For example, suppose the most common form of post-secondary school in Country A is a two year program but in Country B it is a more rigorous four year program. If the two countries have the same completion rates for tertiary education, then Barro and Lee would estimate the same average educational attainment in the two countries. This is likely an issue in Canada, where 2011 National Household Survey data shows that 25.9 per cent of the population aged 25 to 64 had completed a university degree of some sort (corresponding to 15 years of schooling minimum). Calver uses microdata on the number of years an individual spent in school to avoid this problem. While this is likely not possible for the UNDP to do on a global scale, a better measure could use the sort of tertiary schooling completed (e.g. certificate, Bachelor’s, Masters) to avoid the latter source of mismeasurement.

<sup>11</sup> In 2014, Labour Force Survey data indicate that 15.2 per cent of Canadians aged 25 and over had not graduated from high school (in the primary schooling category, allocated 8 years of schooling), 24.9 per cent had graduated from high school or had attended some post-secondary schooling without completion (in the secondary schooling category, allocated 12 years), and 59.9 per cent had earned a post-secondary certificate or diploma or university degree (in the tertiary schooling category, allocated 14 years).

schooling available from the UNESCO Institute for Statistics (UIS) yields the following duration data for Canada: primary is 6 years, secondary adds another 6 years and post-secondary (tertiary) adds another 2 years.

It is therefore difficult to determine how many years of education should be allocated to those with at most primary schooling (i.e. those who did not complete secondary school). Although primary schooling is listed as lasting 6 years in UNESCO's 1999 Statistical Yearbook, schooling is mandatory in Canada up to at least the age of 16, for a total of 10 years (excluding kindergarten). Thus, 6 years of schooling allocated to those who do not complete high school will grossly underestimate their years of schooling. As recently as the 1970s, however, the school leaving age was still 15 in some provinces, so there are still some in the Canadian population today who have received no more than 8 years of formal schooling, ignoring the kindergarten years (Oreopoulos, 2006). Indeed, according to the LFS data, 17.1 per cent of those aged 65 and over had eight or fewer years of schooling in 2015. Therefore, the CSLS allocates those with at most the primary level of schooling 8 years of education. Secondary and tertiary education are more straightforward, and the years allocated follow the UIS duration data: those with at most secondary schooling are allocated 12 years, and those with tertiary are assumed to have 14 years of schooling.

The estimates of average years of schooling are presented in Table 2. The LFS-based CSLS estimates are surprisingly quite similar to those in the most recent HDR, reflecting the small share of Canadians who did not finish high school in the overall population. For the majority of the period, the LFS-based estimates are marginally higher than the corresponding HDR estimate, however in 2014 the HDR estimate of average years of schooling is 0.4 years higher than the LFS estimate.<sup>12</sup>

As average educational attainment is sensitive to the duration assumptions for each schooling level, it is worth checking the sensitivity of the results to alternate assumptions. One important test is to assign those with at most primary education 6 years of schooling, in line with UNESCO's definition, instead of the more realistic 8 years assumed by CSLS. When those with at most primary education are assigned 6 years of schooling, the data from the census gives estimates of 11.1 years in 2001 and 11.9 years in 2006 for those 25 and older. The LFS data similarly yield estimates of 11.4 years in 2000, 11.8 years in 2005, 12.2 years in 2011, and 12.3 years in 2014. These estimates are much closer to the results of Barro and Lee (2014) than are the first set of CSLS estimates: 12.2 years in 2011 from LFS exceeds Barro and Lee's estimate (12.1 years) by only 0.1 years. Since the assumption of 6 years of primary education is not realistic given the Canadian context, CSLS will employ the original assumption of 8 years.

The validity of CSLS's estimates is confirmed by Cohen and Soto (2007). This paper estimates average years of schooling by employing data from surveys published by UNESCO and from an OECD database on educational attainment. Despite using the same UNESCO data source as Barro and Lee for their schooling duration assumptions, their

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<sup>12</sup> If the CSLS estimate using LFS data for Canada in 2014 (12.6 years) is inserted into the most recent HDR international rankings for average years of schooling, Canada would be in eighth place instead of ranking third.



results for Canada exceed those of both the CSLS and Barro and Lee for all available data years (11.7 years in 1990, 12.6 years in 2000, and 13.2 years in 2010).<sup>13</sup> Along with the higher estimates in the revised Barro and Lee dataset, this raises the concern that the most recent HDR may be overestimating Canada's average years of schooling relative to the rest of the world, although this issue is not directly relevant to this report. More importantly, although the CSLS results are not identical to Barro and Lee's results, it is clear that the CSLS estimates are not unreasonable or inconsistent with the literature.

## ii. Expected Years of Schooling

UNESCO Institute for Statistics (UIS) (2009) defines school-life expectancy, or expected years of schooling, as the "total number of years of schooling which a child of a certain age can expect to receive in the future, assuming that the probability of his or her being enrolled in school at any particular age is equal to the current enrolment ratio for that age." Thus, school-life expectancy is simply the sum of the enrolment rates of each age in a population, where the enrolment rate of a certain age is defined as the number of people of that age enrolled in formal schooling divided by the total population of that same age.

Canada's expected years of schooling for 2014 in the most recent HDR is 15.9 years, which places Canada in 26<sup>th</sup> place in the most recent HDR rankings for this indicator. The most recent HDR cites UNESCO as its data source for this measure. The HDR simply uses data on enrolment rates by age. The methodology used by the UNDP for estimating school life expectancy is described in the *UIS Educational Indicators: Technical Guidelines* (UIS, 2009), and this methodology will be followed here.

Unfortunately, the enrolment data for each age year are not publicly available in Canada. Thus two sets of estimates of expected years of schooling will be calculated using different data sources. The first will use administrative data on enrolment from Statistics Canada, and the second will employ school attendance estimates from the Labour Force Survey (LFS) for the population aged 15-29.

For the first set of estimates of expected years of schooling, administrative data on enrolment for 1996-2009 are taken from various versions of *Summary Public School Indicators for Canada, the Provinces and Territories*, a Statistics Canada publication. It should be noted that kindergarten students are included in this enrolment data, and cannot be separated out. Thus, this measure of expected years of schooling includes kindergarten while all other education measures (including expected years of schooling using LFS data) calculated in this paper do not. College and university enrolment data are taken from Statistics Canada's CANSIM database. The enrolment rate data can be seen in Appendix Table 7.

The CSLS calculates expected years of schooling by dividing the enrolment numbers for certain levels of education (primary and secondary, college, and university) by the total population of the age group most likely to be in that level of schooling

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<sup>13</sup> Data from Cohen and Soto (2007) can be found at <http://soto.iae-csic.org/Data.htm>.

(primary and secondary, including one year of kindergarten: 5-17 years old and university and college: 18-22 years old) to obtain the enrolment rate. It is assumed that enrolment below age 5 and above age 22 is zero.<sup>14</sup> For Canada in 2013, the most recent year for which enrolment rates for all schooling levels are available, primary and secondary school enrolment was 99.9 per cent of all those covered by the sample, college enrolment was 31.3 per cent, and university enrolment was 54.5 per cent.

These enrolment rates are then multiplied by the duration of each level (primary and secondary: 13 years (including one year of kindergarten), college: 2 years, university: 4 years) to obtain expected years of schooling. This method is by no means perfect, as many adults over age 22 enroll in secondary school or register in college or university programs and many students do not complete their programs. However, due to data limitations, this is the best approximation available.

It should be noted that the primary and secondary school enrolment data are only for publicly funded schools (including adult high schools), which account for approximately 93 per cent of Canadian students (Brockington, 2009). The exclusion of private school students results in lower enrolment rates in the primary and secondary school years and biases the estimates for expected years of schooling downwards.

The second set of estimates of expected years of schooling employs LFS data.<sup>15</sup> The LFS captures data on whether an individual is attending school (either full-time or part-time) during the regular school year (September to June) and organizes these data by age instead of level of education. Since LFS data on student status are only available for those aged 15-29 and the current school-leaving age is at least 16 in all Canadian provinces and territories, the assumption is made that 100 per cent of individuals between the ages of 6 and 14 attend school and zero per cent are enrolled below the age of 6. Enrolment over age 29 is also assumed to be zero due to lack of data beyond this age.

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<sup>14</sup> Naturally, if 85.8 per cent of individuals aged 18-22 are enrolled in some form of education, assuming the enrollment rate falls to zero at 23 is unrealistic. As such, our estimates ought to be understood to be lower bound. Our administrative estimates are purely for the sake of comparison.

<sup>15</sup> Expected years of schooling using LFS data is calculated using the data in Table 3. First, the per cent of people in school for each age group in a given year is multiplied by the number of years that age group represents (ie 15-19 is 5 years, 20-24 is 5 years and 25-29 is 5 years). These numbers are summed to obtain the expected year of schooling after age 15. Second, nine years are added to this number to approximate 100 per cent enrolment between ages 6-14 (inclusive), yielding the expected years of schooling for a child born in that year. For Canada in 2011, the calculation is as follows: Step 1:  $(5*0.837) + (5*0.419) + (5*0.142) = 6.99$ . Step 2:  $6.99 + 9 = 15.99$ . Thus, Canada's expected years of schooling result in 2011 is 15.99, rounded to 16.0 years.

Table 3: School Attendance by age group, Canada, 2000-2014

Year	Ages 15-19			Ages 20-24			Ages 25-29		
	Number of Students	Population	% in school	Number of Students	Population	% in school	Number of Students	Population	% in school
2000	1,685.7	2,046.9	82.4	757.2	2,021.2	37.5	247.0	2,023.5	12.2
2001	1,715.7	2,063.5	83.1	788.2	2,054.8	38.4	269.0	2,020.5	13.3
2002	1,716.3	2,074.3	82.7	807.8	2,086.3	38.7	271.9	2,032.0	13.4
2003	1,707.0	2,078.7	82.1	824.6	2,119.2	38.9	278.9	2,044.9	13.6
2004	1,715.4	2,092.6	82.0	856.2	2,150.9	39.8	284.9	2,068.1	13.8
2005	1,752.2	2,121.3	82.6	891.9	2,176.6	41.0	288.0	2,092.9	13.8
2006	1,784.3	2,151.8	82.9	876.4	2,194.2	39.9	292.5	2,125.5	13.8
2007	1,795.6	2,173.4	82.6	882.3	2,204.6	40.0	292.8	2,164.1	13.5
2008	1,800.3	2,192.3	82.1	866.4	2,210.9	39.2	297.7	2,211.6	13.5
2009	1,827.1	2,198.0	83.1	885.4	2,226.3	39.8	307.6	2,259.5	13.6
2010	1,835.8	2,191.3	83.8	938.4	2,252.4	41.7	313.1	2,293.7	13.7
2011	1,825.5	2,178.6	83.8	951.6	2,286.9	41.6	321.7	2,309.8	13.9
2012	1,799.0	2,153.9	83.5	1,012.4	2,336.0	43.3	321.7	2,327.9	13.8
2013	1,793.0	2,118.9	84.6	1,013.2	2,378.3	42.6	329.7	2,342.9	14.1
2014	1,753.2	2,076.0	84.5	1,013.2	2,398.1	42.3	317.2	2,366.4	13.4

**Note:** Number of students and population are given in thousands.

**Source:** CANSIM Table 282-0095. Territory data obtained by special request from Statistics Canada. Territorial values for 2012-2014 estimated using compound annual growth rate from 1992 to 2011 for Yukon, 2001 to 2011 for the Northwest Territories, and 2004 to 2011 for Nunavut.

Ideally, the number of individuals of each age (i.e. 15, 16, 17 ...) attending school would be used. However, these data are not publicly available from the LFS, which instead has attendance by age brackets. One problem with this method is that calculating expected years of schooling using a wide age bracket (i.e. 15-29) assumes that each age has a relatively similar number of individuals. Using narrower age brackets available from the LFS (15-19, 20-24 and 25-29) mitigates concerns about the age range's distributions of individuals. When the in-school rates for these three age brackets are multiplied by the number of years they represent (5 years each) and summed together, they represent the expected years of schooling remaining for someone aged 15 years of age and over. Adding nine to this number (to represent the 100 per cent enrolment from ages 6 to 14) yields the expected years of schooling.

Table 3 outlines the LFS data for those aged 15-29. In 2014, it is clear that the large majority (84.5 per cent) of youth aged 15-19 are in school, while the opposite is true for individuals aged 25-29 (just 13.4 per cent are in school). Not surprisingly, the 20-24 age group lies between these two extremes, with 42.3 per cent in school in 2011. These series have shown a slight upward trend since 2000.

**Table 4: Expected Years of Schooling, Canada, 1980, 1990, and 2000-2014**

Year	UNDP – HDR	LFS data	Administrative Data
1980	15.6	-	-
1990	16.7	14.8	-
2000	15.8	15.6	15.2
2001	-	15.7	15.2
2002	-	15.7	15.2
2003	-	15.7	15.2
2004	-	15.8	15.3
2005	15.9	15.9	15.2
2006	15.9	15.8	15.2
2007	15.9	15.8	15.2
2008	15.9	15.7	15.4
2009	15.9	15.8	15.6
2010	15.9	16.0	15.7
2011	15.9	16.0	15.7
2012	15.9	16.0	15.8
2013	15.9	16.1	-
2014	15.9	16.0	-

**Sources:** LFS data calculated using CANSIM Table 282-0095, HDR data can be found on the International Human Development Indicators Website (<http://hdr.undp.org/en/content/expected-years-schooling-children-years>),

The estimates of expected years of schooling using LFS data are presented in Table 4. The most recent HDR relies on UNESCO data (UNDP, 2015b). The CSLS estimates based on LFS data are closer to UNESCO’s estimates in 2000 and 2005 than the CSLS estimates based on administrative data. Our LFS-based estimate is 15.6 versus UNESCO’s 15.8 in 2000, and 15.9 years in 2005 compared to UNESCO’s 15.9. CSLS’s 2014 estimate using LFS data is also quite similar to the HDR estimate for 2014: 16.0 and 15.9 years respectively.

It is worth noting, however, that the most recent estimate available from UNESCO (2015) using the source provided in the HDR technical notes (UNDP, 2015b) for school-life expectancy is, surprisingly, for 2000.<sup>16</sup> Although all other indicators used in the HDI are projected forward in some way to obtain an estimate for 2014, the HDR assumes no growth after 2000 for expected years of schooling. The assumed lack of growth in this education measure from 2000 to 2014 may not accurately reflect the evolution of Canada’s skill base, especially since some growth is observed in the LFS and administrative data estimates by CSLS. However, CSLS’s estimates show that the growth in this indicator has been slow in recent years due to relatively stable enrolment rates in primary and secondary schools and colleges, so the error is likely small.

<sup>16</sup> Specifically, data on Canadian primary and secondary school enrollment from UNESCO is available until 2000 and from 2004 to 2013, but data on Canadian tertiary enrollment is only provided until 2000.

## C. Income

In the most recent HDR, Canada's Gross National Income (GNI) per capita for 2014 is \$42,155 in purchasing power parity (PPP) adjusted 2011 US dollars, the 20<sup>th</sup> highest of all nations with an HDI ranking. The most recent HDR uses GNI estimates and population data from the UN Statistical Division National Accounts Main Aggregates Database. While the GNI estimates match those reported by Statistics Canada, the population figures are slightly different. For the years lacking GNI estimates when the UNDP extracted data, projections were developed using information from the IMF's World Economic Outlook publications.

National accounts estimates from Statistics Canada state that in 2014 Canada's GNI per capita was \$54,674 in current Canadian dollars. This nominal GNI is then deflated by the gross final domestic expenditure implicit price index (2011=100), and adjusted by Canada's PPP in 2011.<sup>17</sup> This PPP adjustment simply translates constant 2011 Canadian dollars into a common unit used in international comparisons (2011 US dollars) so that the cost of a representative basket of goods in Canada will be the same as in the United States, given the exchange rate.<sup>18</sup> Canada's GNI estimate for 2011 in 2011 US PPP adjusted dollars is \$36,058. This estimate does differ somewhat from the projection used in the HDI, which is \$35,166 (Table 5).<sup>19</sup>

**Table 5: GNI per capita, PPP adjusted 2011 US dollars, Canada, 1990, 2000, 2005-2014**

Year	UNDP – HDR	CSLS			
	PPP adjusted 2011 USD	Current dollars	Gross final domestic expenditure, implicit price index 2011=100	2011 constant CAD	PPP adjusted 2011 USD
1990	29,231	24,122	67.8	35,585	29,749
2000	34,567	34,979	81.0	43,160	35,779
2005	38,660	43,048	89.1	48,327	41,465
2006	39,794	45,083	91.2	49,421	42,601
2007	40,150	47,139	93.4	50,486	43,418
2008	39,988	48,986	95.7	51,184	44,070
2009	38,343	45,804	96.5	47,443	40,184
2010	39,049	47,910	97.9	48,962	41,471
2011	41,333	50,561	100.0	50,561	42,825
2012	41,539	51,520	101.7	50,668	43,017
2013	41,887	53,040	103.3	51,362	43,555
2014	42,155	54,674	105.6	51,774	44,008

**Sources:** CSLS: Current dollar from CANSIM Table 380-0083, Implicit Price Index from CANSIM 380-0102, Canada's PPP for GDP in 2011 was 0.847 US dollars per Canadian dollar (PPP from CANSIM table 380-0058).

<sup>17</sup> While GNI and GNP are equivalent in current prices, we note that in constant prices they are not (except in the base year). Nominal GNI is deflated with the gross final domestic expenditure deflator to obtain real GNI, while nominal GNP is deflated with the GDP deflator to obtain real GNP. The UNDP uses the GDP deflator to deflate GNI, which appears inconsistent with the definition of GNI.

<sup>18</sup> Canada's PPP for GDP in 2011 was 0.847 US dollars per Canadian dollar (PPP from CANSIM table 380-0058).

<sup>19</sup> Employing the estimate our GNI estimate in the most recent HDR's GNI rankings increases Canada's ranking from 20<sup>th</sup> to 16<sup>th</sup> place.

## D. Overall Human Development Index

Table 6 presents the results from the CSLS's attempt to replicate the 2014 HDI estimate for Canada. The CSLS is able to closely replicate both the life expectancy index and the income index. CSLS estimates the 2014 Canadian life expectancy index to be 0.960 compared to that from 2014 HDR data of 0.954. Similarly, using the 2014 GNI per capita projection from CSLS yields an income index of 0.919, compared to 0.913 used in the most recent HDR. While the largest discrepancy was found in the education index due to the average educational attainment component, here too it was reasonably close: 0.875 for the HDR compared to 0.862 by the CSLS. Altogether, these indices lead to an HDI (0.913) that is equal when rounded to the third decimal place to the official estimate of the 2015 HDI for Canada (0.913). As such, the insertion of the CSLS HDI estimate for 2015 would not change Canada's eighth place ranking whatsoever.

**Table 6: CSLS Replication of the Official Human Development Index Estimate for Canada, 2014**

Dimension	UNDP – HDR	CSLS estimates	
		CSLS	Proportion of HDR estimates (%)
	A	B	C = B / A
<b>Life Expectancy Index</b>	<b>0.954</b>	<b>0.960</b>	100.6
Life Expectancy at Birth (years)	82.0	82.4	100.5
<b>Education Index</b>	<b>0.875</b>	<b>0.862</b>	98.5
Average Educational Attainment (years)	13.0	12.6	96.9
Average Educational Attainment Index	0.867	0.840	96.9
Expected Years of Schooling	15.9	16.0	100.6
Expected Years of Schooling Index	0.883	0.883	100.0
<b>Income Index</b>	<b>0.913</b>	<b>0.919</b>	100.7
GNI per capita (2011 US PPP adjusted dollars)	42,155	44,008	104.4
<b>HDI</b>	<b>0.913</b>	<b>0.913</b>	99.9

**Notes:** For "UNDP - HDR", CSLS uses the data listed in the most recent HDR and calculates the indices and HDI identically to the other column.

**Source:** CSLS estimates from Table 1, 2, 3, 5 and most recent HDR.

### III. Estimates of the Human Development Index for the Canadian Provinces and Territories

Though we do come quite close, it is clear from the previous section that it is not possible to precisely replicate the estimates of the HDI indicators for Canada using Canadian data sources. As a result, directly calculating each province and territory's HDI using the raw estimates developed by the CSLS is not the most exact estimation strategy. To obtain estimates which are the most internationally comparable for the provinces and territories, we take the proportion that each province and territory's estimate represents of the corresponding Canadian estimate and applying that ratio to Canada's most recent HDR official estimates.

To obtain the proportions needed to develop the internationally comparable estimates, the provincial and territorial estimates are developed using the same methodology and data sources used in replicating Canada's HDI in the previous section. This reduces as much as possible any error arising from using the proportion method of estimating the provincial and territorial HDIs. Therefore, this section will estimate the three components of the HDI (life expectancy, education and income) for each Canadian province or territory in a manner that is as consistent as possible with the most recent HDR. The HDI results and rankings for each province will then be discussed.<sup>20</sup>

#### A. Life Expectancy

The life expectancy data for the provinces and territories are taken from the same Statistics Canada table as that for Canada, and are only available up to 2009. CSLS developed estimates for 2010-2014 by employing the historical growth rates of life expectancy in each province and territory from 1991 to 2009 (Appendix Table 1). While extending any series five years forward is not ideal, because life expectancy moves slowly and steadily over time we do not believe it is a large source of error.

Table 7 shows these raw CSLS estimates in addition to the HDR consistent estimates and the resulting life expectancy index for 2000, 2005, 2011, and 2014. It is notable that the spread between the lowest and highest life expectancy decreased between 2000 (12.7 years) and 2014 (10.7 years). This decreased variation is largely caused by the 4.9 year increase in the average life expectancy of Nunavut between 2000 and 2014. Despite this relatively large improvement, Chart 1 illustrates that in 2014, Nunavut still had by far the lowest life expectancy of all the regions. For this year, this territory's life expectancy was estimated to be 72.7 years, which was 4.6 years lower than the next lowest jurisdiction (Yukon, 77.3 years).

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<sup>20</sup> Due to data limitations, this report will focus on the period 2000 to 2014 when discussing trends over time. Full time series on all of the HDI domains are available in the Appendix Tables. Caution should be taken when interpreting education data for the Territories because of the small sample size involved.

**Table 7: Life Expectancy Estimates and Index, Canada and the Provinces/Territories, 1990, 2000, 2011, and 2014**

Year	CAN	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
<b>Raw Estimates (years)</b>														
2000	79.4	77.3	78.2	78.6	78.8	79.2	79.5	78.1	78.6	79.5	80.5	75.6	75.9	67.8
2005	80.4	78.2	79.8	79.3	79.8	80.4	80.7	79.0	79.3	80.3	81.2	77.0	78.0	72.0
2009	81.4	79.4	79.9	80.2	80.1	81.5	81.7	79.3	79.7	80.8	82.3	76.7	77.4	71.6
2014	82.4	80.2	80.9	81.0	80.8	82.7	82.8	79.8	80.2	81.6	83.4	77.3	77.9	72.7
<b>HDR Consistent Estimates (years)</b>														
2000	79.1	77.0	77.9	78.3	78.5	78.9	79.2	77.8	78.3	79.2	80.2	75.3	75.6	67.5
2005	80.1	77.9	79.5	79.0	79.5	80.1	80.4	78.7	79.0	80.0	80.9	76.7	77.7	71.7
2011	81.2	79.1	79.7	79.9	79.8	81.4	81.5	78.9	79.3	80.5	82.1	76.4	77.0	71.5
2014	82.0	79.7	80.5	80.6	80.4	82.3	82.3	79.4	79.7	81.1	83.0	76.9	77.5	72.3
<b>Life Expectancy Index</b>														
2000	0.909	0.877	0.891	0.897	0.900	0.906	0.911	0.889	0.897	0.911	0.926	0.851	0.856	0.731
2005	0.925	0.891	0.915	0.908	0.915	0.925	0.929	0.903	0.908	0.923	0.937	0.873	0.888	0.796
2011	0.942	0.909	0.918	0.922	0.920	0.944	0.946	0.906	0.912	0.931	0.956	0.867	0.877	0.792
2014	0.954	0.919	0.930	0.932	0.929	0.958	0.959	0.913	0.919	0.941	0.969	0.876	0.884	0.804
<b>Source:</b> CANSIM Table 102-4307 for 2005-2007 for YT, NU and NWT (2005-2007 average for 2005 and 2006, 2007-2009 average for 2007, 2008, and 2009), CANSIM Table 102-0025 for 1979-1990 for all series, CANSIM Table 102-0025 for 1991-1999 for NU and NWT, CANSIM Table 102-0511 for 1991-2006 for all series, CANSIM Table 102-0512 for 2007-2009 for all ten provinces.														

The growth rates for the provinces and territories ranged between 0.14 to 0.50 per cent per year over the 2000-2014 period. The three jurisdictions with the fastest growth were Nunavut (0.50 per cent per year), Quebec (0.31 per cent per year), and Ontario (0.29 per cent per year) (Chart 2). As nearly two thirds of Canada’s population resides in Ontario and Quebec, their high rates of growth in life expectancy result in the national growth rate exceeding 10 provinces and territories.

**Chart 1: Life Expectancy, Raw Estimates, Canada and the Provinces/Territories, 2014**

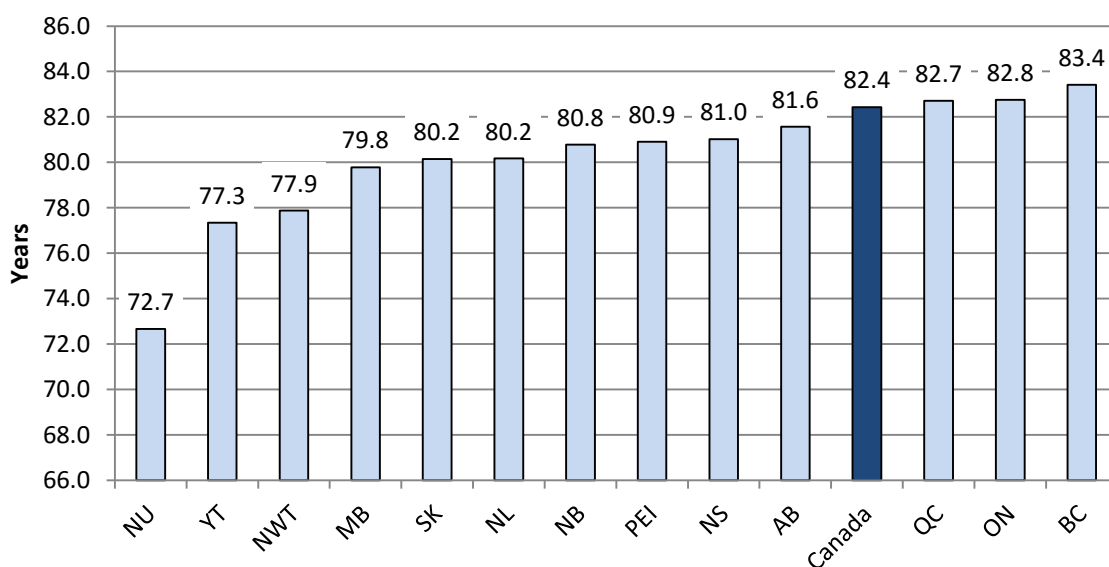
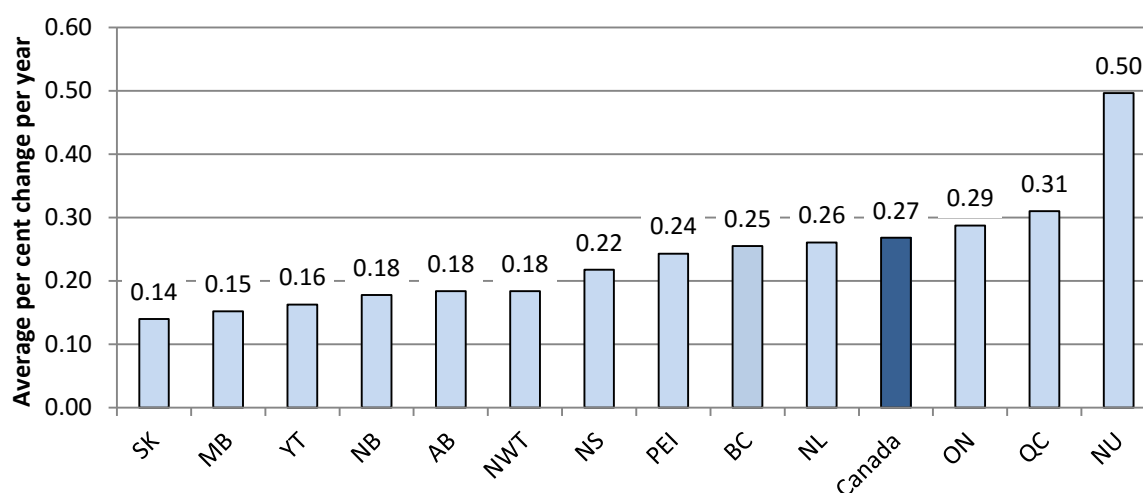




Table 8 shows the ranking of the provinces and territories (where 1 is the highest performing province in that indicator) for 2000, 2005, 2011, and 2014. Most of the provinces and territories maintained the same relative position between 2000 and 2014; for example, Nunavut was 13<sup>th</sup> for all three years and British Columbia remained the top province. The province that fell the most in the rankings was Saskatchewan, from sixth to ninth place. This was reflected in the compound annual growth rates, as Saskatchewan had the worst growth rates of all thirteen regions (Chart 2). On the other hand, despite the very rapid growth in life expectancy between 2000 and 2014, Nunavut continued to lag behind the other provinces and territories.

**Chart 2: Compound Annual Growth in Raw Estimates of Life Expectancy, per cent per year, Canada and the Provinces/Territories, 2000-2014**



Examining the rankings of the regions' life expectancies in the 2011 HDR international rankings highlights the discrepancies between the regions. Table 8 reports the rankings of the provinces and territories from entering each (alone) into the international rankings as if it were a country. British Columbia, the top Canadian province or territory, would rank sixth, while Nunavut, the lowest ranking province or territory, would be in 103<sup>rd</sup> place.

**Table 8: Life Expectancy Rank, Canada and the Provinces/Territories, 2000, 2005, 2011, and 2014**

Year	CAN	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
Regional Rank (Based on Raw Estimates)														
2000	-	10	8	6	5	4	2	9	6	2	1	12	11	13
2005	-	10	5	7	5	3	2	9	7	4	1	12	11	13
2011	-	10	6	7	5	3	2	8	9	4	1	12	11	13
2014	-	8	6	5	7	3	2	10	9	4	1	12	11	13
2014 International HDR Rank (Based on HDR Consistent Estimates)														
2014	12	33	29	28	30	10	10	35	33	21	6	47	43	103

**Note:** The "2014 International HDR Rank" is based on inserting that province alone into the most recent HDR international rankings as if it were a country.

## B. Education

### i. Average Years of Education

Average educational attainment for the provinces and territories is calculated using LFS data (Appendix Table 8). It is calculated in exactly the same manner as described for Canada, allocating 8 years for those with at most primary education, 12 years for those with at most secondary and 14 for those who have a tertiary education. The resulting estimates are reported for 2000, 2005, 2011, and 2014 in Table 9.

Examining the raw estimates for average educational attainment, the gap between the lowest and highest average educational attainment estimates were similar in 2000 (1.5 years) and 2014 (2.1 years). The primary reason for this widening of the gap was due to Nunavut's slow growth in educational attainment, which was 0.7 years lower than the second lowest province or territory in 2000 (Newfoundland and Labrador, 11.4 years), slipping to be 1.4 years lower than the next lowest province or territory in 2014 (Newfoundland and Labrador, 12.3 years). These values translate into rankings between first and 35<sup>th</sup> place in the most recent HDR international rankings for every region.

**Table 9: Average Educational Attainment Estimates and Index, Canada and the Provinces/Territories, 2000, 2005, 2011, and 2014**

Year	CAN	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
Raw Estimates (years)														
2000	11.9	11.4	11.5	11.8	11.6	11.6	12.1	11.7	11.7	12.2	12.2	12.2	12.2	<i>10.7</i>
2005	12.2	11.8	12.0	12.1	11.9	12.0	12.3	12.0	12.0	12.4	12.4	12.5	11.9	10.3
2011	12.5	12.1	12.3	12.4	12.1	12.3	12.6	12.3	12.3	12.6	12.7	12.5	12.2	10.9
2014	12.6	12.3	12.4	12.5	12.3	12.4	12.7	12.4	12.4	12.7	12.7	13.0	12.5	10.9
HDR Consistent Estimates (years)														
2000	11.1	10.6	10.7	11.0	10.8	10.8	11.2	10.9	10.9	11.3	11.4	11.3	11.3	9.9
2005	12.3	11.8	12.1	12.2	11.9	12.1	12.4	12.1	12.1	12.5	12.5	12.6	12.0	10.3
2011	12.3	11.9	12.1	12.2	11.9	12.1	12.4	12.1	12.1	12.4	12.5	12.3	12.0	10.8
2014	13.0	12.7	12.8	12.9	12.7	12.9	13.1	12.8	12.8	13.1	13.2	13.4	12.9	10.9
Average Educational Attainment Index														
2000	0.740	0.707	0.714	0.733	0.718	0.721	0.749	0.728	0.724	0.755	0.757	0.755	0.755	0.663
2005	0.820	0.789	0.804	0.812	0.797	0.806	0.828	0.804	0.805	0.833	0.832	0.837	0.800	0.690
2011	0.820	0.794	0.808	0.810	0.794	0.808	0.827	0.806	0.806	0.827	0.832	0.821	0.799	0.718
2013	0.867	0.845	0.854	0.863	0.848	0.857	0.873	0.851	0.855	0.873	0.877	0.893	0.859	0.748

**Source:** CANSIM Table 282-0004. Territorial data obtained by special request from Statistics Canada. Territorial values for 2012-2014 based on compound annual growth rate of available data for each territory (1991-2011 for Yukon, 2001-2011 for the Northwest Territories, 2004-2011 for Nunavut).<sup>21</sup> LFS data are not available for Nunavut before 2004. Since there is no clear pattern in the yearly growth rates for Nunavut, estimate for 2000 (italicized) is assumed to be equal to the 2004 estimate.

<sup>21</sup> In 2014, the Yukon is ranked first overall in large part due to its rapid growth from 1991 to 2011. Were we to take a more recent subperiod like 2000 to 2011 for the basis of our extrapolation, average educational attainment in the Yukon would be 12.6 years, dropping its ranking among the provinces to fourth.

Chart 3: Average Educational Attainment, Raw Estimates, Canada and the Provinces/Territories, 2014

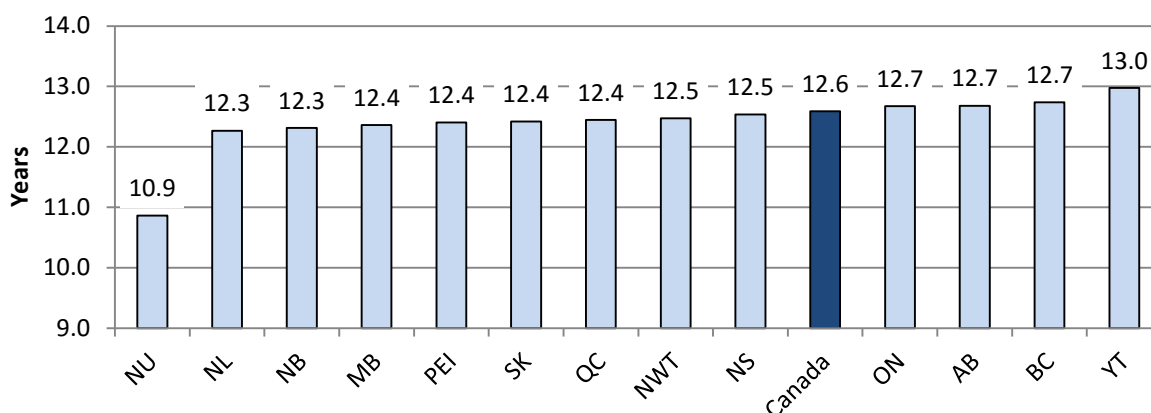
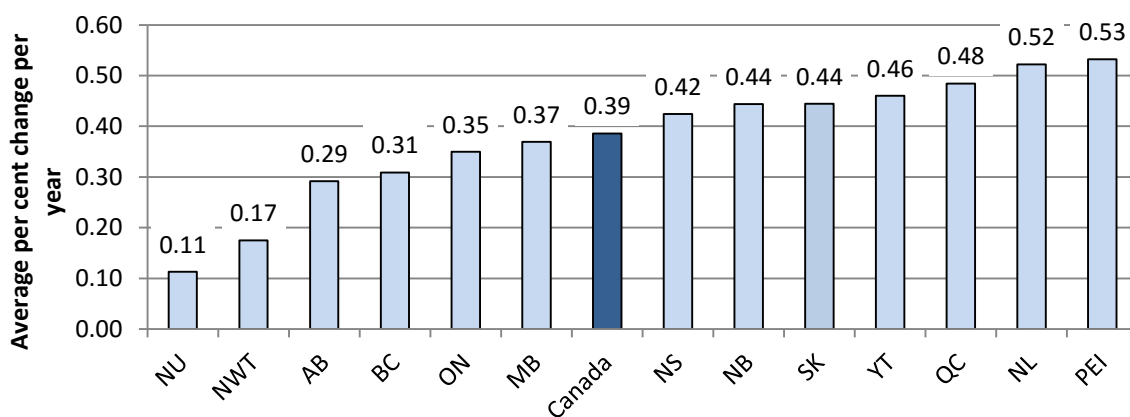


Table 10 also shows the ranking of each province and territory within Canada. There is some change between 2000 and 2014 in terms of rankings among the different provinces and territories. The rank of average educational attainment in the Northwest Territories has declined significantly since 2000, dropping from third to sixth place. Quebec and Ontario, conversely, improved their relative position (ninth to seventh, and fifth to fourth place respectively). British Columbia, Alberta, and Yukon are consistently among the top provinces and territories, while New Brunswick, Newfoundland and Labrador, and Nunavut are consistently in the bottom four throughout the period.

Chart 4: Compound Annual Growth in Average Educational Attainment, per cent per year, Canada and the Provinces/Territories 2000-2014



There is some evidence that provinces and territories are converging in average educational attainment by the growth rates for 2000-2014 despite slow growth in Nunavut, which are illustrated in Chart 4. Chart 3 and Chart 4 show British Columbia and Alberta were among the top ranked provinces in 2014 but were also among the regions with the slowest growth (less than 0.35 per cent per year), while Newfoundland and Labrador and Prince Edward Island had compound annual growth rates that were above the national average (0.39 per cent per year) despite a low ranking among the provinces and territories. The Northwest Territories and Nunavut were the exceptions, as they had both lower ranks in 2014 and the weakest compound annual growth rates of all Canadian regions.

**Table 10: Average Educational Attainment Rank, Canada and the Provinces/Territories, 2000, 2005, 2011, and 2014**

Year	CAN	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
Regional Rank (Based on Raw Estimates)														
2000	-	12	11	6	10	9	5	7	8	2	1	4	3	13
2005	-	12	8	5	11	6	4	9	7	2	3	1	10	13
2011	-	11	7	5	12	6	3	9	8	2	1	4	10	13
2014	-	12	9	5	11	7	4	10	8	3	2	1	6	13
2014 International HDR Rank (Based on HDR Consistent Estimates)														
2014	3	13	11	5	13	6	1	11	6	1	1	1	6	35

**Note:** The "2014 International HDR Rank" is based on introducing that province alone into the most recent HDR international rankings as if it were a country.

## ii. Expected Years of Schooling

Expected years of schooling are estimated for the provinces and territories using LFS data. Once again, the methodology used here is the same as the one used to replicate the Canadian estimates (Appendix Table 9). In 2014, the raw estimate for Canada is nearly identical to the official estimate from the most recent HDR, and as such there ought to be minimal error as a result of scaling the raw provincial values in Table 11 to obtain HDR consistent estimates.

**Table 11: Expected Years of Schooling Estimates and Index, Canada and the Provinces/Territories, 2000, 2005, 2011, and 2014**

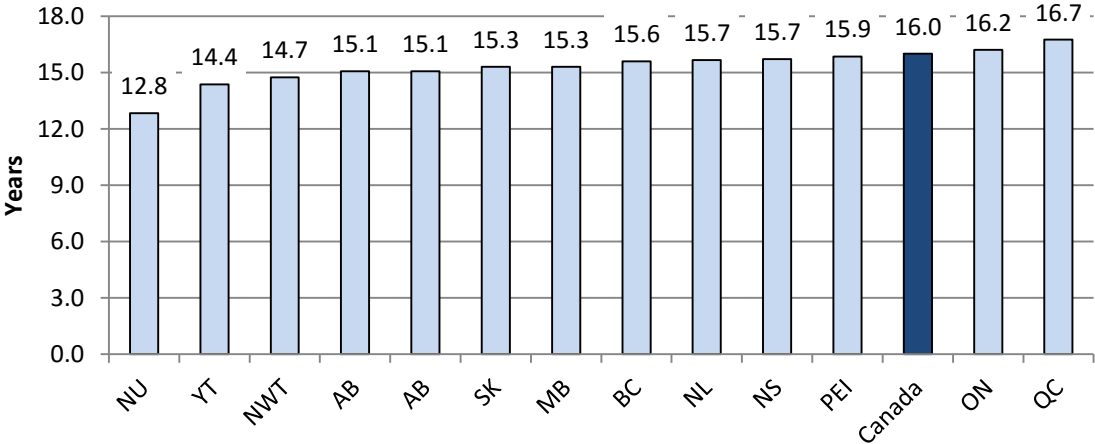
Year	CAN	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
Raw Estimates (years)														
2000	15.6	15.7	15.1	15.7	14.9	15.7	15.9	15.0	15.1	14.8	15.6	13.9	14.5	<i>13.1</i>
2005	15.9	15.7	15.3	15.6	15.3	16.1	16.2	15.5	15.1	14.9	15.7	13.8	14.1	13.3
2011	16.0	15.5	15.5	15.7	15.3	16.4	16.2	15.3	15.1	15.0	15.9	14.3	14.6	12.8
2014	16.0	15.7	15.9	15.7	15.2	16.7	16.2	15.3	15.3	15.1	15.6	14.4	14.7	12.8
HDR Consistent Estimates (years)														
2000	15.8	15.9	15.3	15.9	15.1	15.9	16.1	15.2	15.3	15.0	15.8	14.1	14.7	13.3
2005	15.9	15.8	15.3	15.6	15.4	16.1	16.3	15.5	15.2	15.0	15.7	13.8	14.1	13.3
2011	15.9	15.5	15.4	15.6	15.2	16.3	16.2	15.3	15.0	15.0	15.9	14.2	14.6	12.7
2014	15.9	15.6	15.7	15.6	15.1	16.6	16.1	15.2	15.2	15.0	15.5	14.2	14.6	12.6
Expected Years of Schooling Index														
2000	0.878	0.883	0.851	0.883	0.837	0.885	0.893	0.842	0.848	0.836	0.880	0.781	0.816	0.737
2005	0.883	0.875	0.852	0.866	0.853	0.896	0.903	0.861	0.843	0.832	0.872	0.768	0.785	0.740
2011	0.883	0.859	0.855	0.869	0.845	0.907	0.897	0.849	0.833	0.831	0.881	0.790	0.810	0.707
2014	0.883	0.865	0.875	0.867	0.841	0.924	0.894	0.845	0.844	0.831	0.860	0.787	0.811	0.700

**Source:** CSLS calculations using CANSIM Table 282-0095. Territorial data obtained by special request from Statistics Canada. Territorial values for 2012-2014 estimated using compound annual growth rate for available territorial data (1991 to 2011 for Yukon, 2001 to 2011 for the Northwest Territories, and 2004 to 2011 for Nunavut). LFS data are not available for Nunavut before 2004. Since there is no clear pattern in the yearly growth rates, estimate for 2000 (italicized) is assumed to be equal to the 2004 estimate.

An examination of these raw estimates shows that roughly one year and a half separates the lowest and highest ranking provinces in both 2000 and 2014 (from 15.1 years to 16.7 years), with all three territories consistently ranking below the lowest province throughout the period. The similarity in expected years of schooling across provinces is illustrated for 2014 in Chart 5. The highest expected years of schooling in 2014 was in Quebec at 16.7 years, closely followed by Ontario (16.2 years).<sup>22</sup>

Compared to average educational attainment, there was less movement in the regional rankings between 2000 and 2014 for this measure of education (Table 12). Quebec and Ontario remained in the top two positions, while the three territories occupied the bottom three places between 2000 and 2014. None of the provinces changed their relative position by more than three places in the time frame. It is noteworthy that the top and bottom regions in 2014 are not the same for average educational attainment and expected years of schooling. Indeed, Alberta was in third place for the former and tenth place for the latter, while Newfoundland and Labrador was twelfth for the former and fifth place for the latter in 2014. In both 2000 and 2014, all three territories were in the bottom three places for expected years of schooling. As average educational attainment reflects the current population’s level of education and expected years of schooling estimates in part the future level of schooling, it could be the case that we will see a reversal of educational attainment levels down the road. However, it may also be the case that the educated tend to migrate to certain provinces instead of others, and this results in observed average educational attainment estimates.

Chart 5: Expected Years of Schooling, Raw Estimates, Canada and the Provinces/Territories, 2014



The growth rates indicate that the gap in expected years of schooling over time between the top and bottom ranked regions is increasing (Chart 6). Nunavut was the lowest ranked region in 2000 and experienced significant negative growth from 2000 to 2014, while Quebec, the second ranked province in 2000, experienced the highest growth of all

<sup>22</sup> In 2014, the LFS shows that 48.8 per cent of the population aged 15 to 29 in Quebec was attending school, compared to the Canadian average of 44.6 per cent. The respective figures for the 15-19 age group were 86.9 per cent versus 84.5 per cent, for the 20-24 age group 49.6 per cent versus 42.3 per cent, and for the 25-29 age group 18.3 per cent versus 13.4 per cent.

provinces. However, other than these two regions, there does not seem to be significant positive or negative correlation between the regions' ranking and their growth rate.

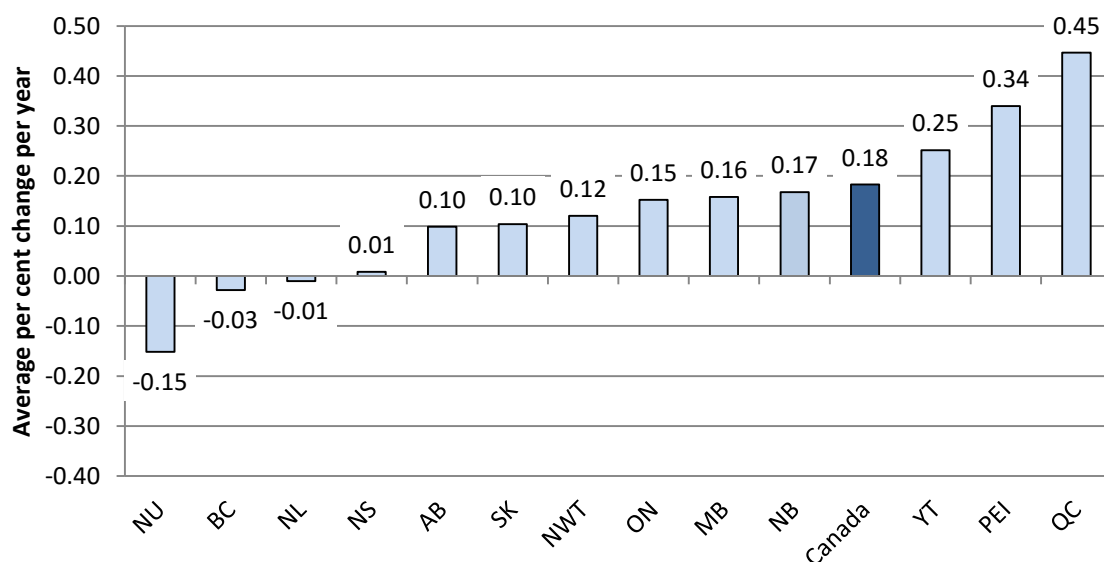
**Table 12: Expected Years of Schooling Rank, Canada and the Provinces/Territories, 2000, 2005, 2011, and 2014**

Year	CAN	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
Regional Rank (Based on Raw Estimates)														
2000	-	4	6	3	9	2	1	8	7	10	5	12	11	13
2005	-	3	8	5	7	2	1	6	9	10	4	12	11	13
2011	-	5	6	4	8	1	2	7	9	10	3	12	11	13
2014	-	5	3	4	9	1	2	7	8	10	6	12	11	13
2014 International HDR Rank (Based on HDR Consistent Estimates)														
2014	26	33	29	33	46	14	23	50	43	49	35	65	55	107

**Note:** The "2014 International HDR Rank" is based on introducing that province alone into the most recent HDR international rankings as if it were a country.

Since many developed countries are clustered around the same values for expected years of schooling in the most recent HDR international rankings, the provinces and territories are remarkably spread out in terms of ranking considering how close their estimates are in absolute terms. Indeed, while Quebec would be in 14<sup>th</sup> place, Nunavut would be 107<sup>th</sup>.

**Chart 6: Compound Annual Growth in Expected Years of Schooling, per cent per year, Canada and the Provinces/Territories, 2000-2014**



## C. Income

In the most recent HDR, the indicator for the income dimension is GNI per capita. Unfortunately, Statistics Canada has not developed a GNI measure for the Canadian provinces and territories despite measuring it for the Canadian economy on the whole.<sup>23</sup> The best way to approximate this income measure is to adjust provincial and territorial GDP by the national difference observed between nominal GNI and GDP in that year (Canada's GNI was 98.2 per cent of Canada's GDP in 2011).<sup>24</sup> Once a province or territory's GDP is adjusted by the national nominal GDP to GNI ratio, population estimates are used to obtain GNI per capita.<sup>25</sup> The raw estimates for 2000, 2005, 2011, and 2014 are presented in Table 13. It should be noted that there are no purchasing power parity (PPP) data available to correct for price differences across Canada, so one dollar is assumed to buy the same amount of goods in all provinces.<sup>26</sup> For example, when comparing food prices in Nunavut with the CPI Food Price Basket from Statistics Canada, the Nunavut Bureau of Statistics (2015) found that in general, Nunavummiut pay around twice as much as Canadians for the same basket of goods. It may well be unrealistic to ignore regional price differences altogether, but without PPP data by region no other assumptions can be reasonably made to try and capture variations in purchasing power.

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<sup>23</sup> This is largely a matter of accounting difficulties. The difference between GNI and GDP is income earned by residents abroad less income earned by non-residents domestically. At the provincial level it is more difficult to identify what income is sent "abroad" (i.e. out of province). Statistics Canada would have to somehow account for workers who cross a provincial border to work in another province, as well as a company paying dividends or servicing debt in one province but doing business across the country.

<sup>24</sup> Nominal GNI is by definition equal to nominal GNP, which is equal to GDP plus net production from non-residents. However, real GNI is not equal to real GNP, except in the base year. See Ross and Murray (2010) for a greater discussion.

<sup>25</sup> It is worth noting that the GDP to GNI ratio almost certainly differs significantly across the country. Provinces such as Newfoundland and Labrador with its oil wells have significant amounts of income earned in the province by corporations located out of province.

<sup>26</sup> Thomas (2016) does provide an alternative to making no adjustment whatsoever. She uses a Statistics Canada series on the consumer price level in the provincial capital cities to roughly estimate purchasing power differences across provinces. While this is an alternative, it exclusively looks at consumer prices, and altogether ignores the prices faced by firms. For example, the prices faced by the Albertan oil firms who earned an extremely significant portion of the province's income would not be included in the price adjustment. Rather than introduce more assumptions, we opt not to adjust our GNI figures whatsoever.

**Table 13: Gross National Income per capita Estimates and Income Index, Canada and the Provinces/Territories, 2000, 2005, 2011, and 2014**

Year	CAN	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
Raw Estimates (current dollars)														
2000	35,925	26,797	24,804	27,280	27,741	31,298	38,708	30,420	34,030	48,911	33,325	41,405	65,810	32,366
2005	43,949	43,259	30,834	34,254	34,158	36,951	44,431	36,563	45,182	67,876	41,674	49,281	102,417	38,268
2011	51,537	63,879	37,657	39,866	41,693	43,051	49,741	45,551	70,166	79,025	48,184	70,392	108,733	59,481
2014	55,510	63,345	41,071	41,466	42,482	45,048	52,785	50,051	73,760	91,183	51,136	70,370	107,572	68,924
Raw Estimates (2011 PPP adjusted USD)														
2000	34,759	24,355	24,394	26,781	27,601	30,948	38,246	30,186	32,267	42,427	32,510	39,095	62,959	31,890
2005	40,156	36,592	28,173	31,654	31,379	34,756	41,474	33,687	40,119	57,860	37,632	44,812	100,471	36,044
2011	42,309	48,232	31,904	33,857	34,728	35,820	41,582	37,793	52,168	62,625	39,756	57,821	96,323	49,673
2014	44,198	54,418	32,651	33,592	34,616	36,373	42,007	40,169	61,986	70,576	40,606	57,481	84,018	54,204
HDR Consistent Estimates (2011 PPP adjusted US dollars)														
2000	35,567	24,922	24,961	27,404	28,243	31,667	39,135	30,887	33,017	43,413	33,265	40,003	64,423	32,632
2005	38,660	35,228	27,123	30,474	30,210	33,461	39,929	32,432	38,624	55,704	36,229	43,142	96,727	34,701
2011	41,333	47,119	31,168	33,076	33,927	34,994	40,623	36,922	50,965	61,180	38,839	56,487	94,102	48,527
2014	42,155	51,902	31,142	32,040	33,016	34,692	40,065	38,312	59,121	67,314	38,729	54,824	80,134	51,698
Income Index														
2000	0.887	0.834	0.834	0.848	0.852	0.870	0.902	0.866	0.876	0.917	0.877	0.905	0.977	0.874
2005	0.900	0.886	0.846	0.864	0.863	0.878	0.905	0.873	0.900	0.955	0.890	0.916	1.000	0.884
2011	0.910	0.930	0.867	0.876	0.880	0.885	0.907	0.893	0.942	0.969	0.901	0.957	1.000	0.934
2014	0.913	0.944	0.867	0.872	0.876	0.884	0.905	0.899	0.964	0.984	0.900	0.953	1.000	0.944

**Source:** CANSIM Table 384-0038 for GNI, PPP from CANSIM Table 380-0058, and Appendix Table 7a for population.

Unlike the other indicators that make up the HDI, there is quite substantial variation in estimated GNI per capita between provinces and territories, ranging from \$24,804 (current dollars) to \$65,810 in 2000 and \$41,071 to \$107,572 in 2014.<sup>27</sup> The Northwest Territories, the top ranking province or territory, has nearly triple the estimated GNI per capita of Prince Edward Island, the lowest ranking one (Chart 7).

<sup>27</sup> One could use real GDP estimates instead of nominal GDP estimates to estimate provincial GDP per capita as a share of the national average. We, however, prefer nominal estimates as they capture terms of trade effects.



Chart 7: GNI per capita, current dollars, Raw Estimates, Canada and the Provinces/Territories, 2014

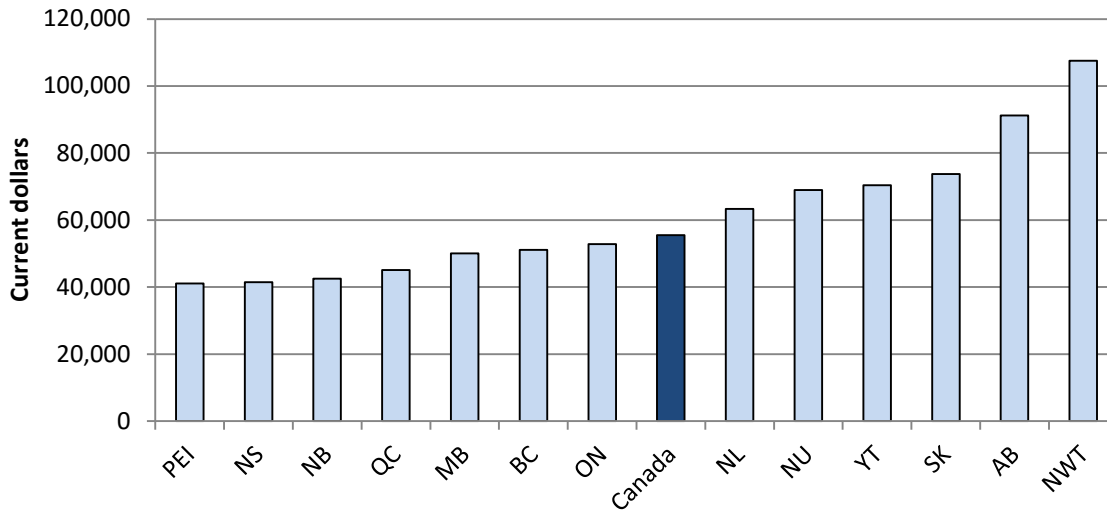
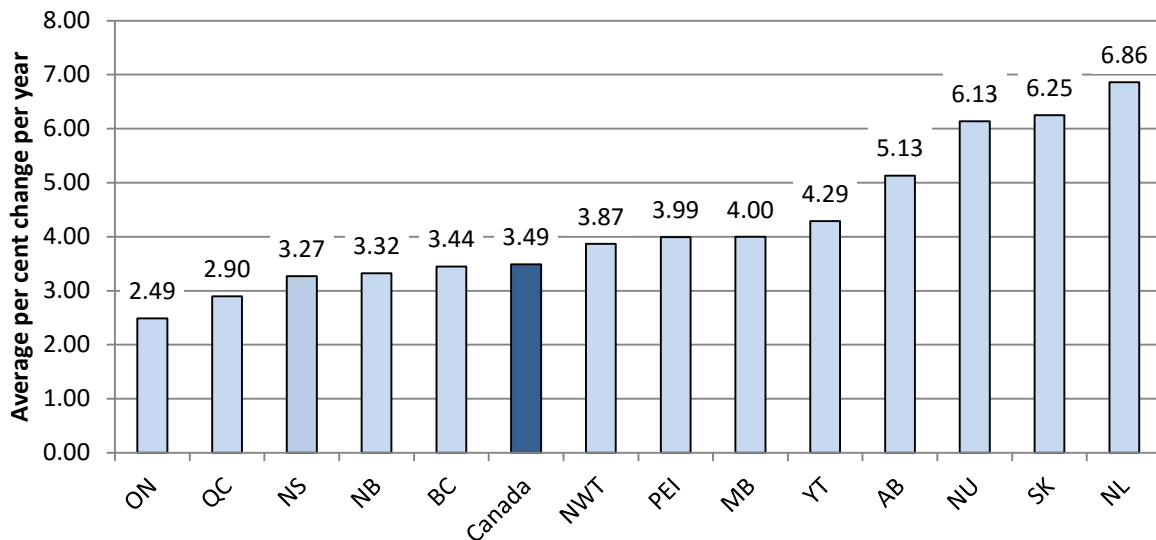


Chart 8: Compound Annual Growth in Nominal GNI per capita, per cent per year, Canada and the Provinces/Territories, 2000-2014



Looking at the provinces and territories' placements in the most recent HDR international rankings, there is not surprisingly a substantial difference between the ranks of the top and bottom regions. The Northwest Territories would claim the third overall spot, while Prince Edward Island is in just 34<sup>th</sup> place (Table 14).

**Table 14: Gross National Income per capita Rank, Canada and the Provinces/Territories, 2000, 2005, 2011, and 2014**

Year	CAN	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
Regional Rank (Based on Raw Estimates)														
2000	-	12	13	11	10	8	4	9	5	2	6	3	1	7
2005	-	6	13	11	12	9	5	10	4	2	7	3	1	8
2011	-	5	13	12	11	10	7	9	4	2	8	3	1	6
2014	-	6	13	12	11	10	7	9	3	2	8	4	1	5
2014 International HDR Rank (Based on HDR Consistent Estimates)														
2014	20	13	34	34	32	23	22	22	8	6	21	10	3	13

**Note:** The "2014 International HDR Rank" is based on introducing that province alone into the most recent HDR international rankings as if it were a country.

## D. Overall Human Development Index

As previously noted, since the CSLS's methods and Canadian data sources result in estimates of the HDI that are not exactly equal to those in the most recent HDR, the CSLS takes the ratio of each jurisdiction's raw estimate to the national raw estimate and applies it to the most recent HDR's official estimates for Canada in order to obtain an internationally comparable HDI estimate for the region. This method results in provincial and territorial estimates that are compatible with the most recent HDR while still representing the same relationship as is shown between the raw CSLS estimates for the provinces/territories and Canada.

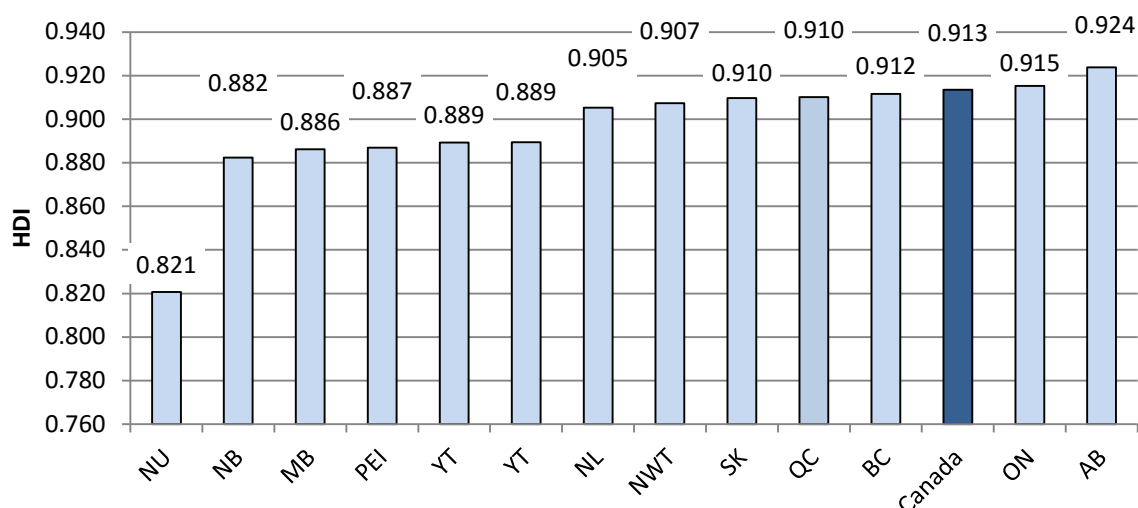
**Table 15: Human Development Index, Canada and the Provinces/Territories, 2000, 2005, 2011, and 2014**

Year	CAN	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
HDI Estimates (Based on HDR Consistent Estimates)														
2000	0.867	0.835	0.835	0.850	0.842	0.859	0.877	0.846	0.852	0.873	0.873	0.839	0.869	0.765
2005	0.892	0.869	0.862	0.870	0.867	0.884	0.899	0.869	0.876	0.902	0.892	0.863	0.901	0.795
2011	0.900	0.887	0.872	0.879	0.872	0.895	0.905	0.875	0.889	0.908	0.903	0.874	0.900	0.808
2014	0.913	0.905	0.887	0.889	0.882	0.910	0.915	0.886	0.910	0.924	0.912	0.886	0.901	0.836

**Source:** CSLS Calculations.

The CSLS's HDI estimates for Canada and the provinces/territories are given for 2000, 2005, 2011, and 2014 in Table 15. The provincial and territorial ranking for 2014 is illustrated in Chart 9. Alberta was found to have the highest HDI of all regions or jurisdictions, while Ontario and the British Columbia came in second and third. Nunavut and New Brunswick held the bottom two spots for 2014, though Nunavut was quite a bit lower than New Brunswick.

**Chart 9: Human Development Index, Canada and the Provinces/Territories, 2014**



Given the relative stability in provincial and territorial rank observed within Canada for most jurisdictions in most indicators, it is not surprising to see little variation in the provincial and territorial HDI rank over time (Table 16). Alberta, Ontario, British Columbia, and Quebec were in the top five places throughout the 2000 to 2014 period. The only province or territory that changed rank significantly was Newfoundland and Labrador, which rose from 11<sup>th</sup> place in 2000 to seventh in 2014 as its income per capita increased dramatically. Notably, the Northwest Territories fell steeply from 2<sup>nd</sup> in 2005 to 6<sup>th</sup> in 2014.

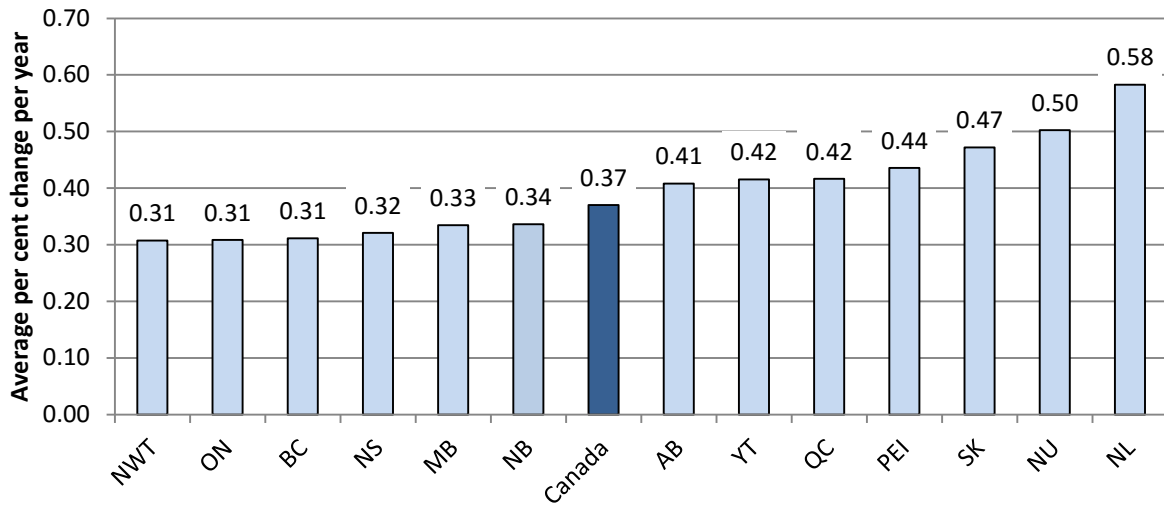
**Table 16: Human Development Index Rank, Canada and the Provinces/Territories, 1990, 2000, 2011, and 2014**

Year	CAN	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
Regional Rank (Based on Raw Estimates)														
2000	-	11	12	7	9	5	1	8	6	3	2	10	4	13
2005	-	8	12	7	10	5	3	9	6	1	4	11	2	13
2011	-	7	12	8	11	5	2	9	6	1	3	10	4	13
2014	-	7	10	9	12	4	2	11	5	1	3	8	6	13
2014 International HDR Rank (Based on HDR Consistent Estimates)														
2014	9	16	23	22	25	12	8	23	12	4	11	23	16	40

**Note:** The "2014 International HDR Rank" is based on introducing that province alone into the most recent HDR international rankings as if it were a country.

Newfoundland and Labrador experienced the fastest growth between 2000 and 2014, well above the national average (0.58 versus 0.37 per cent per year), followed closely behind by Nunavut (0.50 per cent per year) (Chart 10). The Northwest Territories had the worst performance, at 0.31 per cent year, while Ontario and British Columbia were not far from the bottom. There may be some evidence of convergence in HDI as two of the regions with the highest HDI in 2014 (Ontario and British Columbia) had below average growth in HDI, while two of the bottom three ranked regions (Nunavut, Prince Edward Island) had above average growth in HDI.

**Chart 10: Compound Annual Growth Rate in the HDI, per cent per year, Canada and the Provinces/Territories, 2000-2014**



Examining the provincial performance in the most recent HDR international rankings, Alberta, places well above all other provinces and territories, coming in fourth place (Table 16). This implies that these provinces had levels of human development below Switzerland (third highest HDI in the world), but higher than Denmark and the Netherlands (fourth and fifth respectively). Nunavut, on the other hand, comes in 46th place in the international HDI rankings, showing a similar level of human development as Croatia and Latvia. It is also important to understand why Alberta is the top ranking region, and Nunavut is the lowest ranking one. Given the small differences between provinces and territories in the scaled education indicators, it is clear that these differences are primarily driven by differences in life expectancy and income.

#### **IV. Future Research with the Human Development Index**

The HDI occupies a critical area in research into socio-economic well-being, thanks in large part to the global reach of the UNDP. The UNDP undertakes the herculean task of obtaining estimates from national statistics agencies from 188 countries to create the HDR and rank countries in terms of socio-economic well-being. These national statistics agencies vary significantly in the range and quality of data they produce, so the use of four key summary statistics in the HDI makes production of the HDR a more feasible task. Moreover, the inclusion of other components in a development index would make it less transparent for policymakers, as well as run the risk of being criticized for which components are included and which are not. Providing more sophisticated, alternative indices which capture concepts such as gender and income inequality is the best way to provide a more nuanced picture of the level of economic development in a given country, as the UNDP does in every HDR.

While HDI does a commendable job measuring socio-economic well-being, it does have several major drawbacks in terms of its construction. Presently, the index is quite capable of differentiating between advanced economies and developing economies, but has a difficult time differentiating levels of development among economies which are closer in their levels of development. One of the primary issues with its ability differentiating between developed economies is both of the measurements of education employed.

The HDI measures average educational attainment by using statistics on the highest level of education completed. It assigns 8 years for completing primary education only, 12 for completing secondary education only, and 14 for having completed some form of tertiary education. By measuring education completed rather than years of schooling, there is a definite issue with individuals who successfully completed part of a degree. As suggested by Calver (2015), a better measure would simply use number of years of schooling. While this method results in underestimating the average number of years of schooling because it systematically fails to count some successful years of schooling, it will not affect the integrity of the HDI rankings assuming that completion rates for degrees are similar in similar countries.<sup>28</sup>

A much more consequential source of measurement error with average educational attainment is assessing 14 years of education to those who have completed some form of tertiary education. For example, if one country has a most of its students complete two year certificates whereas another country has most of its students complete four year Bachelor's degrees, the HDI's measurement will underestimate the latter country's average educational attainment. In the advanced economies, this is especially an issue as most now have secondary school completion rates well above 90 per cent. A better measure of average educational attainment could still use the degree completed metric, but focus more on the level of degree individuals have completed (e.g. a degree requiring 4 years of study versus 2 years of study). We acknowledge that adding too many different sorts of tertiary education is unrealistic because of the number of national statistics agencies the UNDP deals with, however we believe that breaking tertiary education into three sorts of post-secondary education is realistic. We suggest that the average educational attainment metric should include: a "certificate completed" category for all those who complete a qualification below the level of a Bachelor's degree (equal to 14 years of education completed); an "undergraduate degree completed" value for all those who complete a qualification at the Bachelor's level (equal to 16 years of education completed); and finally a "postgraduate degree completed" for all those who complete a qualification beyond the Bachelor's level (equal to 18 years of education completed).<sup>29</sup>

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<sup>28</sup> Differential degree completion rates should not matter when comparing two countries with completely different education profiles. For example, suppose the completion rate of tertiary education is much higher in South Africa than Canada. Ranking Canadian estimated average years of education versus South Africa will not be much of an issue simply because individuals undertaking tertiary education in South Africa (regardless of completion) is a much smaller proportion of their population as a whole. Differential completion rates could be a far greater issue when comparing two similar countries, such as Canada and the United Kingdom, however we have no *a priori* reason to believe they differ much in similar countries.

<sup>29</sup> Admittedly there is still an issue with unmeasured quality differences among the sorts of tertiary schooling received at these levels in different countries. While this is an issue, we believe its influence on HDI rank is

Another issue with the measurement of education in the HDR is its use of UNESCO enrolment data in constructing the expected years of schooling. Canadian tertiary school enrolment data is not available from UNESCO, and has not been available since 2000. While the problem is not endemic to the UNESCO enrolment data, and most of the advanced economies have data to 2013 or 2014, it is still rather embarrassing that a G7 country's HDI relies on data over a decade old. Whether the burden to resolve the problem lies on Statistics Canada, UNESCO, or the UNDP, the solution should be relatively easy using the LFS microdata as we did in this paper. As mentioned in Section II, using LFS data to estimate Canada's expected years of education yields an estimate which differs very little from the UNESCO estimate.

Finally, from the perspective of Canadian researchers who endeavour to estimate HDI for the provinces (or to do any work comparing the provinces internationally for that matter), we strongly advocate that Statistics Canada create PPP and GNI estimates for a Canadian dollar in individual provinces and territories. The cost of living for provincial capitals solution proposed by Thomas (2016) will suffice in the meantime to provide a purchasing power adjustment for studies dealing solely with consumer data, however at the moment there is no solution we are aware of once producers are included in the data. The measurement of GNI by province and territory is crucial for the measurement of HDI in jurisdictions like Newfoundland and Labrador due to dividends being paid out to residents of other provinces, creating a significant gap between GNI and GDI.

## V. Conclusion

This report has estimated internationally comparable HDIs for Canada and its provinces and territories. A summary of the provincial and territorial rankings for HDI and its component indicators within Canada is presented in Table 17. In 2014, Alberta held the top of the table for the overall HDI and Nunavut the lowest. For life expectancy, British Columbia was the top body and Nunavut ranked last. For average educational attainment, Yukon ranked first and Nunavut last. For expected years of schooling, Quebec ranked at the top and Nunavut came last, while for GNI per capita, Northwest Territories was in first place and Prince Edward Island was in last.

Table 17: Summary of Regional Rankings for the Canadian Provinces/Territories, 2014

Dimension	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
Life Expectancy	8	6	5	7	3	2	10	9	4	1	12	11	13
Average Educational Attainment	12	9	5	11	7	4	10	8	3	2	1	6	13
Expected Years of Schooling	5	3	4	9	1	2	7	8	10	6	12	11	13
GNI per capita	6	13	12	11	10	7	9	3	2	8	4	1	5
<b>HDI</b>	<b>7</b>	<b>10</b>	<b>9</b>	<b>12</b>	<b>4</b>	<b>2</b>	<b>11</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>8</b>	<b>6</b>	<b>13</b>

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minor because countries already near each other in rank due to the other components of HDI are likely to provide similar quality of schooling (e.g. Canada and Australia).

HDI growth in the provinces and territories from 2000-2014 ranged between 0.31 per cent per year and 0.58 per cent per year, lead by Newfoundland and Labrador and Nunavut, where HDI grew the fastest of all provinces and territories at 0.58 and 0.50 per cent per year respectively. This rapid growth was reflected in Newfoundland and Labrador's rise in the rankings from eleventh to sixth place. On the other hand, despite its fast HDI growth, Nunavut was still the lowest ranked jurisdiction in 2014. There is some evidence of convergence in regional HDI as provinces with the highest HDI in 2014 had below average HDI growth during the 2000 to 2014 period, while the bottom three ranked provinces had above average growth. One notable exception to this trend was Alberta, which was the beneficiary of a commodity boom throughout the period, and as such enjoyed high growth despite starting with a high level.

**Table 18: Summary of International HDR Ranks, Canada and the Provinces/Territories, 2014**

<b>Dimension</b>	<b>CAN</b>	<b>NL</b>	<b>PEI</b>	<b>NS</b>	<b>NB</b>	<b>QC</b>	<b>ON</b>	<b>MB</b>	<b>SK</b>	<b>AB</b>	<b>BC</b>	<b>YT</b>	<b>NWT</b>	<b>NU</b>
Life Expectancy	12	33	29	28	30	10	10	35	33	21	6	47	43	103
Average Educational Attainment	3	8	7	5	8	6	1	7	6	1	1	1	6	35
Expected Years of Schooling	26	33	29	33	46	14	23	50	43	49	35	65	55	107
GNI per capita	20	13	34	34	32	23	22	22	8	6	21	10	3	13
<b>HDI</b>	<b>9</b>	<b>16</b>	<b>23</b>	<b>22</b>	<b>25</b>	<b>12</b>	<b>8</b>	<b>23</b>	<b>12</b>	<b>4</b>	<b>11</b>	<b>22</b>	<b>15</b>	<b>46</b>

The performance of Canada's provinces and territories in terms of human development in the international context is summarized in Table 18. Of the 188 countries in the most recent HDR rankings, Canada's regions ranked between sixth and 103<sup>rd</sup> in life expectancy, between third and 35<sup>th</sup> in average educational attainment, between 14<sup>th</sup> and 107<sup>th</sup> in expected years of schooling and between third and 34<sup>th</sup> in GNI per capita. For the overall HDI, Canada's provinces and territories ranked between fourth and 46<sup>th</sup> place. It is therefore clear that Canada's overall HDI masks substantial variation among the provinces and territories.

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# Appendix 1: Statistics Canada Data

Appendix Table 1: Life Expectancy at Birth, Canada, Provinces and Territories, Both Sexes, 1979-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1979	74.9	75.4	75.4	74.2	74.3	74.1	75.3	75.3	76.0	75.2	75.6	70.0	-	-
1980	75.2	74.8	75.9	74.2	74.5	74.5	75.5	75.4	75.9	75.1	76.0	69.9	-	-
1981	75.6	75.6	76.7	74.6	75.1	75.1	75.9	75.2	76.3	75.5	76.2	68.1	-	-
1982	75.8	75.3	77.1	75.1	75.3	75.4	76.1	75.9	75.7	75.9	76.3	70.7	-	-
1983	76.1	75.1	76.0	75.1	75.8	75.5	76.3	76.0	76.9	76.6	77.2	71.4	-	-
1984	76.4	75.4	76.4	75.9	76.0	75.8	76.7	76.8	77.1	76.8	77.2	72.8	-	-
1985	76.4	75.6	76.4	75.4	76.3	75.8	76.7	76.4	76.7	76.7	77.3	71.3	-	-
1986	76.6	76.2	75.8	75.9	76.1	75.9	76.9	76.5	76.9	76.7	77.6	72.7	-	-
1987	76.9	76.0	77.2	76.3	76.6	76.1	77.2	76.8	77.5	77.3	77.7	73.9	-	-
1988	77.0	76.3	77.0	76.1	76.8	76.5	77.2	76.7	77.3	77.2	77.7	71.0	-	-
1989	77.3	76.2	76.9	76.3	76.9	76.7	77.5	77.3	78.0	77.7	77.9	76.8	-	-
1990	77.6	76.1	76.6	76.7	77.3	77.1	77.9	77.5	78.0	77.9	78.1	74.4	-	-
1991	77.8	76.7	76.4	77.3	77.7	77.3	78.0	77.6	78.1	78.1	78.4	74.7	75.9	68.3
1992	78.0	76.9	77.5	77.1	77.6	77.7	78.2	77.9	78.9	78.3	78.4	75.8	74.3	67.3
1993	77.9	76.8	77.1	77.4	77.5	77.4	78.1	77.6	78.5	78.2	78.3	75.2	75.3	67.0
1994	78.0	76.6	78.0	77.2	77.6	77.7	78.2	77.9	78.4	78.3	78.6	75.1	75.6	71.5
1995	78.2	77.2	77.4	77.8	77.7	77.6	78.4	77.6	78.1	78.5	78.9	72.8	77.4	70.7
1996	78.4	77.5	77.2	77.7	78.1	78.1	78.6	78.1	78.3	78.5	78.9	76.6	76.3	69.0
1997	78.6	76.9	79.4	77.8	78.2	78.0	78.9	78.1	78.5	78.9	79.3	76.4	76.8	70.4
1998	78.8	77.3	77.4	77.8	78.0	78.3	79.2	78.0	78.5	79.1	79.5	75.8	76.5	66.5
1999	79.0	77.6	78.5	78.8	78.4	78.5	79.3	78.0	78.5	79.2	79.9	76.8	75.3	68.9
2000	79.4	77.3	78.2	78.6	78.8	79.2	79.5	78.1	78.6	79.5	80.5	75.6	75.9	67.8
2001	79.6	78.1	78.9	78.9	79.0	79.4	79.9	78.6	79.2	79.7	80.4	77.5	75.9	69.4
2002	79.7	78.3	78.8	79.0	79.3	79.4	80.1	78.7	79.1	79.7	80.6	76.7	75.8	68.5
2003	79.9	78.2	79.1	79.1	79.2	79.9	80.2	78.7	79.1	79.9	80.8	78.8	74.7	68.5
2004	80.2	78.5	79.2	79.1	79.7	80.1	80.6	78.9	79.3	80.2	80.9	76.4	79.1	70.4
2005	80.4	78.2	79.8	79.3	79.8	80.4	80.7	79.0	79.3	80.3	81.2	77.0	78.0	72.0
2006	80.8	78.2	79.9	79.6	80.1	80.9	81.1	79.3	79.4	80.5	81.4	77.0	78.0	72.0
2007	80.9	78.5	80.9	80.2	80.1	80.8	81.2	79.6	79.8	80.7	81.0	76.7	77.4	71.6
2008	81.0	78.8	79.8	79.9	80.4	81.3	81.6	79.6	79.3	80.6	81.8	76.7	77.4	71.6
2009	81.4	79.4	79.9	80.2	80.1	81.5	81.7	79.3	79.7	80.8	82.3	76.7	77.4	71.6
2010	<i>81.6</i>	<i>79.6</i>	<i>80.1</i>	<i>80.4</i>	<i>80.2</i>	<i>81.7</i>	<i>81.9</i>	<i>79.4</i>	<i>79.8</i>	<i>81.0</i>	<i>82.5</i>	<i>76.8</i>	<i>77.5</i>	<i>71.8</i>
2011	<i>81.8</i>	<i>79.7</i>	<i>80.3</i>	<i>80.5</i>	<i>80.4</i>	<i>82.0</i>	<i>82.1</i>	<i>79.5</i>	<i>79.9</i>	<i>81.1</i>	<i>82.7</i>	<i>77.0</i>	<i>77.6</i>	<i>72.0</i>
2012	<i>82.0</i>	<i>79.9</i>	<i>80.5</i>	<i>80.7</i>	<i>80.5</i>	<i>82.2</i>	<i>82.3</i>	<i>79.6</i>	<i>80.0</i>	<i>81.3</i>	<i>83.0</i>	<i>77.1</i>	<i>77.7</i>	<i>72.2</i>
2013	<i>82.2</i>	<i>80.0</i>	<i>80.7</i>	<i>80.9</i>	<i>80.6</i>	<i>82.5</i>	<i>82.5</i>	<i>79.7</i>	<i>80.1</i>	<i>81.4</i>	<i>83.2</i>	<i>77.2</i>	<i>77.8</i>	<i>72.4</i>
2014	<i>82.4</i>	<i>80.2</i>	<i>80.9</i>	<i>81.0</i>	<i>80.8</i>	<i>82.7</i>	<i>82.8</i>	<i>79.8</i>	<i>80.2</i>	<i>81.6</i>	<i>83.4</i>	<i>77.3</i>	<i>77.9</i>	<i>72.7</i>
Compound Annual Growth Rates														
1991-2008	0.25	0.19	0.25	0.20	0.17	0.29	0.26	0.12	0.11	0.19	0.27	0.17	0.12	0.30
2000-2014	0.27	0.26	0.24	0.22	0.18	0.31	0.29	0.15	0.14	0.18	0.25	0.16	0.18	0.50
2000-2005	0.25	0.23	0.41	0.18	0.25	0.30	0.30	0.23	0.18	0.20	0.17	0.37	0.55	1.21
2005-2014	0.28	0.28	0.15	0.24	0.14	0.31	0.28	0.11	0.12	0.17	0.30	0.05	-0.02	0.10

**Sources:** CANSIM Table 102-4307 for 2005-2007 for YT, NU and NWT (2005-2007 average for 2005 and 2006, 2007-2009 average for 2007, 2008, and 2009), CANSIM Table 102-0025 for 1979-1990 for all series, CANSIM Table 102-0025 for 1991-1999 for NU and NWT, CANSIM Table 102-0511 for 1991-2006 for all series, CANSIM Table 102-0512 for 2007-2008 for all ten provinces

**Notes:** Provincial estimates for 2007 and 2008 calculated using CANSIM table 102-0512 three-year life expectancy averages. Italicized estimates for 2010-2014 are extrapolated using compound annual growth rate from 1991-2009 for that province or for Canada.

Appendix Table 2: Gross Domestic Product, Canada, Provinces and Territories, 1981-2014

Appendix Table 2a: GDP, Income-Based at Market Prices, Millions of Current Dollars, Canada, Provinces and Territories, 1981-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1981	367,121	5,247	1,072	8,066	6,624	82,453	132,336	13,839	15,101	54,491	45,999	495	..	..
1982	386,773	5,646	1,151	9,389	7,263	87,281	139,969	14,342	15,276	58,335	45,928	486	..	..
1983	419,691	6,056	1,335	10,627	8,292	94,115	156,545	15,381	16,225	60,239	48,540	460	..	..
1984	460,243	6,491	1,376	11,896	9,174	102,992	175,735	17,290	17,310	64,590	50,949	473	..	..
1985	498,075	6,813	1,437	12,894	9,758	110,084	193,511	18,848	18,189	68,906	54,868	512	..	..
1986	524,450	7,378	1,672	14,051	10,950	119,800	212,800	19,395	17,958	59,613	57,943	655	..	..
1987	571,926	7,977	1,771	15,066	12,044	131,308	235,504	20,772	18,496	61,564	64,039	920	..	..
1988	624,401	8,568	1,942	15,909	12,828	143,220	260,275	22,423	19,121	65,363	70,943	1,006	..	..
1989	669,026	9,068	2,091	17,031	13,441	150,298	282,766	23,831	20,125	69,096	77,267	1,069	..	..
1990	692,997	9,300	2,183	17,602	13,770	155,692	287,334	24,752	21,623	75,284	81,223	1,106	..	..
1991	699,253	9,704	2,258	18,257	13,910	157,509	288,217	24,607	21,783	75,046	83,779	1,008	..	..
1992	716,019	9,677	2,303	18,749	14,372	160,868	293,068	25,093	21,723	76,639	89,356	1,179	..	..
1993	744,608	9,878	2,488	18,898	15,096	164,840	302,245	25,134	23,088	82,913	96,066	958	..	..
1994	789,507	10,398	2,543	19,247	15,762	174,054	319,986	26,640	24,670	89,886	102,426	991	..	..
1995	828,973	10,855	2,671	19,801	16,994	181,452	337,400	27,653	26,584	93,614	107,931	1,131	..	..
1996	857,023	10,610	2,827	20,025	17,257	184,390	347,842	29,062	29,102	100,517	111,195	1,221	..	..
1997	903,902	10,716	2,837	20,956	17,404	192,942	368,960	30,189	29,177	109,163	117,135	1,185	..	..
1998	937,295	11,273	2,979	21,978	18,165	200,301	389,250	31,690	29,855	109,317	118,186	1,129	..	..
1999	1,004,456	12,347	3,160	23,771	19,693	215,431	418,245	32,780	31,117	119,077	123,959	1,144	2,432	813
2000	1,102,380	14,148	3,385	25,475	20,820	230,258	452,238	34,901	34,287	146,939	134,606	1,260	2,664	890
2001	1,140,505	14,433	3,448	26,723	21,430	238,548	469,084	36,080	33,704	154,230	136,852	1,337	3,152	933
2002	1,189,452	16,722	3,705	28,006	22,012	249,671	494,815	37,588	35,062	153,801	141,946	1,317	3,205	1,019
2003	1,250,315	18,400	3,801	29,786	23,093	259,094	509,511	38,521	37,528	173,951	149,751	1,358	3,893	1,029
2004	1,331,178	19,651	4,026	30,871	24,408	271,833	533,365	41,022	41,529	194,484	162,293	1,463	4,516	1,117
2005	1,417,028	22,249	4,257	32,127	25,552	280,133	556,635	43,082	44,889	225,460	174,855	1,572	4,445	1,161
2006	1,492,207	24,573	4,425	32,701	26,718	290,595	578,241	46,622	46,171	245,929	188,219	1,700	4,437	1,240
2007	1,573,532	29,065	4,630	33,941	28,287	306,029	601,735	49,726	52,381	260,964	198,325	1,814	4,667	1,319
2008	1,652,923	31,572	4,754	35,416	28,779	314,380	608,446	52,154	67,619	296,072	204,406	2,043	5,024	1,566
2009	1,567,365	25,001	4,927	34,931	28,857	314,541	597,882	50,804	60,080	245,690	196,250	2,134	4,012	1,535
2010	1,662,130	29,085	5,222	36,849	30,213	328,138	630,989	53,308	63,368	270,049	205,117	2,311	4,816	1,914
2011	1,769,921	33,539	5,424	37,652	31,500	344,735	659,743	56,197	74,821	299,521	216,786	2,492	4,730	2,034
2012	1,822,808	32,032	5,573	37,835	31,723	354,040	680,084	59,781	77,957	312,485	221,414	2,551	4,393	2,199
2013	1,892,193	34,991	5,783	38,576	31,857	361,211	693,210	61,897	83,496	344,452	226,605	2,550	4,490	2,339
2014	1,973,043	33,514	6,003	39,077	32,056	370,064	721,970	64,077	82,780	375,756	237,188	2,603	4,731	2,487
Compound Annual Growth Rates														
1991-2014	4.61	5.54	4.34	3.36	3.70	3.78	4.07	4.25	5.98	7.25	4.63	4.21	-	-
1991-2000	5.19	4.28	4.60	3.77	4.58	4.31	5.13	3.96	5.17	7.75	5.41	2.51	-	-
2000-2014	4.25	6.35	4.18	3.10	3.13	3.45	3.40	4.44	6.50	6.94	4.13	5.32	4.19	7.62
2000-2005	5.15	9.48	4.69	4.75	4.18	4.00	4.24	4.30	5.54	8.94	5.37	4.52	10.78	5.46
2005-2014	3.75	4.66	3.89	2.20	2.55	3.14	2.93	4.51	7.04	5.84	3.45	5.76	0.70	8.83

Sources: CANSIM table 384-0037.

Appendix Table 2b: GDP per Capita, Current Dollars, Canada, Provinces and Territories, 1981-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1981	14,791	9,120	8,677	9,435	9,377	12,594	15,017	13,364	15,476	23,784	16,274	20,729	-	-
1982	15,399	9,840	9,313	10,930	10,266	13,263	15,691	13,721	15,484	24,616	15,967	19,702	-	-
1983	16,545	10,456	10,671	12,239	11,600	14,253	17,318	14,514	16,205	25,167	16,695	19,439	-	-
1984	17,973	11,190	10,872	13,557	12,733	15,531	19,169	16,132	17,061	26,981	17,287	19,773	-	-
1985	19,274	11,761	11,260	14,556	13,491	16,515	20,820	17,412	17,747	28,657	18,442	21,005	-	-
1986	20,094	12,802	13,018	15,804	15,103	17,859	22,549	17,768	17,457	24,503	19,291	26,811	-	-
1987	21,626	13,867	13,767	16,860	16,549	19,361	24,435	18,912	17,909	25,222	21,006	35,789	-	-
1988	23,306	14,901	15,021	17,732	17,564	20,948	26,454	20,345	18,596	26,607	22,776	37,744	-	-
1989	24,527	15,728	16,066	18,843	18,284	21,703	27,987	21,590	19,741	27,657	24,171	39,349	-	-
1990	25,026	16,108	16,740	19,333	18,604	22,251	27,908	22,391	21,457	29,549	24,672	39,561	-	-
1991	24,940	16,741	17,320	19,954	18,657	22,287	27,630	22,176	21,724	28,950	24,832	34,914	-	-
1992	25,237	16,681	17,603	20,392	19,211	22,626	27,721	22,552	21,637	29,111	25,760	39,190	-	-
1993	25,958	17,032	18,823	20,454	20,160	23,033	28,274	22,489	22,930	31,085	26,926	31,579	-	-
1994	27,224	18,100	19,058	20,766	21,011	24,200	29,576	23,717	24,436	33,284	27,863	33,385	-	-
1995	28,290	19,131	19,871	21,335	22,630	25,135	30,812	24,490	26,212	34,234	28,573	37,153	-	-
1996	28,943	18,957	20,827	21,502	22,940	25,444	31,385	25,623	28,561	36,221	28,701	38,901	-	-
1997	30,225	19,451	20,846	22,475	23,128	26,523	32,862	26,572	28,664	38,576	29,665	37,268	-	-
1998	31,082	20,882	21,936	23,586	24,203	27,454	34,247	27,860	29,346	37,708	29,672	36,245	-	-
1999	33,040	23,151	23,187	25,457	26,236	29,417	36,354	28,693	30,672	40,328	30,902	37,161	59,845	30,313
2000	35,925	26,797	24,804	27,280	27,741	31,298	38,708	30,420	34,030	48,911	33,325	41,405	65,810	32,366
2001	36,766	27,647	25,230	28,658	28,580	32,252	39,428	31,334	33,696	50,434	33,568	44,335	77,170	33,163
2002	37,931	32,190	27,068	29,948	29,374	33,551	40,916	32,498	35,174	49,165	34,620	43,412	76,870	35,355
2003	39,515	35,491	27,700	31,766	30,814	34,613	41,614	33,107	37,662	54,653	36,313	43,891	91,396	35,093
2004	41,680	37,980	29,242	32,855	32,570	36,075	43,048	34,965	41,641	60,056	39,060	46,512	104,284	37,412
2005	43,949	43,259	30,834	34,254	34,158	36,951	44,431	36,563	45,182	67,876	41,674	49,281	102,417	38,268
2006	45,815	48,127	32,097	34,867	35,834	38,076	45,669	39,393	46,529	71,880	44,374	52,679	102,761	40,244
2007	47,845	57,098	33,619	36,298	37,948	39,782	47,142	41,809	52,274	74,263	46,219	55,718	107,599	42,013
2008	49,718	61,719	34,260	37,843	38,534	40,505	47,230	43,542	66,466	82,339	46,996	61,744	115,894	49,103
2009	46,608	48,383	35,216	37,232	38,478	40,102	45,999	42,036	58,061	66,780	44,494	63,263	92,980	47,086
2010	48,879	55,721	36,858	39,115	40,121	41,383	48,039	43,662	60,269	72,349	45,929	66,800	111,281	57,386
2011	51,537	63,879	37,657	39,866	41,693	43,051	49,741	45,551	70,166	79,025	48,184	70,392	108,733	59,481
2012	52,453	60,794	38,366	40,044	41,915	43,791	50,716	47,809	71,703	80,360	48,742	70,491	100,646	63,319
2013	53,824	66,269	39,762	40,908	42,155	44,294	51,156	48,917	75,485	85,947	49,449	69,999	102,315	66,008
2014	55,510	63,345	41,071	41,466	42,482	45,048	52,785	50,051	73,760	91,183	51,136	70,370	107,572	68,924
Compound Annual Growth Rates														
1991-2011	3.70	6.92	3.96	3.52	4.10	3.35	2.98	3.66	6.04	5.15	3.37	3.57	-	-
1991-2000	4.14	5.37	4.07	3.54	4.51	3.85	3.82	3.57	5.11	6.00	3.32	1.91	-	-
2000-2013	3.16	7.21	3.70	3.17	3.27	2.71	2.17	3.72	6.32	4.43	3.08	4.12	3.45	5.64
2000-2005	4.11	10.05	4.45	4.66	4.25	3.38	2.80	3.75	5.83	6.77	4.57	3.54	9.25	3.41
2005-2013	2.57	5.48	3.23	2.24	2.66	2.29	1.78	3.71	6.63	2.99	2.16	4.48	-0.01	7.05

Sources: Appendix Table 2a and Appendix Table 7a.

Appendix Table 3: GNI and GNI per Capita, Market Prices, Canada, 1982-2014

Year	GNI current \$ (millions)	GNI per capita current \$	Gross domestic expenditure, implicit price index 2005=100	Gross domestic expenditure, implicit price index 2011=100	GNI 2011 constant dollars (millions)	GNI per capita 2011 constant dollars	GNI 2011 US\$ PPP adjusted (millions)
1982	373,366	14,865	52.5	49.0	761,667	30,325	639,800
1983	407,345	16,058	55.4	51.7	787,485	31,044	661,487
1984	445,946	17,415	57.6	53.8	829,181	32,381	696,512
1985	482,793	18,682	59.7	55.7	866,116	33,516	727,538
1986	506,727	19,415	62.1	58.0	873,920	33,483	734,093
1987	554,221	20,956	64.5	60.2	920,265	34,797	773,022
1988	604,106	22,548	67.1	62.7	964,229	35,990	809,952
1989	645,935	23,681	69.9	65.3	989,694	36,283	831,343
1990	667,971	24,122	72.6	67.8	985,395	35,585	823,790
1991	675,996	24,110	75.2	70.2	962,755	34,338	812,565
1992	690,265	24,330	76.6	71.5	965,109	34,017	797,180
1993	719,217	25,073	78	72.8	987,540	34,427	822,621
1994	761,141	26,246	79.2	73.9	1,029,270	35,491	863,558
1995	800,325	27,313	80.2	74.9	1,068,763	36,474	896,692
1996	828,455	27,979	81.2	75.8	1,092,704	36,903	901,480
1997	875,769	29,284	82.4	76.9	1,138,287	38,062	939,087
1998	905,650	30,033	83.5	78.0	1,161,618	38,521	956,012
1999	970,531	31,924	84.7	79.1	1,227,200	40,367	1,021,031
2000	1,073,359	34,979	86.8	81.0	1,324,387	43,160	1,097,916
2001	1,108,278	35,727	88.6	82.7	1,339,690	43,187	1,107,924
2002	1,159,248	36,968	90.6	84.6	1,370,369	43,700	1,126,444
2003	1,219,451	38,539	92	85.9	1,419,600	44,865	1,176,848
2004	1,302,388	40,779	93.6	87.4	1,490,232	46,660	1,254,776
2005	1,387,961	43,048	95.4	89.1	1,558,183	48,327	1,336,921
2006	1,468,391	45,083	97.7	91.2	1,609,669	49,421	1,387,535
2007	1,550,309	47,139	100	93.4	1,660,381	50,486	1,427,928
2008	1,628,577	48,986	102.5	95.7	1,701,664	51,184	1,465,133
2009	1,540,309	45,804	103.4	96.5	1,595,426	47,443	1,351,326
2010	1,629,202	47,910	104.8	97.9	1,664,957	48,962	1,410,219
2011	1,736,412	50,561	107.1	100.0	1,736,412	50,561	1,470,741
2012	1,790,386	51,520	108.9	101.7	1,760,793	50,668	1,494,913
2013	1,864,663	53,040	110.6	103.3	1,805,655	51,362	1,531,195
2014	1,943,321	54,674	113.1	105.6	1,840,227	51,774	1,564,193
Compound Annual Growth Rates							
1991-2014	4.70	3.62	1.79	1.79	2.86	1.80	2.89
1991-2000	5.27	4.22	1.61	1.61	3.61	2.57	3.40
2000-2014	4.33	3.24	1.91	1.91	2.38	1.31	2.56
2000-2005	5.28	4.24	1.91	1.91	2.47	2.29	4.02
2005-2014	4.30	3.03	2.15	2.15	2.10	0.86	1.98

Source: GNI current dollars from CANSIM table 380-0083, Final consumption expenditure Implicit price index from CANSIM 380-0101, PPP from CANSIM 380-0058 for 1990-2014. Average used for 1981-1990 (= 0.84)

**Appendix Table 4: Enrolment in Public Elementary and Secondary Schools, Canada, Provinces and Territories, 1996-2012**

Appendix Table 4a: Total Enrolment in September by Headcount in Public Elementary and Secondary Schools, Both Sexes, Canada, Provinces and Territories, 1996-2009

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1996	5,319,748	106,205	24,537	163,941	133,276	1,267,336	2,080,197	192,176	193,881	526,930	607,644	6,366	-	-
1997	5,354,706	101,768	24,397	162,359	131,586	1,260,513	2,095,630	194,798	196,013	532,301	631,445	6,333	-	-
1998	5,357,244	97,557	24,146	160,011	129,131	1,250,248	2,111,622	192,630	194,797	543,387	629,545	6,102	-	-
1999	5,372,733	94,118	24,089	158,205	127,003	1,247,757	2,131,626	197,067	192,885	546,402	628,269	5,975	9,753	9,584
2000	5,350,719	90,233	23,153	155,873	124,942	1,237,981	2,143,599	189,912	186,586	549,633	624,618	5,764	9,672	9,558
2001	5,360,375	86,971	22,843	153,450	122,792	1,244,689	2,163,108	188,907	183,024	548,122	622,829	5,608	9,707	8,738
2002	5,352,040	84,337	23,242	150,599	120,600	1,244,943	2,164,940	186,892	184,605	554,397	613,227	5,610	9,747	8,901
2003	5,293,261	81,511	22,905	148,514	118,869	1,240,820	2,129,742	186,287	182,128	552,592	605,536	5,520	9,718	9,119
2004	5,255,616	79,483	22,393	145,396	117,145	1,232,663	2,123,904	184,352	178,709	550,983	596,168	5,459	9,607	9,354
2005	5,213,462	76,806	21,948	142,304	114,820	1,215,927	2,118,544	182,371	175,588	551,740	589,379	5,335	9,571	9,129
2006	5,169,601	74,345	21,365	138,661	112,013	1,204,612	2,103,464	180,043	172,109	560,563	578,797	5,232	9,332	9,065
2007	5,115,075	72,109	20,813	135,303	110,288	1,188,904	2,087,588	179,320	167,066	559,118	571,268	5,227	9,048	9,023
2008	5,086,549	70,641	20,324	133,134	108,407	1,187,612	2,070,736	177,962	164,763	564,051	565,875	5,005	8,762	9,277
2009	5,074,669	69,665	19,955	130,550	106,394	1,189,876	2,061,390	177,500	166,003	567,979	562,743	5,010	8,564	9,040
2010	5,051,760	68,655	21,162	128,131	104,421	1,179,970	2,051,865	177,679	167,043	573,198	557,102	5,086	8,576	8,872
2011	5,030,315	67,829	20,831	125,540	102,579	1,172,185	2,043,117	178,919	168,354	577,759	550,748	5,037	8,512	8,905
2012	5,029,009	67,478	20,406	122,643	101,079	1,176,811	2,031,195	179,291	170,318	594,445	542,879	5,049	8,329	9,086
Compound Annual Growth Rates														
1996-2012	-0.35	-2.80	-1.15	-1.80	-1.71	-0.46	-0.15	-0.43	-0.81	0.76	-0.70	-1.44	-	-
1996-2000	0.15	-3.99	-1.44	-1.25	-1.60	-0.58	0.75	-0.30	-0.95	1.06	0.69	-2.45	-	-
2000-2012	-0.52	-2.39	-1.05	-1.98	-1.75	-0.42	-0.45	-0.48	-0.76	0.66	-1.16	-1.10	-1.24	-0.42
2000-2005	-0.52	-3.17	-1.06	-1.81	-1.68	-0.36	-0.23	-0.81	-1.21	0.08	-1.15	-1.53	-0.21	-0.91
2005-2012	-0.51	-1.61	-0.91	-1.84	-1.58	-0.41	-0.52	-0.21	-0.38	0.94	-1.02	-0.69	-1.72	-0.06

**Sources:** Statistics Canada, "Summary Public School Indicators for the Provinces and Territories," catalogue number 81-595-M, nos. 22, 44, 50, 67, 78, 83, 88, and 95.

**Notes:** Headcount enrolments are the number of students enrolled in a publicly-funded primary or secondary school in September of the indicated year (or as soon as possible thereafter). In some cases this includes adult high schools and kindergarten students.

Years refer to the year in which the school year began. For example, 2006 data refer to the 2006/2007 school year, which began in September 2006.

Data from 1996 to 1999 is obtained from an earlier publication of "Summary Public School Indicators for the Provinces and Territories" and, unlike the period 2000-2004, has not been updated in later publications.

Appendix Table 4b: Total Enrolment Rates in September by Headcount in Public Elementary and Secondary Schools, Proportion of the Population Aged 5-17, Both Sexes, Per Cent, Canada, Provinces and Territories, 1996-2012

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1996	101.6	99.9	93.5	100.5	100.7	103.5	107.6	90.4	93.1	96.5	91.8	99.9	-	-
1997	101.3	99.6	93.3	100.0	100.3	103.2	106.4	91.3	94.7	95.9	93.7	97.7	-	-
1998	100.7	99.7	93.0	99.4	99.9	102.8	105.4	90.2	94.6	96.4	92.8	96.3	-	-
1999	100.8	99.7	93.4	99.0	99.5	103.4	105.1	91.9	94.7	96.4	92.5	96.0	102.8	118.9
2000	100.0	99.1	90.9	98.5	99.3	103.0	104.1	88.3	93.1	96.5	92.0	94.8	102.8	115.7
2001	99.9	99.1	90.2	98.0	99.2	103.7	103.7	87.7	93.3	95.8	91.9	95.1	102.9	104.2
2002	99.7	99.4	93.1	97.6	99.2	104.0	102.7	86.9	95.8	96.1	91.4	97.2	102.9	104.2
2003	99.0	99.1	93.9	97.8	99.5	104.3	100.9	86.9	96.4	95.8	91.4	96.2	102.6	105.8
2004	98.9	99.5	93.6	97.4	99.7	104.3	100.8	86.1	96.4	95.7	90.6	96.2	102.0	108.1
2005	98.4	98.4	92.9	97.0	99.0	103.2	100.8	85.6	96.6	95.3	90.0	94.9	103.9	104.7
2006	98.2	98.0	92.1	96.5	98.6	102.8	100.7	85.0	96.4	96.0	88.9	95.2	104.3	104.5
2007	98.0	97.3	92.2	96.6	99.0	102.6	100.6	85.4	94.7	95.8	88.7	96.7	103.1	104.1
2008	98.6	97.4	91.7	97.8	99.4	104.4	100.7	85.6	94.3	96.8	88.8	93.4	102.9	107.2
2009	99.3	97.2	91.3	98.4	99.4	106.6	101.0	85.7	95.4	97.2	88.8	94.8	103.7	104.5
2010	99.6	97.0	97.9	98.6	99.4	107.6	101.2	86.0	96.0	97.9	88.3	96.4	106.9	-
2011	99.8	96.7	96.3	98.5	99.4	108.2	101.4	86.2	96.8	97.9	87.8	96.5	108.1	103.1
2012	99.9	97.1	95.1	98.2	99.4	109.4	101.6	86.1	97.0	99.2	87.2	96.0	106.9	104.9
Compound Annual Growth Rates														
1996-2009	-0.18	-0.21	-0.18	-0.17	-0.10	0.22	-0.48	-0.41	0.18	0.05	-0.26	-0.40	-	-
1996-2000	-0.38	-0.20	-0.71	-0.49	-0.34	-0.12	-0.81	-0.60	-0.01	-0.02	0.06	-1.31	-	-
2000-2012	-0.01	-0.17	0.39	-0.03	0.01	0.50	-0.20	-0.20	0.34	0.24	-0.45	0.11	0.33	-0.81
2000-2005	-0.33	-0.14	0.44	-0.30	-0.05	0.04	-0.66	-0.61	0.73	-0.25	-0.44	0.04	0.22	-1.98
2005-2012	0.21	-0.20	0.34	0.17	0.05	0.83	0.12	0.09	0.07	0.58	-0.45	0.16	0.41	0.03

Sources: Appendix Table 4a and Appendix Table 7a.

Appendix Table 5: College Enrolment (Full-time and Part-time), Canada, Provinces and Territories, 1992-2013

Appendix Table 5a: College Enrolment (Full-time and Part-time) in September, Both Sexes, Canada, Provinces and Territories, 1992-2013

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1992	469,806	4,830	924	3,297	3,207	191,643	130,257	5,670	4,251	45,774	78,492	570	885	-
1993	467,622	5,151	1,344	3,228	3,291	184,935	134,886	5,619	4,644	44,145	78,480	612	1,284	-
1994	470,769	6,177	1,197	3,003	3,603	184,608	138,786	5,289	3,936	44,112	77,811	639	1,614	-
1995	478,971	5,859	1,317	7,083	3,852	183,501	146,034	4,971	3,405	43,017	78,531	564	834	-
1996	484,389	5,811	1,419	7,242	4,977	177,867	152,037	5,742	2,946	44,769	80,244	654	678	-
1997	490,221	6,150	1,695	7,701	5,274	173,823	152,451	6,246	3,351	46,137	85,923	813	648	-
1998	494,955	6,444	1,974	7365	5,364	173,427	152,583	6,693	2,829	49,836	86,781	714	942	-
1999	497,250	7,410	1,974	7,776	5,478	174,831	154,590	7,542	3,048	46,215	86,895	654	594	243
2000	545,943	4,095	1,368	6,924	5,274	203,850	154,338	8,715	4,320	48,048	107,580	621	591	216
2001	562,446	6,333	1,557	10,353	6,684	199,173	158,943	8,262	4,137	49,446	116,004	609	405	543
2002	571,956	7,860	1,800	7,950	6,270	195,507	168,324	8,463	3,852	53,073	117,381	540	522	420
2003	608,277	7,779	1,791	7,662	6,501	190,800	207,837	8,841	4,020	54,246	117,381	522	507	390
2004	608,352	6,558	1,275	7,677	8,040	189,159	203,967	8,733	3,840	61,011	116,601	501	531	459
2005	605,637	8,718	1,620	8,013	7,278	185,382	217,302	8,931	3,837	61,674	101,565	501	531	285
2006	611,823	8,991	1,557	8,547	7,008	188,055	216,414	9,051	6,825	61,770	102,570	201	531	297
2007	644,790	9,504	1,842	8,880	6,987	195,627	230,040	8,940	17,862	60,063	104,040	207	498	294
2008	634,233	9,690	2,487	9,417	7,110	202,299	239,334	8,871	20,160	62,982	70,995	210	447	237
2009	704,169	9,498	3,447	10,179	8,082	210,084	276,492	11,685	19,959	59,319	94,386	243	522	279
2010	725,559	10,170	3,510	11,811	9,288	214,761	278,610	18,387	20,541	60,246	97,056	-	-	-
2011	738,363	9,774	3,576	11,757	8,889	217,545	287,223	16,197	20,103	59,145	99,111	-	-	-
2012	739,917	9,888	2,622	11,124	8,454	220,125	292,044	16,134	19,407	59,898	96,543	-	-	-
2013	747,576	9,108	2,670	11,715	8,721	221,778	301,794	16,149	19,134	54,978	97,698	-	-	-
Compound Annual Growth Rates														
1992-2013	2.24	3.07	5.18	6.22	4.88	0.70	4.08	5.11	7.43	0.88	1.05	-	-	-
1992-2000	1.90	-2.04	5.03	9.72	6.42	0.77	2.14	5.52	0.20	0.61	4.02	1.08	-4.92	-
2000-2013	2.45	6.34	5.28	4.13	3.94	0.65	5.29	4.86	12.13	1.04	-0.74	-	-	-
2000-2005	2.10	16.31	3.44	2.96	6.65	-1.88	7.08	0.49	-2.34	5.12	-1.14	-4.20	-2.12	5.70
2005-2013	2.67	1.59	6.20	4.19	1.89	2.17	3.76	7.67	22.46	-0.36	-0.63	-	-	-

Sources: CANSIM Table 477-0019.

Notes: Years refer to the year in which the school year began. For example, 2005 data refer to the 2005/2006 school year, which began in September 2005.



Appendix Table 5b: College Enrolment Rate, Proportion of the Total Population Aged 18-22, Both Sexes, Per Cent, Canada, Provinces and Territories, 1992-2013

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1992	23.4	9.2	9.3	33.2	5.4	40.8	17.2	6.9	6.1	24.0	33.5	26.7	26.8	-
1993	23.6	9.9	13.5	32.4	5.6	39.5	18.1	6.9	6.6	23.5	33.3	29.1	41.0	-
1994	23.9	12.3	12.1	30.4	6.3	39.4	19.0	6.6	5.6	23.5	32.8	34.2	53.1	-
1995	24.2	12.3	13.5	72.7	6.9	38.5	20.0	6.3	4.7	22.7	32.4	29.9	26.8	-
1996	24.3	12.7	14.5	74.0	9.1	36.7	20.9	7.3	4.0	23.0	31.8	33.1	21.8	-
1997	24.3	14.1	17.4	79.0	9.8	35.3	20.8	7.9	4.5	23.0	33.2	41.0	20.6	-
1998	24.3	15.6	20.7	77.4	10.2	34.7	20.7	8.6	3.8	23.8	33.4	36.6	30.8	-
1999	24.1	18.6	20.7	81.6	10.6	34.5	20.6	9.6	4.1	21.5	33.1	33.8	19.5	10.5
2000	26.1	10.5	14.2	71.8	10.3	40.1	20.1	11.0	5.8	21.7	40.2	31.4	19.3	9.4
2001	26.4	16.5	16.0	106.1	13.0	39.4	20.0	10.3	5.5	21.6	42.0	29.7	12.8	22.9
2002	26.4	20.7	18.6	82.2	12.2	39.0	20.6	10.4	5.1	22.5	41.5	24.5	15.9	16.7
2003	27.8	20.9	18.3	78.1	12.7	38.6	24.8	10.7	5.3	22.5	40.9	22.4	14.9	15.2
2004	27.6	17.9	12.8	76.8	15.9	38.9	23.9	10.4	5.0	24.7	40.5	21.5	15.4	17.2
2005	27.4	24.8	16.3	80.8	14.7	38.7	25.1	10.6	5.1	24.2	35.5	22.0	15.5	10.3
2006	27.5	26.6	16.1	88.3	14.4	39.6	24.7	10.7	9.1	23.6	35.8	8.8	15.3	10.3
2007	28.9	28.9	19.1	92.2	14.6	41.0	26.2	10.5	23.6	22.6	35.9	9.0	14.1	9.8
2008	28.1	29.3	25.9	97.9	14.8	41.6	27.0	10.3	26.2	23.5	24.4	9.2	12.3	7.7
2009	30.7	28.7	35.6	105.1	16.8	41.8	30.8	13.4	25.6	22.1	32.2	10.4	14.1	8.7
2010	31.2	30.8	35.3	118.9	19.1	41.3	30.5	20.8	26.3	22.7	32.8	-	-	-
2011	31.3	30.1	35.6	117.1	18.3	41.0	30.8	18.2	25.8	22.2	33.4	-	-	-
2012	31.0	31.0	25.9	109.8	17.5	41.2	30.8	17.8	24.9	22.3	31.8	-	-	-
2013	31.3	29.5	26.8	117.6	18.4	41.9	31.7	17.6	24.7	20.4	31.8	-	-	-
<b>Compound Annual Growth Rates</b>														
1992-2013	1.39	5.73	5.16	6.20	5.98	0.13	2.96	4.55	6.88	-0.77	-0.25	-	-	-
1992-2000	1.37	1.74	5.39	10.10	8.29	-0.22	1.98	5.97	-0.64	-1.23	2.32	2.04	-4.01	-
2000-2013	1.40	8.26	5.02	3.87	4.59	0.34	3.57	3.69	11.80	-0.49	-1.80	-	-	-
2000-2005	0.93	18.67	2.88	2.41	7.43	-0.68	4.57	-0.80	-2.71	2.21	-2.49	-6.91	-4.25	1.85
2005-2013	1.70	2.22	6.38	4.79	2.85	0.99	2.95	6.60	21.94	-2.14	-1.36	-	-	-

Sources: Appendix Table 5a and 7c.

**Appendix Table 6: University Enrolment (Full-time and Part-time), Canada, Provinces and Nunavut, 1992-2013**

Appendix Table 6a: University Enrolment (Full-time and Part-time), Both Sexes, Canada, Provinces and Nunavut, 1992-2013

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	NU
1992	885,645	17,856	3,636	37,881	24,822	257,472	339,048	37,587	32,895	68,271	66,171	-
1993	874,605	17,397	3,468	37,983	25,059	255,552	330,723	37,056	31,707	68,769	66,888	-
1994	858,972	17,169	3,132	37,245	24,783	248,421	324,387	35,769	31,248	67,434	69,381	-
1995	846,408	16,215	2,901	36,639	24,798	242,031	319,413	33,408	31,575	67,917	71,502	-
1996	829,767	16,053	2,739	36,834	23,628	235,692	306,834	32,055	31,320	70,032	74,580	-
1997	822,774	15,798	2,934	37,083	22,686	232,095	303,408	30,822	31,227	71,418	75,303	-
1998	826,362	15,711	2,886	37,242	22,767	232,278	302,943	30,735	31,278	73,773	76,749	-
1999	847,032	16,278	3,096	37,137	22,374	237,855	312,315	30,696	31,452	81,552	74,277	-
2000	851,157	16,140	3,366	38,823	23,649	233,652	320,112	31,938	32,013	76,341	75,126	4
2001	887,244	16,275	3,354	40,575	24,312	240,669	335,721	34,143	32,673	79,131	80,388	12
2002	936,390	16,908	3,561	41,892	24,654	250,806	362,736	35,172	34,254	83,448	82,959	5
2003	993,711	17,550	3,855	44,778	25,554	260,058	397,773	38,046	34,560	86,097	85,440	18
2004	1,021,500	18,048	3,972	43,539	24,903	263,379	413,406	39,285	33,126	89,124	92,724	10
2005	1,050,057	18,336	3,849	43,308	25,014	265,992	431,040	39,615	20,622	91,665	110,619	7
2006	1,066,770	17,811	3,999	42,465	23,757	266,709	440,607	40,119	20,604	94,149	116,550	9
2007	1,072,902	17,523	3,837	41,442	23,682	268,011	446,196	39,567	20,607	94,659	117,375	5
2008	1,113,507	17,322	4,089	40,890	23,004	269,091	448,470	42,081	19,818	93,774	154,968	8
2009	1,201,062	17,967	4,227	41,886	23,349	277,398	468,834	43,155	31,683	125,607	166,953	10
2010	1,235,916	18,324	4,401	42,831	23,415	287,475	483,780	43,632	31,848	128,361	171,840	10
2011	1,261,911	18,417	4,491	43,305	23,250	294,525	495,906	44,610	33,276	130,113	174,015	10
2012	1,283,241	18,615	4,362	43,824	22,644	300,612	504,972	45,336	34,509	131,799	176,562	10
2013	1,300,440	18,096	4,197	43,905	21,843	307,548	512,712	45,876	34,701	131,742	179,817	-
Compound Annual Growth Rates												
1992-2013	1.85	0.06	0.69	0.71	-0.61	0.85	1.99	0.95	0.25	3.18	4.88	-
1992-2000	-0.50	-1.26	-0.96	0.31	-0.60	-1.21	-0.72	-2.02	-0.34	1.41	1.60	-
2000-2013	3.31	0.88	1.71	0.95	-0.61	2.14	3.69	2.82	0.62	4.29	6.94	-
2000-2005	4.29	2.58	2.72	2.21	1.13	2.63	6.13	4.40	-8.42	3.73	8.05	-
2005-2013	2.71	-0.16	1.09	0.17	-1.68	1.83	2.19	1.85	6.72	4.64	6.26	-

**Sources:** Statistics Canada. Table 477-0019. Nunavut university data based on number of BED graduates associated with Nunavut Arctic College, taken from correspondence with the College.

**Notes:** Years refer to the year in which the school year began. For example, 2006 data refer to the 2006/2007 school year, which began in September 2006.

Appendix Table 6b: University Enrolment Rate (Full-time and Part-time Enrolment), Proportion of the Total Population Aged 18-22, Both Sexes, Per Cent, Canada, Provinces and Nunavut, 1992-2013

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	NU
1992	44.2	33.9	36.7	381.9	42.1	54.8	44.7	45.9	47.2	35.8	28.2	-
1993	44.1	33.6	34.8	380.9	43.0	54.6	44.5	45.6	45.1	36.6	28.4	-
1994	43.7	34.3	31.7	376.9	43.4	53.0	44.3	44.5	44.2	36.0	29.2	-
1995	42.8	34.0	29.8	375.9	44.3	50.8	43.7	42.1	43.7	35.8	29.5	-
1996	41.6	35.2	28.0	376.2	43.0	48.7	42.1	40.5	42.5	36.0	29.5	-
1997	40.8	36.2	30.1	380.5	42.1	47.1	41.4	39.2	41.9	35.6	29.1	-
1998	40.6	38.0	30.3	391.2	43.4	46.5	41.0	39.5	41.8	35.3	29.5	-
1999	41.1	40.8	32.5	389.9	43.3	46.9	41.6	39.2	41.9	37.9	28.3	-
2000	40.7	41.5	34.9	402.5	46.1	46.0	41.6	40.4	43.0	34.5	28.1	0.2
2001	41.7	42.4	34.4	416.0	47.4	47.6	42.2	42.7	43.6	34.5	29.1	0.5
2002	43.3	44.6	36.8	433.1	48.0	50.0	44.4	43.4	45.3	35.3	29.3	0.2
2003	45.4	47.2	39.3	456.5	50.1	52.6	47.5	46.2	45.1	35.7	29.8	0.7
2004	46.4	49.3	39.8	435.8	49.3	54.2	48.5	47.0	42.9	36.1	32.2	0.4
2005	47.5	52.1	38.8	436.9	50.6	55.6	49.8	46.9	27.2	36.0	38.6	0.3
2006	48.0	52.6	41.3	438.7	48.9	56.2	50.4	47.4	27.6	36.0	40.7	0.3
2007	48.0	53.2	39.8	430.1	49.4	56.2	50.7	46.5	27.3	35.6	40.5	0.2
2008	49.3	52.4	42.5	425.1	47.9	55.3	50.5	48.9	25.8	35.0	53.2	0.3
2009	52.4	54.3	43.7	432.6	48.4	55.2	52.2	49.3	40.7	46.9	57.0	0.3
2010	53.1	55.5	44.3	431.1	48.2	55.3	52.9	49.3	40.8	48.3	58.1	0.3
2011	53.5	56.6	44.7	431.2	47.8	55.5	53.2	50.0	42.7	48.8	58.6	0.3
2012	53.8	58.3	43.1	432.6	46.8	56.2	53.3	49.9	44.3	49.2	58.2	0.3
2013	54.5	58.6	42.1	440.6	46.1	58.1	53.8	50.1	44.8	48.9	58.5	0.3
Compound Annual Growth Rates												
1992-2013	1.00	2.65	0.66	0.68	0.44	0.28	0.89	0.42	-0.25	1.50	3.53	-
1992-2000	-1.01	2.56	-0.61	0.66	1.14	-2.18	-0.87	-1.60	-1.18	-0.45	-0.06	-
2000-2013	2.26	2.70	1.46	0.70	0.00	1.82	1.99	1.68	0.32	2.71	5.80	4.24
2000-2005	3.10	4.66	2.16	1.66	1.86	3.88	3.64	3.06	-8.76	0.86	6.57	7.77
2005-2013	1.74	1.49	1.02	0.11	-1.14	0.56	0.98	0.82	6.45	3.88	5.32	2.09

Sources: Appendix Table 7c and Appendix Table 6a.

Appendix Table 7: Population, Canada, Provinces and Territories

Appendix Table 7a: Population, Both Sexes, Canada, Provinces and Territories, 1981-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1981	24,819,915	575,302	123,551	854,871	706,438	6,547,207	8,812,286	1,035,545	975,759	2,291,104	2,826,558	23,880	-	-
1982	25,116,942	573,795	123,588	859,038	707,457	6,580,631	8,920,288	1,045,224	986,582	2,369,827	2,876,513	24,668	-	-
1983	25,366,451	579,164	125,102	868,289	714,842	6,602,976	9,039,564	1,059,752	1,001,249	2,393,587	2,907,502	23,664	-	-
1984	25,607,053	580,065	126,563	877,471	720,488	6,631,220	9,167,484	1,071,810	1,014,615	2,393,907	2,947,181	23,921	-	-
1985	25,842,116	579,275	127,619	885,848	723,287	6,665,802	9,294,657	1,082,495	1,024,928	2,404,490	2,975,131	24,375	-	-
1986	26,100,278	576,306	128,436	889,087	725,019	6,708,170	9,437,359	1,091,552	1,028,717	2,432,930	3,003,621	24,430	-	-
1987	26,446,601	575,242	128,641	893,606	727,768	6,781,984	9,637,945	1,098,373	1,032,799	2,440,877	3,048,651	25,706	-	-
1988	26,791,747	574,982	129,289	897,216	730,349	6,837,077	9,838,620	1,102,152	1,028,225	2,456,614	3,114,761	26,653	-	-
1989	27,276,781	576,551	130,153	903,841	735,129	6,925,128	10,103,305	1,103,792	1,019,439	2,498,325	3,196,725	27,167	-	-
1990	27,691,138	577,368	130,404	910,451	740,156	6,996,986	10,295,832	1,105,421	1,007,727	2,547,788	3,292,111	27,957	-	-
1991	28,037,420	579,644	130,369	914,969	745,567	7,067,396	10,431,316	1,109,604	1,002,713	2,592,306	3,373,787	28,871	38,724	22,154
1992	28,371,264	580,109	130,827	919,451	748,121	7,110,010	10,572,205	1,112,689	1,003,995	2,632,672	3,468,802	30,084	39,416	22,883
1993	28,684,764	579,977	132,177	923,925	748,812	7,156,537	10,690,038	1,117,618	1,006,900	2,667,292	3,567,772	30,337	39,820	23,559
1994	29,000,663	574,466	133,437	926,871	750,185	7,192,403	10,819,146	1,123,230	1,009,575	2,700,606	3,676,075	29,684	40,578	24,407
1995	29,302,311	567,397	134,415	928,120	750,943	7,219,219	10,950,119	1,129,150	1,014,187	2,734,519	3,777,390	30,442	41,432	24,978
1996	29,610,218	559,698	135,737	931,327	752,268	7,246,897	11,082,903	1,134,196	1,018,945	2,775,133	3,874,317	31,387	41,741	25,669
1997	29,905,948	550,911	136,095	932,402	752,511	7,274,611	11,227,651	1,136,128	1,017,902	2,829,848	3,948,583	31,797	41,625	25,884
1998	30,155,173	539,843	135,804	931,836	750,530	7,295,935	11,365,901	1,137,489	1,017,332	2,899,066	3,983,113	31,149	40,802	26,373
1999	30,401,286	533,329	136,281	933,784	750,601	7,323,250	11,504,759	1,142,448	1,014,524	2,952,692	4,011,375	30,785	40,638	26,820
2000	30,685,730	527,966	136,470	933,821	750,517	7,356,951	11,683,290	1,147,313	1,007,565	3,004,198	4,039,230	30,431	40,480	27,498
2001	31,020,596	522,046	136,665	932,491	749,819	7,396,415	11,897,370	1,151,450	1,000,239	3,058,084	4,076,881	30,157	40,845	28,134
2002	31,358,418	519,483	136,876	935,155	749,379	7,441,498	12,093,299	1,156,636	996,816	3,128,262	4,100,161	30,337	41,694	28,822
2003	31,641,630	518,445	137,221	937,676	749,434	7,485,491	12,243,758	1,163,528	996,431	3,182,852	4,123,937	30,940	42,595	29,322
2004	31,938,004	517,402	137,681	939,612	749,408	7,535,278	12,390,068	1,173,223	997,312	3,238,387	4,155,017	31,454	43,305	29,857
2005	32,242,364	514,315	138,064	937,899	748,044	7,581,192	12,527,990	1,178,296	993,523	3,321,638	4,195,764	31,899	43,401	30,339
2006	32,570,505	510,584	137,865	937,869	745,609	7,631,873	12,661,566	1,183,524	992,302	3,421,361	4,241,691	32,271	43,178	30,812
2007	32,887,928	509,039	137,721	935,071	745,407	7,692,736	12,764,195	1,189,366	1,002,048	3,514,031	4,290,988	32,557	43,374	31,395
2008	33,245,773	511,543	138,764	935,865	746,855	7,761,504	12,882,625	1,197,774	1,017,346	3,595,755	4,349,412	33,088	43,350	31,892
2009	33,628,571	516,729	139,909	938,194	749,954	7,843,475	12,997,687	1,208,589	1,034,782	3,679,092	4,410,679	33,732	43,149	32,600
2010	34,005,274	521,972	141,678	942,073	753,044	7,929,365	13,135,063	1,220,930	1,051,425	3,732,573	4,465,924	34,596	43,278	33,353
2011	34,342,780	525,037	144,038	944,469	755,530	8,007,656	13,263,544	1,233,728	1,066,349	3,790,191	4,499,139	35,402	43,501	34,196
2012	34,751,476	526,895	145,259	944,835	756,836	8,084,768	13,409,558	1,250,406	1,087,223	3,888,552	4,542,578	36,189	43,648	34,729
2013	35,155,499	528,017	145,441	942,991	755,718	8,154,761	13,551,004	1,265,342	1,106,122	4,007,748	4,582,607	36,429	43,884	35,435
2014	35,543,658	529,069	146,162	942,387	754,578	8,214,885	13,677,687	1,280,242	1,122,283	4,120,897	4,638,415	36,990	43,980	36,083
Compound Annual Growth Rates														
1991-2014	1.04	-0.40	0.50	0.13	0.05	0.66	1.19	0.62	0.49	2.04	1.39	1.08	0.55	2.14
2000-2014	1.06	0.01	0.49	0.07	0.04	0.79	1.13	0.79	0.77	2.28	0.99	1.40	0.59	1.96
2000-2005	0.99	-0.52	0.23	0.09	-0.07	0.60	1.41	0.53	-0.28	2.03	0.76	0.95	1.40	1.99
2005-2014	1.09	0.31	0.64	0.05	0.10	0.90	0.98	0.93	1.36	2.42	1.12	1.66	0.15	1.95
1991-2014	1.04	-0.40	0.50	0.13	0.05	0.66	1.19	0.62	0.49	2.04	1.39	1.08	0.55	2.14
2000-2014	1.06	0.01	0.49	0.07	0.04	0.79	1.13	0.79	0.77	2.28	0.99	1.40	0.59	1.96

Source: CANSIM table 015-0001.

Appendix Table 7b: Population Aged 5-17 (School Aged Population), Both Sexes, Canada, Provinces and Territories, 1981-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1981	5,111,600	158,816	28,785	189,384	165,174	1,297,441	1,791,448	219,002	214,399	480,664	547,356	5,403	-	-
1982	5,006,960	154,097	27,956	184,015	160,398	1,261,407	1,752,853	214,948	210,788	482,763	538,725	5,326	-	-
1983	4,906,618	150,823	27,343	179,338	156,682	1,228,210	1,718,074	212,043	208,695	476,866	530,127	4,826	-	-
1984	4,847,382	147,036	27,012	176,303	153,479	1,209,125	1,698,237	210,283	208,427	470,709	528,299	4,815	-	-
1985	4,826,565	143,678	26,774	174,284	151,015	1,203,898	1,691,518	209,738	209,460	469,307	527,862	4,928	-	-
1986	4,824,948	139,749	26,367	171,709	148,814	1,204,818	1,693,574	209,657	209,845	473,245	528,032	4,937	-	-
1987	4,836,497	136,222	26,127	169,954	147,165	1,209,234	1,706,345	209,382	209,866	472,953	530,209	5,119	-	-
1988	4,852,627	133,215	26,046	168,061	145,361	1,208,221	1,723,205	208,482	208,903	475,015	537,033	5,222	-	-
1989	4,883,130	130,173	26,015	165,995	143,569	1,211,455	1,742,873	207,198	207,300	482,218	546,950	5,346	-	-
1990	4,933,018	126,701	25,866	164,766	141,858	1,217,715	1,765,874	207,185	205,798	494,088	563,369	5,548	-	-
1991	4,984,705	123,370	25,823	163,844	140,389	1,225,980	1,788,077	207,756	205,605	506,455	577,046	5,648	8,427	6,285
1992	5,035,813	120,127	25,761	163,325	138,483	1,226,605	1,815,928	207,689	205,814	516,427	594,400	5,890	8,865	6,499
1993	5,068,521	116,877	25,762	162,646	136,308	1,221,949	1,835,467	207,641	206,171	523,514	610,461	5,867	9,080	6,778
1994	5,117,548	112,963	25,964	162,059	134,644	1,220,281	1,863,784	208,543	207,063	530,404	629,599	5,888	9,256	7,100
1995	5,177,683	109,947	26,147	162,710	133,358	1,220,355	1,897,592	210,828	207,962	538,836	647,020	6,168	9,411	7,349
1996	5,238,039	106,357	26,250	163,128	132,391	1,224,010	1,933,793	212,522	208,142	545,980	662,065	6,373	9,490	7,538
1997	5,286,018	102,166	26,147	162,392	131,183	1,221,433	1,969,322	213,375	207,015	554,974	674,251	6,480	9,544	7,736
1998	5,318,539	97,839	25,957	161,018	129,258	1,215,654	2,003,425	213,632	205,976	563,776	678,355	6,338	9,477	7,834
1999	5,330,242	94,392	25,783	159,778	127,688	1,206,866	2,027,753	214,541	203,630	566,917	679,119	6,227	9,490	8,058
2000	5,348,557	91,071	25,483	158,207	125,812	1,201,534	2,058,511	215,168	200,373	569,849	678,797	6,083	9,410	8,259
2001	5,364,395	87,765	25,318	156,515	123,741	1,199,785	2,085,902	215,420	196,259	572,414	677,562	5,898	9,431	8,385
2002	5,370,784	84,840	24,970	154,263	121,546	1,197,393	2,108,598	215,099	192,603	576,996	670,687	5,774	9,476	8,539
2003	5,345,754	82,262	24,403	151,924	119,456	1,190,133	2,110,893	214,453	188,842	576,746	662,807	5,741	9,476	8,618
2004	5,316,458	79,921	23,917	149,316	117,491	1,181,710	2,107,379	214,209	185,355	575,713	657,705	5,677	9,415	8,650
2005	5,297,301	78,053	23,627	146,635	115,929	1,177,830	2,102,751	213,086	181,860	579,130	654,855	5,619	9,208	8,718
2006	5,265,854	75,824	23,208	143,620	113,590	1,172,061	2,089,602	211,757	178,519	583,803	650,762	5,493	8,943	8,672
2007	5,217,659	74,126	22,575	140,058	111,387	1,158,586	2,074,214	209,999	176,487	583,671	643,707	5,405	8,776	8,668
2008	5,158,915	72,554	22,169	136,134	109,079	1,137,702	2,055,882	207,920	174,722	582,697	637,526	5,361	8,512	8,657
2009	5,112,611	71,675	21,862	132,722	107,038	1,116,333	2,041,180	207,087	174,081	584,384	634,058	5,286	8,258	8,647
2010	5,070,839	70,807	21,625	129,937	105,063	1,096,389	2,028,278	206,719	173,931	585,242	630,902	5,274	8,023	8,649
2011	5,042,068	70,157	21,623	127,436	103,187	1,083,351	2,015,498	207,609	173,869	590,095	627,515	5,217	7,871	8,640
2012	5,019,450	69,525	21,447	124,899	101,672	1,075,835	1,999,085	208,130	175,519	598,992	622,641	5,257	7,789	8,659
2013	5,005,463	69,054	21,159	122,745	100,389	1,073,659	1,982,313	208,102	177,307	611,351	617,639	5,190	7,747	8,808
2014	5,001,784	68,779	21,067	120,922	99,451	1,074,779	1,966,588	208,827	179,808	624,024	615,746	5,245	7,645	8,903
Compound Annual Growth Rates														
1989-2014	0.10	-2.52	-0.84	-1.26	-1.46	-0.48	0.48	0.03	-0.57	1.04	0.48	-0.08	-	-
1991-2014	0.01	-2.51	-0.88	-1.31	-1.49	-0.57	0.41	0.02	-0.58	0.91	0.28	-0.32	-0.42	1.53
1989-2000	0.83	-3.20	-0.19	-0.44	-1.19	-0.07	1.52	0.34	-0.31	1.53	1.98	1.18	-	-
2000-2014	-0.48	-1.99	-1.35	-1.90	-1.67	-0.79	-0.33	-0.21	-0.77	0.65	-0.69	-1.05	-1.47	0.54
2000-2005	-0.19	-3.04	-1.50	-1.51	-1.62	-0.40	0.43	-0.19	-1.92	0.32	-0.72	-1.57	-0.43	1.09
2005-2014	-0.64	-1.40	-1.27	-2.12	-1.69	-1.01	-0.74	-0.22	-0.13	0.83	-0.68	-0.76	-2.05	0.23

Source: CANSIM table 051-0001.

Note: Values are computed by subtracting the 0-4 population from the 0 to 17 population.

Appendix Table 7c: Population Aged 18-22, Both Sexes, Canada, Provinces and Territories, 1989-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1981	2,488,600	56,111	11,856	11,856	69,913	670,114	862,648	99,461	94,179	263,426	268,845	2,385	-	-
1982	2,497,608	56,311	11,908	11,908	70,146	660,989	875,238	100,877	95,482	264,363	268,835	2,548	-	-
1983	2,478,539	57,901	12,264	12,264	71,168	648,639	881,089	102,140	96,578	251,875	262,057	2,374	-	-
1984	2,418,673	58,075	12,210	12,210	70,424	626,217	869,948	101,160	95,727	236,415	254,358	2,287	-	-
1985	2,337,271	57,309	12,054	12,054	68,259	601,198	848,132	98,222	92,609	224,322	243,437	2,152	-	-
1986	2,235,764	55,955	11,589	11,589	65,254	568,527	818,193	94,051	87,177	214,963	232,159	1,948	-	-
1987	2,134,378	54,946	10,902	10,902	62,077	537,130	787,183	89,276	82,134	202,057	225,289	1,957	-	-
1988	2,062,668	53,489	10,397	10,397	59,404	508,648	768,678	85,684	77,232	194,766	224,352	1,983	-	-
1989	2,054,060	53,038	10,168	10,168	58,550	495,594	775,979	84,133	73,684	194,757	228,663	2,025	-	-
1990	2,041,574	52,700	10,049	10,049	58,628	483,743	775,531	83,178	70,481	194,818	233,279	2,041	-	-
1991	2,022,757	53,220	9,957	9,957	59,137	476,970	767,786	82,546	69,360	192,881	232,557	2,124	3,555	2,216
1992	2,004,148	52,704	9,918	9,918	58,951	469,706	759,095	81,857	69,630	190,862	234,480	2,133	3,308	2,095
1993	1,981,833	51,834	9,971	9,971	58,312	467,692	743,204	81,175	70,243	188,117	235,569	2,100	3,135	2,056
1994	1,967,355	50,064	9,882	9,882	57,111	468,630	732,337	80,299	70,694	187,434	237,240	1,866	3,038	2,074
1995	1,975,805	47,667	9,747	9,747	55,971	476,407	730,320	79,329	72,233	189,806	242,298	1,884	3,108	2,127
1996	1,995,080	45,613	9,791	9,791	54,971	484,026	729,116	79,166	73,691	194,526	252,693	1,975	3,112	2,228
1997	2,016,224	43,620	9,746	9,746	53,866	492,740	733,465	78,594	74,555	200,396	258,510	1,984	3,153	2,249
1998	2,032,939	41,309	9,520	9,520	52,405	499,754	738,337	77,900	74,898	208,967	259,908	1,950	3,058	2,312
1999	2,059,764	39,930	9,525	9,525	51,685	507,269	750,524	78,228	75,114	215,126	262,802	1,936	3,044	2,321
2000	2,088,980	38,928	9,646	9,646	51,283	508,453	768,760	79,142	74,516	221,243	267,448	1,977	3,064	2,300
2001	2,130,168	38,379	9,754	9,754	51,306	505,538	795,244	79,915	74,936	229,366	275,971	2,053	3,152	2,368
2002	2,164,435	37,905	9,673	9,673	51,388	501,654	816,785	81,086	75,667	236,307	283,163	2,207	3,286	2,509
2003	2,188,082	37,208	9,808	9,808	51,046	494,094	837,148	82,352	76,557	241,172	287,092	2,329	3,397	2,567
2004	2,203,301	36,583	9,990	9,990	50,511	486,317	852,180	83,659	77,127	246,872	288,076	2,330	3,450	2,664
2005	2,212,256	35,210	9,912	9,912	49,461	478,504	865,769	84,417	75,920	254,526	286,477	2,281	3,420	2,769
2006	2,220,882	33,849	9,680	9,680	48,567	474,525	874,731	84,672	74,783	261,756	286,612	2,274	3,461	2,872
2007	2,234,932	32,938	9,635	9,635	47,956	477,128	879,528	85,118	75,546	266,187	289,584	2,297	3,535	3,006
2008	2,259,332	33,037	9,620	9,620	48,028	486,825	887,572	86,127	76,902	268,064	291,265	2,274	3,629	3,097
2009	2,290,576	33,064	9,682	9,682	48,227	502,594	897,890	87,490	77,853	268,015	292,849	2,326	3,708	3,204
2010	2,327,107	33,036	9,936	9,936	48,547	519,769	914,339	88,424	77,970	265,851	295,866	2,388	3,675	3,265
2011	2,359,260	32,518	10,042	10,042	48,680	531,145	932,492	89,178	77,894	266,723	297,135	2,419	3,600	3,318
2012	2,385,342	31,918	10,131	10,131	48,361	534,584	947,071	90,769	77,876	268,140	303,565	2,460	3,660	3,335
2013	2,387,100	30,860	9,964	9,964	47,343	529,152	952,587	91,543	77,458	269,680	307,595	2,465	3,640	3,353
2014	2,383,621	30,020	9,795	9,795	46,111	517,673	955,481	92,026	76,736	271,736	314,791	2,410	3,604	3,328
Compound Annual Growth Rates														
1989-2014	0.60	-2.25	-0.15	-0.15	-0.95	0.17	0.84	0.36	0.16	1.34	1.29	0.70	-	-
1991-2014	0.72	-2.46	-0.07	-0.07	-1.08	0.36	0.96	0.47	0.44	1.50	1.33	0.55	0.06	1.78
1989-2000	0.15	-2.77	-0.48	-0.48	-1.20	0.23	-0.08	-0.55	0.10	1.17	1.43	-0.22	-	-
2000-2014	0.95	-1.84	0.11	0.11	-0.76	0.13	1.57	1.08	0.21	1.48	1.17	1.42	1.17	2.67
2000-2005	1.15	-1.99	0.55	0.55	-0.72	-1.21	2.41	1.30	0.37	2.84	1.38	2.90	2.22	3.78
2005-2014	0.83	-1.76	-0.13	-0.13	-0.78	0.88	1.10	0.96	0.12	0.73	1.05	0.61	0.58	2.06

Source: CANSIM table 051-0001.

Note: Values are computed by adding the 18, 19, 20, 21 and 22 year old population estimates.

Appendix Table 7d: Population Aged 25 and Over, Both Sexes, Canada, Provinces and Territories, 1989-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1981	14,440,952	290,239	69,190	488,592	391,345	3,835,024	5,230,705	602,263	549,635	1,243,884	1,706,116	12,925	-	-
1982	14,804,225	294,999	70,203	497,667	398,597	3,915,633	5,352,668	613,547	561,115	1,306,624	1,757,635	13,372	-	-
1983	15,144,969	302,149	71,743	508,784	408,282	3,990,465	5,481,046	626,904	573,499	1,345,584	1,800,456	13,072	-	-
1984	15,481,564	307,524	73,271	519,977	417,477	4,068,177	5,617,409	639,179	585,877	1,369,386	1,845,651	13,462	-	-
1985	15,820,562	312,507	74,667	531,784	425,563	4,149,860	5,755,865	651,949	597,176	1,396,579	1,885,372	13,893	-	-
1986	16,182,220	316,573	76,205	541,263	433,188	4,238,069	5,909,731	664,367	605,639	1,430,969	1,925,949	14,230	-	-
1987	16,600,728	321,716	77,223	551,988	441,479	4,344,179	6,102,116	675,545	615,172	1,455,406	1,974,095	15,269	-	-
1988	17,016,015	327,213	78,594	562,102	449,810	4,438,056	6,292,540	684,983	621,055	1,483,837	2,034,690	16,108	-	-
1989	17,498,890	333,618	79,997	573,318	458,840	4,545,084	6,521,214	692,155	623,111	1,523,464	2,103,536	16,545	-	-
1990	17,902,486	339,733	80,932	583,424	467,346	4,631,866	6,693,200	697,832	621,968	1,563,738	2,176,260	17,114	-	-
1991	18,228,512	346,000	81,405	591,176	474,701	4,700,617	6,818,698	703,581	622,268	1,600,042	2,242,045	17,766	20,962	9,251
1992	18,504,236	350,932	82,099	598,236	480,143	4,745,511	6,927,492	707,218	624,415	1,631,173	2,307,286	18,488	21,415	9,828
1993	18,781,114	355,850	83,302	604,688	484,292	4,791,043	7,031,851	712,229	627,290	1,661,501	2,378,194	18,727	21,869	10,278
1994	19,058,771	357,758	84,457	610,515	488,619	4,828,757	7,139,057	717,599	630,066	1,691,394	2,458,736	18,489	22,550	10,774
1995	19,338,131	358,772	85,586	615,297	492,849	4,863,186	7,251,107	723,448	633,976	1,722,003	2,538,621	19,004	23,245	11,037
1996	19,613,446	359,675	86,902	621,060	498,142	4,896,647	7,363,216	729,087	637,990	1,755,482	2,610,594	19,735	23,521	11,395
1997	19,892,117	359,705	87,873	626,576	502,867	4,933,658	7,485,823	733,508	639,543	1,797,008	2,670,198	20,178	23,624	11,556
1998	20,129,890	357,840	88,471	630,805	506,228	4,964,449	7,596,062	737,328	641,691	1,845,397	2,706,432	19,949	23,377	11,861
1999	20,366,747	357,682	89,453	636,152	510,070	5,003,766	7,705,811	742,347	642,455	1,887,062	2,736,676	19,797	23,348	12,128
2000	20,635,305	357,959	90,051	639,318	513,569	5,052,189	7,840,978	747,533	641,344	1,929,558	2,767,220	19,715	23,353	12,518
2001	20,939,306	357,457	90,693	642,183	516,577	5,107,031	7,999,461	752,378	639,988	1,973,879	2,803,336	19,730	23,664	12,929
2002	21,256,848	358,981	91,484	647,971	519,734	5,163,796	8,159,213	757,995	640,679	2,028,356	2,830,982	19,930	24,388	13,339
2003	21,538,117	361,600	92,329	652,615	522,834	5,220,518	8,288,740	764,683	643,410	2,073,758	2,858,526	20,392	25,075	13,637
2004	21,828,037	363,764	93,238	657,445	525,392	5,280,794	8,416,191	772,754	646,815	2,119,045	2,892,076	20,871	25,680	13,972
2005	22,131,438	364,952	94,156	660,186	527,883	5,341,764	8,538,747	778,353	648,626	2,181,610	2,933,480	21,370	25,973	14,338
2006	22,452,465	365,577	94,843	664,421	529,717	5,404,680	8,659,900	784,256	651,868	2,254,556	2,980,022	21,857	26,081	14,687
2007	22,767,560	366,627	95,357	665,734	532,424	5,470,030	8,766,584	789,925	660,685	2,327,567	3,029,020	22,167	26,411	15,029
2008	23,109,169	370,017	96,620	669,520	536,003	5,536,842	8,884,444	797,214	672,790	2,396,226	3,084,956	22,701	26,514	15,322
2009	23,462,484	375,410	97,801	674,088	540,571	5,610,357	8,996,403	805,486	686,734	2,467,878	3,142,175	23,285	26,520	15,776
2010	23,808,807	381,022	99,481	679,514	544,832	5,687,942	9,121,939	814,808	700,331	2,517,790	3,194,039	24,040	26,793	16,276
2011	24,121,813	385,094	101,571	684,150	548,997	5,758,047	9,239,454	824,664	713,264	2,567,403	3,230,419	24,766	27,121	16,863
2012	24,489,705	388,238	102,748	687,233	552,144	5,826,153	9,378,780	837,695	729,327	2,646,616	3,270,725	25,384	27,366	17,296
2013	24,857,956	390,829	103,205	689,421	553,650	5,888,323	9,517,381	849,986	744,165	2,739,673	3,310,152	25,636	27,739	17,796
2014	25,222,416	393,272	104,077	692,238	555,157	5,950,001	9,647,151	862,173	757,309	2,829,096	3,359,611	26,079	27,951	18,301

Compound Annual Growth Rates

1989-2014	1.47	0.66	1.06	0.76	0.77	1.08	1.58	0.88	0.78	2.51	1.89	1.84	-	-
1991-2014	1.42	0.56	1.07	0.69	0.68	1.03	1.52	0.89	0.86	2.51	1.77	1.68	1.26	3.01
1989-2000	1.51	0.64	1.08	1.00	1.03	0.97	1.69	0.70	0.26	2.17	2.52	1.61	-	-
2000-2014	1.44	0.67	1.04	0.57	0.56	1.18	1.49	1.02	1.19	2.77	1.40	2.02	1.29	2.75
2000-2005	1.41	0.39	0.90	0.64	0.55	1.12	1.72	0.81	0.23	2.49	1.17	1.63	2.15	2.75

Source: CANSIM table 051-0001. Note: Values are computed by subtracting the 18-24 population from the 18 and over population.

Appendix Table 7e: Population Aged 18-29 (University-aged Population), Both Sexes, Canada, Provinces and Territories, 1989-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1981	5,714,968	127,003	25,564	188,484	157,977	1,543,912	1,953,033	225,062	212,461	624,164	638,842	6,349	-	-
1982	5,806,360	126,618	25,637	190,831	158,463	1,549,612	1,993,357	229,136	217,123	648,200	647,818	6,651	-	-
1983	5,853,092	129,496	26,573	195,465	161,593	1,548,928	2,030,359	234,697	222,376	640,156	643,943	6,179	-	-
1984	5,842,353	129,789	27,134	198,160	162,188	1,534,672	2,052,325	236,735	224,196	618,552	638,868	6,077	-	-
1985	5,787,200	128,526	27,185	198,670	160,329	1,510,578	2,057,477	236,576	222,605	599,612	625,799	5,893	-	-
1986	5,730,389	125,950	26,973	196,585	157,654	1,483,919	2,064,808	235,259	218,044	588,219	613,520	5,592	-	-
1987	5,668,325	124,675	26,333	192,867	154,330	1,455,802	2,076,113	231,384	213,081	566,250	607,900	5,718	-	-
1988	5,603,449	123,298	25,794	189,002	151,314	1,419,299	2,086,413	227,032	205,265	548,350	607,761	5,788	-	-
1989	5,591,484	123,003	25,316	187,102	149,739	1,394,808	2,122,616	221,857	195,140	539,630	612,248	5,610	-	-
1990	5,507,585	122,027	24,630	183,748	147,781	1,354,819	2,109,353	215,190	183,269	530,120	616,269	5,597	-	-
1991	5,373,964	122,004	23,922	178,919	145,940	1,310,938	2,058,644	209,014	174,849	517,017	612,051	5,748	9,442	5,476
1992	5,269,758	120,778	23,404	174,060	143,223	1,270,341	2,019,980	203,613	170,457	506,301	617,100	5,830	9,064	5,607
1993	5,158,339	118,989	23,178	169,572	139,651	1,236,965	1,966,659	199,252	166,695	494,554	622,694	5,679	8,878	5,573
1994	5,062,858	115,071	22,846	164,429	136,535	1,206,332	1,922,804	195,250	163,825	486,326	630,037	5,121	8,671	5,611
1995	4,982,285	109,960	22,506	158,863	133,212	1,180,144	1,884,043	191,733	163,438	481,674	637,361	5,131	8,660	5,560
1996	4,949,617	104,799	22,599	155,862	130,711	1,165,730	1,854,751	190,197	165,006	485,580	654,838	5,451	8,435	5,658
1997	4,940,857	99,771	22,420	152,934	128,447	1,160,794	1,848,237	188,352	165,244	494,646	660,656	5,373	8,347	5,636
1998	4,940,370	93,995	21,868	150,464	125,683	1,163,055	1,846,817	186,914	165,434	512,112	655,210	5,133	8,029	5,656
1999	4,961,034	90,148	21,685	149,201	124,063	1,171,246	1,856,776	187,084	165,381	525,320	651,673	4,953	7,832	5,672
2000	4,985,679	86,746	21,469	147,423	122,451	1,176,490	1,877,784	186,964	164,132	536,147	647,962	4,788	7,664	5,659
2001	5,032,258	83,925	21,226	144,925	120,712	1,181,760	1,911,624	187,076	163,515	548,686	650,653	4,673	7,699	5,784
2002	5,090,299	82,421	21,102	144,151	119,136	1,191,029	1,942,575	187,673	164,062	565,241	654,333	4,787	7,884	5,905
2003	5,148,969	81,389	21,251	144,481	118,005	1,200,560	1,973,399	189,493	165,667	577,586	657,995	4,989	8,133	6,021
2004	5,211,986	80,434	21,463	144,779	117,084	1,209,439	2,003,613	192,116	168,161	591,480	663,683	5,137	8,406	6,191
2005	5,255,682	77,984	21,431	143,794	115,286	1,207,722	2,026,399	193,116	167,422	612,219	670,291	5,145	8,492	6,381
2006	5,303,629	75,542	21,181	142,650	113,229	1,206,549	2,047,665	193,870	166,916	637,167	678,563	5,164	8,514	6,619
2007	5,369,304	74,135	20,947	141,805	111,517	1,210,929	2,067,186	196,034	169,991	663,812	692,187	5,295	8,643	6,823
2008	5,453,650	74,717	20,954	142,574	111,274	1,221,192	2,094,619	199,021	174,998	684,649	708,544	5,431	8,729	6,948
2009	5,541,691	75,489	21,018	143,961	111,724	1,237,704	2,121,196	202,252	180,336	701,740	724,687	5,631	8,766	7,187
2010	5,610,187	76,205	21,389	145,195	112,002	1,249,973	2,154,851	205,278	184,218	702,332	736,728	5,890	8,847	7,279
2011	5,649,676	76,202	21,578	145,943	112,258	1,256,206	2,183,853	207,389	187,242	701,515	735,089	6,050	8,915	7,436
2012	5,722,848	75,710	21,781	146,414	111,539	1,262,783	2,224,489	211,841	192,095	712,729	740,869	6,094	8,905	7,599
2013	5,782,286	74,956	21,679	145,173	109,485	1,268,842	2,254,879	215,978	195,894	728,635	744,174	6,003	8,841	7,747
2014	5,832,495	74,052	21,636	144,531	107,703	1,267,307	2,281,948	219,125	196,951	742,230	754,400	5,977	8,825	7,810
Compound Annual Growth Rates														
1989-2014	0.17	-2.01	-0.63	-1.03	-1.31	-0.38	0.29	-0.05	0.04	1.28	0.84	0.25	-	-
1991-2014	0.36	-2.15	-0.44	-0.92	-1.31	-0.15	0.45	0.21	0.52	1.58	0.91	0.17	-0.29	1.56
1989-2000	-1.04	-3.12	-1.49	-2.14	-1.81	-1.54	-1.11	-1.54	-1.56	-0.06	0.52	-1.43	-	-
2000-2014	1.13	-1.12	0.06	-0.14	-0.91	0.53	1.40	1.14	1.31	2.35	1.09	1.60	1.01	2.33
2000-2005	1.06	-2.11	-0.04	-0.50	-1.20	0.53	1.54	0.65	0.40	2.69	0.68	1.45	2.07	2.43

Source: CANSIM table 051-0001. Note: Values are computed by adding the 18-24 population to the 25-29 population.



## Appendix 2: CSLS Estimates of HDI and its Components

Appendix Table 8: Estimated Average Educational Attainment Using LFS data, Canada, Provinces and Territories, 1990-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	10.5	10.7	10.7	11.2	10.9	10.9	11.4	11.0	11.0	11.6	11.7	-	-	-
1991	11.3	10.8	10.8	11.2	10.9	11.0	11.4	11.1	11.0	11.7	11.7	-	-	-
1992	11.4	10.9	11.0	11.3	11.0	11.1	11.5	11.1	11.1	11.8	11.8	12.0	-	-
1993	11.5	11.0	11.2	11.3	11.1	11.2	11.6	11.2	11.2	11.9	11.9	12.0	-	-
1994	11.6	11.0	11.2	11.4	11.2	11.2	11.7	11.2	11.3	11.9	12.0	12.0	-	-
1995	11.6	11.1	11.3	11.4	11.3	11.3	11.7	11.4	11.3	11.9	12.0	12.2	-	-
1996	11.7	11.1	11.3	11.5	11.3	11.4	11.8	11.5	11.4	12.0	12.1	12.3	-	-
1997	11.8	11.2	11.3	11.6	11.4	11.5	11.9	11.5	11.4	12.1	12.1	12.2	-	-
1998	11.8	11.3	11.4	11.7	11.5	11.6	11.9	11.6	11.6	12.2	12.1	12.3	-	-
1999	11.9	11.3	11.5	11.8	11.6	11.6	12.0	11.7	11.6	12.2	12.2	12.4	-	-
2000	11.9	11.4	11.5	11.8	11.6	11.6	12.1	11.7	11.7	12.2	12.2	12.2	12.2	<i>10.7</i>
2001	12.0	11.5	11.7	11.9	11.7	11.7	12.2	11.8	11.7	12.3	12.3	12.6	12.2	<i>10.7</i>
2002	12.1	11.6	11.8	11.9	11.7	11.8	12.2	11.8	11.8	12.3	12.3	12.6	11.9	<i>10.7</i>
2003	12.1	11.7	11.9	12.0	11.8	11.9	12.3	11.9	11.9	12.3	12.3	12.5	11.9	<i>10.7</i>
2004	12.2	11.7	11.9	12.1	11.9	11.9	12.3	11.9	11.9	12.3	12.4	12.6	12.0	10.7
2005	12.2	11.8	12.0	12.1	11.9	12.0	12.3	12.0	12.0	12.4	12.4	12.5	11.9	10.3
2006	12.3	11.8	12.0	12.1	12.0	12.1	12.4	12.0	12.0	12.4	12.4	12.2	12.1	10.9
2007	12.3	11.8	12.0	12.2	12.0	12.1	12.5	12.0	12.1	12.5	12.5	12.4	12.2	11.2
2008	12.4	11.9	12.0	12.2	12.1	12.2	12.5	12.1	12.1	12.5	12.5	12.4	12.0	11.0
2009	12.4	11.9	12.1	12.2	12.1	12.2	12.5	12.2	12.2	12.6	12.6	12.3	11.9	10.9
2010	12.5	12.1	12.2	12.4	12.1	12.3	12.6	12.2	12.3	12.6	12.6	12.2	11.9	10.8
2011	12.5	12.1	12.3	12.4	12.1	12.3	12.6	12.3	12.3	12.6	12.7	12.5	12.2	10.9
2012	12.5	12.2	12.3	12.4	12.2	12.4	12.6	12.3	12.3	12.6	12.7	12.6	12.1	11.3
2013	12.6	12.3	12.4	12.5	12.2	12.4	12.7	12.3	12.4	12.6	12.7	12.7	12.0	11.8
2014	12.6	12.3	12.4	12.5	12.3	12.4	12.7	12.4	12.4	12.7	12.7	12.8	12.0	12.2
Compound Annual Growth Rates														
1990-2014	0.75	0.56	0.63	0.49	0.51	0.55	0.44	0.49	0.51	0.36	0.35	-	-	-
1990-2000	1.25	0.60	0.76	0.58	0.60	0.65	0.57	0.65	0.59	0.45	0.41	-	-	-
2000-2014	0.39	0.52	0.53	0.42	0.44	0.48	0.35	0.37	0.44	0.29	0.31	0.36	-0.11	0.94
2000-2005	0.51	0.64	0.82	0.49	0.53	0.67	0.46	0.42	0.57	0.43	0.34	0.53	-0.39	-0.77
2005-2013	0.32	0.46	0.37	0.39	0.39	0.38	0.29	0.34	0.38	0.22	0.29	0.26	0.04	1.91

**Sources:** LFS data from CANSIM Table 2820004 for provinces, unpublished Yukon, Northwest Territories, and Nunavut data obtained from LFS by special request from Statistics Canada.

**Notes:** LFS data is not available for Nunavut before 2004. Since there is no clear pattern in the yearly growth rates, estimates for 2000-2003 (italicized) are assumed to be equal to the 2004 estimate. Average educational attainment for Northwest Territories (2000) was estimated in the same manner.

CSLS allocates 8 years for those with at most primary, 12 years for those with at most secondary and 14 years for those with tertiary schooling.

Appendix Table 9: Expected Years of Schooling, Canada, Provinces and Territories

Appendix Table 9: Expected Years of Schooling Using LFS data, Canada, Provinces and Territories, 1990-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT*	NWT*	NU
1990	14.8	14.4	14.3	14.8	14.2	14.9	15.2	14.5	14.5	14.5	14.3	-	-	-
1991	15.1	14.4	14.5	15.0	14.5	15.3	15.5	14.6	14.7	14.5	14.7	-	-	-
1992	15.4	14.8	14.9	15.1	14.6	15.6	15.8	14.9	14.9	14.7	14.9	14.5	-	-
1993	15.5	14.9	15.2	15.3	14.8	15.8	15.9	14.9	14.8	15.0	14.8	14.2	-	-
1994	15.5	15.2	14.9	15.2	14.9	15.7	16.0	14.8	14.7	14.9	15.0	14.9	-	-
1995	15.6	15.3	14.9	15.2	14.8	15.7	16.1	14.8	14.8	14.8	15.1	14.2	-	-
1996	15.6	15.4	14.9	15.4	14.8	15.8	16.0	14.8	14.7	14.9	15.2	14.4	-	-
1997	15.7	15.9	14.8	15.4	15.0	16.0	16.1	14.9	14.8	15.1	15.5	15.0	-	-
1998	15.7	15.8	15.4	15.5	14.8	15.9	16.0	14.9	15.0	15.0	15.6	14.7	-	-
1999	15.6	15.8	14.9	15.4	14.8	15.7	16.0	15.0	15.0	15.0	15.6	14.5	-	-
2000	15.6	15.7	15.1	15.7	14.9	15.7	15.9	15.0	15.1	14.8	15.6	13.9	<i>14.5</i>	<i>13.1</i>
2001	15.7	15.5	15.2	15.4	14.9	15.9	16.0	15.2	15.3	15.1	15.7	14.1	14.5	<i>13.1</i>
2002	15.7	15.8	15.2	15.4	14.9	15.9	16.0	15.3	15.4	15.1	15.8	14.6	14.5	<i>13.1</i>
2003	15.7	15.4	15.4	15.7	15.2	15.9	15.9	15.5	15.2	15.1	15.9	14.4	14.3	<i>13.1</i>
2004	15.8	15.6	15.3	15.8	15.3	15.9	16.0	15.5	15.1	15.0	15.8	14.5	14.4	13.1
2005	15.9	15.7	15.3	15.6	15.3	16.1	16.2	15.5	15.1	14.9	15.7	13.8	14.1	13.3
2006	15.8	15.9	15.2	15.7	15.3	16.2	16.1	15.5	15.1	14.9	15.7	14.4	14.2	13.5
2007	15.8	15.9	15.5	15.6	15.5	16.2	16.2	15.3	15.0	14.7	15.6	14.2	14.2	13.0
2008	15.7	15.7	15.3	15.3	15.3	16.1	16.1	15.3	14.9	14.7	15.6	13.0	13.8	12.9
2009	15.8	15.7	15.4	15.4	15.2	16.1	16.2	15.3	14.8	14.8	15.6	13.1	14.5	13.6
2010	16.0	15.5	15.7	15.6	15.3	16.3	16.3	15.4	15.0	15.1	15.8	13.8	14.1	13.2
2011	16.0	15.5	15.5	15.7	15.3	16.4	16.2	15.3	15.1	15.0	15.9	14.3	14.6	12.8
2012	16.0	15.5	15.7	15.7	15.3	16.5	16.3	15.3	15.0	15.0	16.0	14.3	14.7	12.7
2013	16.1	15.7	15.6	15.8	15.4	16.5	16.4	15.3	15.1	15.1	15.9	14.3	14.7	12.7
2014	16.0	15.7	15.9	15.7	15.2	16.7	16.2	15.3	15.3	15.1	15.6	14.3	14.7	12.7
Compound Annual Growth Rates														
1990-2014	0.32	0.36	0.43	0.26	0.29	0.49	0.28	0.24	0.21	0.17	0.35	-	-	-
1990-2000	0.51	0.87	0.54	0.62	0.46	0.55	0.45	0.36	0.37	0.27	0.89	-	-	-
2000-2014	0.18	-0.01	0.34	0.01	0.17	0.45	0.15	0.16	0.10	0.10	-0.03	0.19	0.09	-0.23
2000-2005	0.34	0.04	0.25	-0.18	0.59	0.46	0.45	0.64	0.09	0.12	0.02	-0.10	-0.57	0.29
2005-2014	0.11	-0.04	0.44	0.13	-0.08	0.49	-0.01	-0.12	0.12	0.10	-0.06	0.40	0.52	-0.58

Sources: CSLS calculations use CANSIM Table 2820095 for Canada and provinces.

Notes: LFS data is not available for Nunavut before 2004. Since there is no clear pattern in the yearly growth rates, estimates for 2000-2003 (italicized) are assumed to be equal to the 2004 estimate. Average educational attainment for Northwest Territories (2000) was estimated in the same manner.

Appendix Table 10: GNI, Canada, Provinces and Territories, 1981-2014

Appendix Table 10a: GNI, Millions of Current Dollars, Canada, Provinces and Territories, 1981-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1981	367,121	5,247	1,072	8,066	6,624	82,453	132,336	13,839	15,101	54,491	45,999	495	..	..
1982	386,773	5,646	1,151	9,389	7,263	87,281	139,969	14,342	15,276	58,335	45,928	486	..	..
1983	419,691	6,056	1,335	10,627	8,292	94,115	156,545	15,381	16,225	60,239	48,540	460	..	..
1984	460,243	6,491	1,376	11,896	9,174	102,992	175,735	17,290	17,310	64,590	50,949	473	..	..
1985	498,075	6,813	1,437	12,894	9,758	110,084	193,511	18,848	18,189	68,906	54,868	512	..	..
1986	524,450	7,378	1,672	14,051	10,950	119,800	212,800	19,395	17,958	59,613	57,943	655	..	..
1987	571,926	7,977	1,771	15,066	12,044	131,308	235,504	20,772	18,496	61,564	64,039	920	..	..
1988	624,401	8,568	1,942	15,909	12,828	143,220	260,275	22,423	19,121	65,363	70,943	1,006	..	..
1989	669,026	9,068	2,091	17,031	13,441	150,298	282,766	23,831	20,125	69,096	77,267	1,069	..	..
1990	692,997	9,300	2,183	17,602	13,770	155,692	287,334	24,752	21,623	75,284	81,223	1,106	..	..
1991	699,253	9,704	2,258	18,257	13,910	157,509	288,217	24,607	21,783	75,046	83,779	1,008	..	..
1992	716,019	9,677	2,303	18,749	14,372	160,868	293,068	25,093	21,723	76,639	89,356	1,179	..	..
1993	744,608	9,878	2,488	18,898	15,096	164,840	302,245	25,134	23,088	82,913	96,066	958	..	..
1994	789,507	10,398	2,543	19,247	15,762	174,054	319,986	26,640	24,670	89,886	102,426	991	..	..
1995	828,973	10,855	2,671	19,801	16,994	181,452	337,400	27,653	26,584	93,614	107,931	1,131	..	..
1996	857,023	10,610	2,827	20,025	17,257	184,390	347,842	29,062	29,102	100,517	111,195	1,221	..	..
1997	903,902	10,716	2,837	20,956	17,404	192,942	368,960	30,189	29,177	109,163	117,135	1,185	..	..
1998	937,295	11,273	2,979	21,978	18,165	200,301	389,250	31,690	29,855	109,317	118,186	1,129	..	..
1999	1,004,456	12,347	3,160	23,771	19,693	215,431	418,245	32,780	31,117	119,077	123,959	1,144	2,432	813
2000	1,102,380	14,148	3,385	25,475	20,820	230,258	452,238	34,901	34,287	146,939	134,606	1,260	2,664	890
2001	1,140,505	14,433	3,448	26,723	21,430	238,548	469,084	36,080	33,704	154,230	136,852	1,337	3,152	933
2002	1,189,452	16,722	3,705	28,006	22,012	249,671	494,815	37,588	35,062	153,801	141,946	1,317	3,205	1,019
2003	1,250,315	18,400	3,801	29,786	23,093	259,094	509,511	38,521	37,528	173,951	149,751	1,358	3,893	1,029
2004	1,331,178	19,651	4,026	30,871	24,408	271,833	533,365	41,022	41,529	194,484	162,293	1,463	4,516	1,117
2005	1,417,028	22,249	4,257	32,127	25,552	280,133	556,635	43,082	44,889	225,460	174,855	1,572	4,445	1,161
2006	1,492,207	24,573	4,425	32,701	26,718	290,595	578,241	46,622	46,171	245,929	188,219	1,700	4,437	1,240
2007	1,573,532	29,065	4,630	33,941	28,287	306,029	601,735	49,726	52,381	260,964	198,325	1,814	4,667	1,319
2008	1,652,923	31,572	4,754	35,416	28,779	314,380	608,446	52,154	67,619	296,072	204,406	2,043	5,024	1,566
2009	1,567,365	25,001	4,927	34,931	28,857	314,541	597,882	50,804	60,080	245,690	196,250	2,134	4,012	1,535
2010	1,662,130	29,085	5,222	36,849	30,213	328,138	630,989	53,308	63,368	270,049	205,117	2,311	4,816	1,914
2011	1,769,921	33,539	5,424	37,652	31,500	344,735	659,743	56,197	74,821	299,521	216,786	2,492	4,730	2,034
2012	1,822,808	32,032	5,573	37,835	31,723	354,040	680,084	59,781	77,957	312,485	221,414	2,551	4,393	2,199
2013	1,892,193	34,991	5,783	38,576	31,857	361,211	693,210	61,897	83,496	344,452	226,605	2,550	4,490	2,339
2014	1,973,043	33,514	6,003	39,077	32,056	370,064	721,970	64,077	82,780	375,756	237,188	2,603	4,731	2,487
1991-2014	4.61	4.34	3.36	3.70	3.78	4.07	4.25	5.98	7.25	4.63	4.21	-	-	5.28
1991-2000	5.19	4.60	3.77	4.58	4.31	5.13	3.96	5.17	7.75	5.41	2.51	-	-	5.42
2000-2014	4.25	4.18	3.10	3.13	3.45	3.40	4.44	6.50	6.94	4.13	5.32	4.19	7.62	5.19
2000-2005	5.15	4.69	4.75	4.18	4.00	4.24	4.30	5.54	8.94	5.37	4.52	10.78	5.46	9.54
2005-2014	3.75	3.89	2.20	2.55	3.14	2.93	4.51	7.04	5.84	3.45	5.76	0.70	8.83	2.85

Sources: CANSIM table 3840001, 3800062.

Note: GNI=GDP in current dollars. 2011 CSLs estimates for provinces and territories (italicized) based on GDP projections from Appendix Table 2a multiplied by the national GNP/GDP ratio.

Appendix Table 10b: GNI per Capita, Current Dollars, Canada, Provinces and Territories, 1981-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1981	14,791	9,120	8,677	9,435	9,377	12,594	15,017	13,364	15,476	23,784	16,274	20,729	-	-
1982	15,399	9,840	9,313	10,930	10,266	13,263	15,691	13,721	15,484	24,616	15,967	19,702	-	-
1983	16,545	10,456	10,671	12,239	11,600	14,253	17,318	14,514	16,205	25,167	16,695	19,439	-	-
1984	17,973	11,190	10,872	13,557	12,733	15,531	19,169	16,132	17,061	26,981	17,287	19,773	-	-
1985	19,274	11,761	11,260	14,556	13,491	16,515	20,820	17,412	17,747	28,657	18,442	21,005	-	-
1986	20,094	12,802	13,018	15,804	15,103	17,859	22,549	17,768	17,457	24,503	19,291	26,811	-	-
1987	21,626	13,867	13,767	16,860	16,549	19,361	24,435	18,912	17,909	25,222	21,006	35,789	-	-
1988	23,306	14,901	15,021	17,732	17,564	20,948	26,454	20,345	18,596	26,607	22,776	37,744	-	-
1989	24,527	15,728	16,066	18,843	18,284	21,703	27,987	21,590	19,741	27,657	24,171	39,349	-	-
1990	25,026	16,108	16,740	19,333	18,604	22,251	27,908	22,391	21,457	29,549	24,672	39,561	-	-
1991	24,940	16,741	17,320	19,954	18,657	22,287	27,630	22,176	21,724	28,950	24,832	34,914	-	-
1992	25,237	16,681	17,603	20,392	19,211	22,626	27,721	22,552	21,637	29,111	25,760	39,190	-	-
1993	25,958	17,032	18,823	20,454	20,160	23,033	28,274	22,489	22,930	31,085	26,926	31,579	-	-
1994	27,224	18,100	19,058	20,766	21,011	24,200	29,576	23,717	24,436	33,284	27,863	33,385	-	-
1995	28,290	19,131	19,871	21,335	22,630	25,135	30,812	24,490	26,212	34,234	28,573	37,153	-	-
1996	28,943	18,957	20,827	21,502	22,940	25,444	31,385	25,623	28,561	36,221	28,701	38,901	-	-
1997	30,225	19,451	20,846	22,475	23,128	26,523	32,862	26,572	28,664	38,576	29,665	37,268	-	-
1998	31,082	20,882	21,936	23,586	24,203	27,454	34,247	27,860	29,346	37,708	29,672	36,245	-	-
1999	33,040	23,151	23,187	25,457	26,236	29,417	36,354	28,693	30,672	40,328	30,902	37,161	59,845	30,313
2000	35,925	26,797	24,804	27,280	27,741	31,298	38,708	30,420	34,030	48,911	33,325	41,405	65,810	32,366
2001	36,766	27,647	25,230	28,658	28,580	32,252	39,428	31,334	33,696	50,434	33,568	44,335	77,170	33,163
2002	37,931	32,190	27,068	29,948	29,374	33,551	40,916	32,498	35,174	49,165	34,620	43,412	76,870	35,355
2003	39,515	35,491	27,700	31,766	30,814	34,613	41,614	33,107	37,662	54,653	36,313	43,891	91,396	35,093
2004	41,680	37,980	29,242	32,855	32,570	36,075	43,048	34,965	41,641	60,056	39,060	46,512	104,284	37,412
2005	43,949	43,259	30,834	34,254	34,158	36,951	44,431	36,563	45,182	67,876	41,674	49,281	102,417	38,268
2006	45,815	48,127	32,097	34,867	35,834	38,076	45,669	39,393	46,529	71,880	44,374	52,679	102,761	40,244
2007	47,845	57,098	33,619	36,298	37,948	39,782	47,142	41,809	52,274	74,263	46,219	55,718	107,599	42,013
2008	49,718	61,719	34,260	37,843	38,534	40,505	47,230	43,542	66,466	82,339	46,996	61,744	115,894	49,103
2009	46,608	48,383	35,216	37,232	38,478	40,102	45,999	42,036	58,061	66,780	44,494	63,263	92,980	47,086
2010	48,879	55,721	36,858	39,115	40,121	41,383	48,039	43,662	60,269	72,349	45,929	66,800	111,281	57,386
2011	51,537	63,879	37,657	39,866	41,693	43,051	49,741	45,551	70,166	79,025	48,184	70,392	108,733	59,481
2012	52,453	60,794	38,366	40,044	41,915	43,791	50,716	47,809	71,703	80,360	48,742	70,491	100,646	63,319
2013	53,824	66,269	39,762	40,908	42,155	44,294	51,156	48,917	75,485	85,947	49,449	69,999	102,315	66,008
2014	55,510	63,345	41,071	41,466	42,482	45,048	52,785	50,051	73,760	91,183	51,136	70,370	107,572	68,924
Compound Annual Nominal Growth Rates														
1991-2014	3.54	5.96	3.83	3.23	3.64	3.11	2.85	3.60	5.46	5.11	3.19	3.09	-	-
1991-2000	4.14	5.37	4.07	3.54	4.51	3.85	3.82	3.57	5.11	6.00	3.32	1.91	-	-
2000-2014	3.16	6.34	3.67	3.04	3.09	2.64	2.24	3.62	5.68	4.55	3.11	3.86	3.57	5.55
2000-2005	4.11	10.05	4.45	4.66	4.25	3.38	2.80	3.75	5.83	6.77	4.57	3.54	9.25	3.41
2005-2014	2.63	4.33	3.24	2.15	2.45	2.23	1.93	3.55	5.60	3.33	2.30	4.04	0.55	6.76

Source: Appendix Table 10a, 7a.

**Appendix Table 11: Life Expectancy Dimension Data and Calculations, Canada, Provinces and Territories, 1990, 2000, and 2005-2014**

Appendix Table 11a: Life Expectancy Using LFS Data, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	77.6	76.1	76.6	76.7	77.3	77.1	77.9	77.5	78.0	77.9	78.1	74.4	-	-
2000	79.4	77.3	78.2	78.6	78.8	79.2	79.5	78.1	78.6	79.5	80.5	75.6	75.9	67.8
2005	80.4	78.2	79.8	79.3	79.8	80.4	80.7	79.0	79.3	80.3	81.2	77.0	78.0	72.0
2006	80.8	78.2	79.9	79.6	80.1	80.9	81.1	79.3	79.4	80.5	81.4	77.0	78.0	72.0
2007	80.9	78.5	80.9	80.2	80.1	80.8	81.2	79.6	79.8	80.7	81.0	76.7	77.4	71.6
2008	81.0	78.8	79.8	79.9	80.4	81.3	81.6	79.6	79.3	80.6	81.8	76.7	77.4	71.6
2009	81.4	79.4	79.9	80.2	80.1	81.5	81.7	79.3	79.7	80.8	82.3	76.7	77.4	71.6
2010	81.6	79.6	80.1	80.4	80.2	81.7	81.9	79.4	79.8	81.0	82.5	76.8	77.5	71.8
2011	81.8	79.7	80.3	80.5	80.4	82.0	82.1	79.5	79.9	81.1	82.7	77.0	77.6	72.0
2012	82.0	79.9	80.5	80.7	80.5	82.2	82.3	79.6	80.0	81.3	83.0	77.1	77.7	72.2
2013	82.2	80.0	80.7	80.9	80.6	82.5	82.5	79.7	80.1	81.4	83.2	77.2	77.8	72.4
2014	82.4	80.2	80.9	81.0	80.8	82.7	82.8	79.8	80.2	81.6	83.4	77.3	77.9	72.7

*Note: Italicized estimates for 2010-2014 are extrapolated using compound annual growth rate from 1991-2009 for that province or for Canada.*

**Source:** Appendix Table 1

Appendix Table 12b: Proportion of Canadian Estimates that Provincial and Territorial Estimates Represent, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	1.000	0.981	0.987	0.988	0.996	0.994	1.004	0.999	1.005	1.004	1.006	0.959	-	-
2000	1.000	0.974	0.985	0.990	0.992	0.997	1.001	0.984	0.990	1.001	1.014	0.952	0.956	0.854
2005	1.000	0.973	0.993	0.986	0.993	1.000	1.004	0.983	0.986	0.999	1.010	0.958	0.970	0.896
2006	1.000	0.968	0.989	0.985	0.991	1.001	1.004	0.981	0.983	0.996	1.007	0.953	0.965	0.891
2007	1.000	0.970	1.000	0.991	0.990	0.999	1.004	0.984	0.986	0.998	1.001	0.948	0.957	0.885
2008	1.000	0.973	0.985	0.986	0.993	1.004	1.007	0.983	0.979	0.995	1.010	0.947	0.956	0.884
2009	1.000	0.975	0.982	0.985	0.984	1.001	1.004	0.974	0.979	0.993	1.011	0.942	0.951	0.880
2010	1.000	0.975	0.982	0.985	0.983	1.002	1.004	0.973	0.978	0.992	1.011	0.941	0.950	0.880
2011	1.000	0.974	0.982	0.984	0.982	1.002	1.004	0.972	0.976	0.991	1.011	0.941	0.948	0.880
2012	1.000	0.974	0.982	0.984	0.982	1.003	1.004	0.970	0.975	0.991	1.012	0.940	0.947	0.881
2013	1.000	0.973	0.981	0.983	0.981	1.003	1.004	0.969	0.974	0.990	1.012	0.939	0.946	0.881
2014	1.000	0.973	0.981	0.983	0.980	1.003	1.004	0.968	0.972	0.990	1.012	0.938	0.945	0.882

**Source:** Appendix Table 11a.

Appendix Table 11c: Provincial and Territorial Estimates Proportional to 2011 HDR estimates for Canada, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	77.2	75.7	76.2	76.3	76.9	76.7	77.5	77.1	77.6	77.5	77.7	74.0	-	-
2000	79.1	77.0	77.9	78.3	78.5	78.9	79.2	77.8	78.3	79.2	80.2	75.3	75.6	67.5
2005	80.1	77.9	79.5	79.0	79.5	80.1	80.4	78.7	79.0	80.0	80.9	76.7	77.7	71.7
2006	80.3	77.7	79.4	79.1	79.6	80.4	80.6	78.8	78.9	80.0	80.9	76.5	77.5	71.6
2007	80.5	78.1	80.5	79.8	79.7	80.4	80.8	79.2	79.4	80.3	80.6	76.3	77.0	71.2
2008	80.6	78.4	79.4	79.5	80.0	80.9	81.2	79.2	78.9	80.2	81.4	76.3	77.0	71.2
2009	80.8	78.8	79.3	79.6	79.5	80.9	81.1	78.7	79.1	80.2	81.7	76.1	76.8	71.1
2010	81.0	79.0	79.5	79.8	79.6	81.1	81.3	78.8	79.2	80.4	81.9	76.3	76.9	71.3
2011	81.2	79.1	79.7	79.9	79.8	81.4	81.5	78.9	79.3	80.5	82.1	76.4	77.0	71.5
2012	81.3	79.2	79.8	80.0	79.8	81.5	81.6	78.9	79.3	80.5	82.2	76.4	77.0	71.6
2013	81.5	79.3	80.0	80.1	79.9	81.7	81.8	79.0	79.4	80.7	82.5	76.5	77.1	71.8
2014	82.0	79.7	80.5	80.6	80.4	82.3	82.3	79.4	79.7	81.1	83.0	76.9	77.5	72.3

**Source:** Appendix Table 11a,b, Canada data taken from the International Human Development Indicators website (<http://hdrstats.undp.org/en/indicators/69206.html>)

Appendix Table 11d: Life Expectancy Index Based on 2011 HDR Proportional Estimates, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	0.880	0.857	0.865	0.866	0.875	0.872	0.885	0.878	0.886	0.885	0.888	0.831	-	-
2000	0.909	0.877	0.891	0.897	0.900	0.906	0.911	0.889	0.897	0.911	0.926	0.851	0.856	0.731
2005	0.925	0.891	0.915	0.908	0.915	0.925	0.929	0.903	0.908	0.923	0.937	0.873	0.888	0.796
2006	0.928	0.888	0.914	0.909	0.917	0.929	0.932	0.905	0.906	0.923	0.937	0.870	0.885	0.793
2007	0.931	0.894	0.931	0.920	0.919	0.929	0.935	0.911	0.914	0.928	0.932	0.866	0.877	0.788
2008	0.932	0.899	0.914	0.915	0.923	0.937	0.941	0.911	0.906	0.926	0.945	0.866	0.877	0.788
2009	0.935	0.905	0.912	0.917	0.916	0.937	0.940	0.903	0.909	0.926	0.949	0.864	0.874	0.786
2010	0.938	0.907	0.915	0.920	0.918	0.941	0.943	0.905	0.911	0.929	0.952	0.865	0.876	0.789
2011	0.942	0.909	0.918	0.922	0.920	0.944	0.946	0.906	0.912	0.931	0.956	0.867	0.877	0.792
2012	0.943	0.910	0.920	0.923	0.920	0.946	0.948	0.906	0.912	0.932	0.958	0.868	0.877	0.794
2013	0.946	0.912	0.923	0.925	0.922	0.950	0.951	0.907	0.913	0.934	0.961	0.870	0.878	0.797
2014	0.954	0.919	0.930	0.932	0.929	0.958	0.959	0.913	0.919	0.941	0.969	0.876	0.884	0.804

**Source:** Appendix Table 11c; HDR 2011 for minimum= 20 and maximum=83.4 (Japan 2011).

**Appendix Table 12: Average Educational Attainment Dimension Data and Calculations, Canada, Provinces and Territories, 1990, 2000, and 2005-2014**

Appendix Table 12a: Estimated Average Educational Attainment Using LFS Data, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	10.5	10.7	10.7	11.2	10.9	10.9	11.4	11.0	11.0	11.6	11.7	-	-	-
2000	11.9	11.4	11.5	11.8	11.6	11.6	12.1	11.7	11.7	12.2	12.2	12.2	12.2	10.7
2005	12.2	11.8	12.0	12.1	11.9	12.0	12.3	12.0	12.0	12.4	12.4	12.5	11.9	10.3
2006	12.3	11.8	12.0	12.1	12.0	12.1	12.4	12.0	12.0	12.4	12.4	12.2	12.1	10.9
2007	12.3	11.8	12.0	12.2	12.0	12.1	12.5	12.0	12.1	12.5	12.5	12.4	12.2	11.2
2008	12.4	11.9	12.0	12.2	12.1	12.2	12.5	12.1	12.1	12.5	12.5	12.4	12.0	11.0
2009	12.4	11.9	12.1	12.2	12.1	12.2	12.5	12.2	12.2	12.6	12.6	12.3	11.9	10.9
2010	12.5	12.1	12.2	12.4	12.1	12.3	12.6	12.2	12.3	12.6	12.6	12.2	11.9	10.8
2011	12.5	12.1	12.3	12.4	12.1	12.3	12.6	12.3	12.3	12.6	12.7	12.5	12.2	10.9
2012	12.5	12.2	12.3	12.4	12.2	12.4	12.6	12.3	12.3	12.6	12.7	12.6	12.1	11.3
2013	12.6	12.3	12.4	12.5	12.2	12.4	12.7	12.3	12.4	12.6	12.7	12.7	12.0	11.8
2014	12.6	12.3	12.4	12.5	12.3	12.4	12.7	12.4	12.4	12.7	12.7	12.8	12.0	12.2

Source: Appendix Table 8

Appendix Table 12b: Proportion of Canadian Estimates that Provincial and Territorial Estimates Represent, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	1.000	1.019	1.014	1.059	1.035	1.035	1.082	1.045	1.045	1.104	1.111	-	-	-
2000	1.000	0.956	0.965	0.991	0.970	0.975	1.012	0.984	0.979	1.020	1.023	1.020	1.020	0.896
2005	1.000	0.962	0.980	0.990	0.971	0.983	1.009	0.980	0.981	1.016	1.014	1.021	0.975	0.841
2006	1.000	0.962	0.981	0.988	0.976	0.985	1.010	0.978	0.979	1.013	1.011	0.995	0.985	0.887
2007	1.000	0.960	0.976	0.989	0.972	0.985	1.010	0.973	0.979	1.014	1.011	1.002	0.990	0.910
2008	1.000	0.960	0.970	0.983	0.976	0.985	1.010	0.979	0.980	1.012	1.012	1.005	0.970	0.890
2009	1.000	0.963	0.977	0.987	0.977	0.985	1.008	0.981	0.984	1.015	1.012	0.996	0.961	0.877
2010	1.000	0.968	0.980	0.992	0.974	0.985	1.008	0.982	0.984	1.012	1.012	0.976	0.958	0.863
2011	1.000	0.969	0.985	0.988	0.968	0.986	1.008	0.983	0.983	1.009	1.014	1.001	0.974	0.875
2012	1.000	0.973	0.983	0.992	0.972	0.989	1.007	0.982	0.984	1.007	1.012	1.006	0.966	0.905
2013	1.000	0.977	0.985	0.993	0.970	0.987	1.008	0.980	0.986	1.006	1.013	1.010	0.958	0.936
2014	1.000	0.974	0.985	0.996	0.978	0.988	1.006	0.982	0.987	1.007	1.012	1.016	0.951	0.968

Source: Appendix Table 12a.

Appendix Table 12c: Provincial and Territorial Estimates Proportional to 2011 HDR Estimates for Canada, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	10.3	10.5	10.4	10.9	10.7	10.7	11.1	10.8	10.8	11.4	11.4	-	-	-
2000	11.1	10.6	10.7	11.0	10.8	10.8	11.2	10.9	10.9	11.3	11.4	11.3	11.3	9.9
2005	12.3	11.8	12.1	12.2	11.9	12.1	12.4	12.1	12.1	12.5	12.5	12.6	12.0	10.3
2006	12.3	11.8	12.1	12.2	12.0	12.1	12.4	12.0	12.0	12.5	12.4	12.2	12.1	10.9
2007	12.3	11.8	12.0	12.2	12.0	12.1	12.4	12.0	12.0	12.5	12.4	12.3	12.2	11.2
2008	12.3	11.8	11.9	12.1	12.0	12.1	12.4	12.0	12.1	12.5	12.4	12.4	11.9	10.9
2009	12.3	11.8	12.0	12.1	12.0	12.1	12.4	12.1	12.1	12.5	12.5	12.2	11.8	10.8
2010	12.3	11.9	12.1	12.2	12.0	12.1	12.4	12.1	12.1	12.4	12.4	12.0	11.8	10.6
2011	12.3	11.9	12.1	12.2	11.9	12.1	12.4	12.1	12.1	12.4	12.5	12.3	12.0	10.8
2012	12.3	12.0	12.1	12.2	12.0	12.2	12.4	12.1	12.1	12.4	12.4	12.4	11.9	11.1
2013	12.3	12.0	12.1	12.2	11.9	12.1	12.4	12.1	12.1	12.4	12.5	12.4	11.8	11.5
2014	13.0	12.7	12.8	12.9	12.7	12.9	13.1	12.8	12.8	13.1	13.2	13.2	12.4	12.6

**Source:** Appendix Table 12a,b, Canada data taken from the International Human Development Indicators website (<http://hdrstats.undp.org/en/indicators/103006.html>)

Appendix Table 12d: Estimated Average Educational Attainment Index Based on 2011 HDR Proportional Estimates, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	0.687	0.700	0.696	0.727	0.711	0.711	0.743	0.717	0.717	0.758	0.763	-	-	-
2000	0.740	0.707	0.714	0.733	0.718	0.721	0.749	0.728	0.724	0.755	0.757	0.755	0.755	0.663
2005	0.820	0.789	0.804	0.812	0.797	0.806	0.828	0.804	0.805	0.833	0.832	0.837	0.800	0.690
2006	0.820	0.789	0.804	0.810	0.801	0.808	0.828	0.802	0.803	0.831	0.829	0.816	0.807	0.728
2007	0.820	0.788	0.800	0.811	0.797	0.808	0.828	0.798	0.803	0.831	0.829	0.822	0.812	0.746
2008	0.820	0.787	0.796	0.806	0.801	0.808	0.828	0.803	0.803	0.830	0.830	0.824	0.796	0.730
2009	0.820	0.789	0.801	0.809	0.801	0.808	0.827	0.804	0.807	0.832	0.830	0.816	0.788	0.719
2010	0.820	0.794	0.804	0.814	0.799	0.808	0.827	0.805	0.807	0.829	0.830	0.800	0.785	0.708
2011	0.820	0.794	0.808	0.810	0.794	0.808	0.827	0.806	0.806	0.827	0.832	0.821	0.799	0.718
2012	0.820	0.798	0.806	0.814	0.797	0.811	0.826	0.805	0.807	0.826	0.830	0.825	0.792	0.742
2013	0.820	0.801	0.808	0.815	0.796	0.809	0.826	0.804	0.809	0.825	0.831	0.829	0.786	0.767
2014	0.867	0.845	0.854	0.863	0.848	0.857	0.873	0.851	0.855	0.873	0.877	0.881	0.825	0.840

**Source:** Appendix Table 12c; HDR 2011 for minimum=0 and maximum=13.1 (Czech Republic, 2005).



**Appendix Table 13: Expected Years of Schooling Dimension Data and Calculations, Canada, Provinces and Territories, 1990, 2000, and 2005-2014**

Appendix Table 13a: Estimated Expected Years of Schooling Using LFS Data, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	14.8	14.4	14.3	14.8	14.2	14.9	15.2	14.5	14.5	14.5	14.3	-	-	-
2000	15.6	15.7	15.1	15.7	14.9	15.7	15.9	15.0	15.1	14.8	15.6	13.9	14.5	13.1
2005	15.9	15.7	15.3	15.6	15.3	16.1	16.2	15.5	15.1	14.9	15.7	13.8	14.1	13.3
2006	15.8	15.9	15.2	15.7	15.3	16.2	16.1	15.5	15.1	14.9	15.7	14.4	14.2	13.5
2007	15.8	15.9	15.5	15.6	15.5	16.2	16.2	15.3	15.0	14.7	15.6	14.2	14.2	13.0
2008	15.7	15.7	15.3	15.3	15.3	16.1	16.1	15.3	14.9	14.7	15.6	13.0	13.8	12.9
2009	15.8	15.7	15.4	15.4	15.2	16.1	16.2	15.3	14.8	14.8	15.6	13.1	14.5	13.6
2010	16.0	15.5	15.7	15.6	15.3	16.3	16.3	15.4	15.0	15.1	15.8	13.8	14.1	13.2
2011	16.0	15.5	15.5	15.7	15.3	16.4	16.2	15.3	15.1	15.0	15.9	14.3	14.6	12.8
2012	16.0	15.5	15.7	15.7	15.3	16.5	16.3	15.3	15.0	15.0	16.0	14.3	14.7	12.7
2013	16.1	15.7	15.6	15.8	15.4	16.5	16.4	15.3	15.1	15.1	15.9	14.3	14.7	12.7
2014	16.0	15.7	15.9	15.7	15.2	16.7	16.2	15.3	15.3	15.1	15.6	14.3	14.7	12.7

Source: Appendix Table 9

Appendix Table 13b: Proportion of Canadian Estimates that Provincial and Territorial Estimates Represent, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	1.000	0.970	0.966	0.996	0.959	1.005	1.023	0.975	0.980	0.975	0.966	-	-	-
2000	1.000	1.006	0.969	1.006	0.954	1.008	1.017	0.960	0.966	0.952	1.003	0.889	0.929	0.840
2005	1.000	0.991	0.965	0.981	0.966	1.014	1.022	0.974	0.955	0.942	0.987	0.870	0.888	0.838
2006	1.000	1.005	0.961	0.993	0.967	1.021	1.016	0.978	0.953	0.942	0.990	0.907	0.895	0.851
2007	1.000	1.003	0.981	0.987	0.982	1.022	1.022	0.969	0.946	0.930	0.985	0.898	0.896	0.821
2008	1.000	0.999	0.975	0.974	0.972	1.020	1.022	0.975	0.947	0.932	0.992	0.827	0.878	0.820
2009	1.000	0.992	0.974	0.971	0.958	1.020	1.026	0.966	0.935	0.935	0.989	0.827	0.915	0.858
2010	1.000	0.971	0.981	0.978	0.960	1.021	1.021	0.966	0.942	0.944	0.990	0.864	0.886	0.826
2011	1.000	0.972	0.968	0.983	0.956	1.027	1.016	0.961	0.943	0.940	0.997	0.894	0.917	0.801
2012	1.000	0.967	0.981	0.980	0.957	1.027	1.019	0.955	0.936	0.935	0.996	0.890	0.914	0.795
2013	1.000	0.976	0.972	0.983	0.959	1.028	1.019	0.952	0.940	0.940	0.990	0.888	0.914	0.792
2014	1.000	0.979	0.991	0.982	0.952	1.046	1.012	0.956	0.956	0.941	0.974	0.891	0.918	0.793

Source: Appendix Table 13a.

Appendix Table 13c: Provincial and Territorial Estimates Proportional to 2011 HDR Estimates for Canada, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	16.7	16.2	16.1	16.6	16.0	16.8	17.1	16.3	16.4	16.3	16.1	-	-	-
2000	15.8	15.9	15.3	15.9	15.1	15.9	16.1	15.2	15.3	15.0	15.8	14.1	14.7	13.3
2005	15.9	15.8	15.3	15.6	15.4	16.1	16.3	15.5	15.2	15.0	15.7	13.8	14.1	13.3
2006	15.9	16.0	15.3	15.8	15.4	16.2	16.2	15.6	15.2	15.0	15.7	14.4	14.2	13.5
2007	15.9	16.0	15.6	15.7	15.6	16.2	16.3	15.4	15.0	14.8	15.7	14.3	14.3	13.0
2008	15.9	15.9	15.5	15.5	15.5	16.2	16.2	15.5	15.1	14.8	15.8	13.1	14.0	13.0
2009	15.9	15.8	15.5	15.4	15.2	16.2	16.3	15.4	14.9	14.9	15.7	13.1	14.5	13.6
2010	15.9	15.4	15.6	15.5	15.3	16.2	16.2	15.4	15.0	15.0	15.7	13.7	14.1	13.1
2011	15.9	15.5	15.4	15.6	15.2	16.3	16.2	15.3	15.0	15.0	15.9	14.2	14.6	12.7
2012	15.9	15.4	15.6	15.6	15.2	16.3	16.2	15.2	14.9	14.9	15.8	14.1	14.5	12.6
2013	15.9	15.5	15.5	15.6	15.2	16.3	16.2	15.1	14.9	14.9	15.7	14.1	14.5	12.6
2014	15.9	15.6	15.7	15.6	15.1	16.6	16.1	15.2	15.2	15.0	15.5	14.2	14.6	12.6

**Source:** Appendix Table 13a,b, Canada data taken from the International Human Development Indicators website (<http://hdrstats.undp.org/en/indicators/69706.html>)

Appendix Table 13d: Estimated Expected Years of Schooling Index Based on 2011 HDR Proportional Estimates, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	0.928	0.900	0.896	0.924	0.890	0.932	0.949	0.904	0.909	0.905	0.896	-	-	-
2000	0.878	0.883	0.851	0.883	0.837	0.885	0.893	0.842	0.848	0.836	0.880	0.781	0.816	0.737
2005	0.883	0.875	0.852	0.866	0.853	0.896	0.903	0.861	0.843	0.832	0.872	0.768	0.785	0.740
2006	0.883	0.888	0.849	0.877	0.854	0.902	0.898	0.864	0.842	0.832	0.874	0.802	0.791	0.752
2007	0.883	0.886	0.866	0.872	0.867	0.903	0.903	0.856	0.836	0.822	0.870	0.793	0.792	0.725
2008	0.883	0.882	0.861	0.860	0.859	0.901	0.902	0.861	0.837	0.824	0.877	0.730	0.776	0.724
2009	0.883	0.876	0.860	0.857	0.847	0.901	0.906	0.853	0.826	0.826	0.873	0.730	0.808	0.758
2010	0.883	0.857	0.867	0.864	0.848	0.902	0.901	0.854	0.832	0.834	0.874	0.763	0.783	0.730
2011	0.883	0.859	0.855	0.869	0.845	0.907	0.897	0.849	0.833	0.831	0.881	0.790	0.810	0.707
2012	0.883	0.855	0.866	0.866	0.846	0.908	0.900	0.844	0.827	0.826	0.880	0.786	0.808	0.702
2013	0.883	0.862	0.859	0.868	0.847	0.908	0.900	0.841	0.830	0.830	0.874	0.784	0.807	0.699
2014	0.883	0.865	0.875	0.867	0.841	0.924	0.894	0.845	0.844	0.831	0.860	0.787	0.811	0.700

**Source:** Appendix Table 13c; HDR 2011 for minimum=0 and maximum=18.0 (cap).

Appendix Table 14: Education Index Based on 2011 HDR Consistent Estimates, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	0.807	0.800	0.796	0.826	0.800	0.822	0.846	0.811	0.813	0.832	0.830	-	-	-
2000	0.809	0.795	0.782	0.808	0.778	0.803	0.821	0.785	0.786	0.795	0.819	0.768	0.785	0.700
2005	0.852	0.832	0.828	0.839	0.825	0.851	0.865	0.832	0.824	0.833	0.852	0.803	0.792	0.715
2006	0.852	0.839	0.827	0.844	0.827	0.855	0.863	0.833	0.822	0.831	0.852	0.809	0.799	0.740
2007	0.852	0.837	0.833	0.842	0.832	0.855	0.866	0.827	0.819	0.827	0.850	0.807	0.802	0.735
2008	0.852	0.835	0.828	0.833	0.830	0.854	0.865	0.832	0.820	0.827	0.853	0.777	0.786	0.727
2009	0.852	0.833	0.831	0.833	0.824	0.854	0.866	0.829	0.816	0.829	0.852	0.773	0.798	0.738
2010	0.852	0.825	0.835	0.839	0.824	0.855	0.864	0.830	0.820	0.832	0.852	0.782	0.784	0.719
2011	0.852	0.827	0.831	0.840	0.819	0.858	0.862	0.827	0.819	0.829	0.856	0.805	0.805	0.712
2012	0.852	0.826	0.836	0.840	0.821	0.859	0.863	0.825	0.817	0.826	0.855	0.805	0.800	0.722
2013	0.852	0.832	0.833	0.841	0.821	0.859	0.863	0.822	0.819	0.827	0.853	0.806	0.796	0.733
2014	0.875	0.855	0.865	0.865	0.844	0.890	0.883	0.848	0.850	0.852	0.869	0.834	0.818	0.770

Source: Appendix Table 12d,13d.

**Appendix Table 15: Income Dimension Data and Calculations, Canada, Provinces and Territories, 1990, 2000, and 2005-2014**

Appendix Table 15a: GNI per Capita in Current Dollars, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	25,026	16,108	16,740	19,333	18,604	22,251	27,908	22,391	21,457	29,549	24,672	-	-	-
2000	35,925	26,797	24,804	27,280	27,741	31,298	38,708	30,420	34,030	48,911	33,325	41,405	65,810	32,366
2005	43,949	43,259	30,834	34,254	34,158	36,951	44,431	36,563	45,182	67,876	41,674	49,281	102,417	38,268
2006	45,815	48,127	32,097	34,867	35,834	38,076	45,669	39,393	46,529	71,880	44,374	52,679	102,761	40,244
2007	47,845	57,098	33,619	36,298	37,948	39,782	47,142	41,809	52,274	74,263	46,219	55,718	107,599	42,013
2008	49,718	61,719	34,260	37,843	38,534	40,505	47,230	43,542	66,466	82,339	46,996	61,744	115,894	49,103
2009	46,608	48,383	35,216	37,232	38,478	40,102	45,999	42,036	58,061	66,780	44,494	63,263	92,980	47,086
2010	48,879	55,721	36,858	39,115	40,121	41,383	48,039	43,662	60,269	72,349	45,929	66,800	111,281	57,386
2011	51,537	63,879	37,657	39,866	41,693	43,051	49,741	45,551	70,166	79,025	48,184	70,392	108,733	59,481
2012	52,453	60,794	38,366	40,044	41,915	43,791	50,716	47,809	71,703	80,360	48,742	70,491	100,646	63,319
2013	53,824	66,269	39,762	40,908	42,155	44,294	51,156	48,917	75,485	85,947	49,449	69,999	102,315	66,008
2014	55,510	63,345	41,071	41,466	42,482	45,048	52,785	50,051	73,760	91,183	51,136	70,370	107,572	68,924

Source: Appendix Table 10b

Appendix Table 15b: GNI per Capita in 2005 PPP adjusted US Dollars, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	31,568	20,243	20,677	24,252	23,532	27,933	36,021	27,787	25,408	35,596	31,109	50,644	-	-
2000	34,759	24,355	24,394	26,781	27,601	30,948	38,246	30,186	32,267	42,427	32,510	39,095	62,959	31,890
2005	40,156	36,592	28,173	31,654	31,379	34,756	41,474	33,687	40,119	57,860	37,632	44,812	100,471	36,044
2006	42,333	41,669	29,700	32,995	32,902	35,592	42,797	35,218	43,520	65,380	40,142	47,468	98,651	36,860
2007	43,292	45,477	30,329	32,947	33,861	35,980	43,154	37,223	43,967	67,922	41,930	49,778	97,102	38,028
2008	44,068	52,590	30,965	33,432	34,953	36,641	43,421	38,508	48,147	68,401	42,570	51,319	99,105	38,697
2009	44,729	55,525	30,821	34,045	34,666	36,440	42,490	39,173	59,796	74,076	42,280	55,548	104,263	44,175
2010	40,890	42,447	30,895	32,664	33,757	35,182	40,355	36,878	50,937	58,587	39,035	55,501	81,572	41,309
2011	42,309	48,232	31,904	33,857	34,728	35,820	41,582	37,793	52,168	62,625	39,756	57,821	96,323	49,673
2012	43,652	54,106	31,895	33,766	35,314	36,464	42,131	38,581	59,430	66,934	40,812	59,622	92,097	50,380
2013	43,796	50,761	32,034	33,435	34,998	36,564	42,346	39,919	59,870	67,098	40,698	58,858	84,036	52,869
2014	44,198	54,418	32,651	33,592	34,616	36,373	42,007	40,169	61,986	70,576	40,606	57,481	84,018	54,204

Source: Appendix Table 3 and 15a

Appendix Table 15c: Proportion of Canadian Estimates that Provincial and Territorial Estimates Represent, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	1.000	0.641	0.655	0.768	0.745	0.885	1.141	0.880	0.805	1.128	0.985	1.604	-	-
2000	1.000	0.701	0.702	0.770	0.794	0.890	1.100	0.868	0.928	1.221	0.935	1.125	1.811	0.917
2005	1.000	0.911	0.702	0.788	0.781	0.866	1.033	0.839	0.999	1.441	0.937	1.116	2.502	0.898
2006	1.000	0.984	0.702	0.779	0.777	0.841	1.011	0.832	1.028	1.544	0.948	1.121	2.330	0.871
2007	1.000	1.050	0.701	0.761	0.782	0.831	0.997	0.860	1.016	1.569	0.969	1.150	2.243	0.878
2008	1.000	1.193	0.703	0.759	0.793	0.831	0.985	0.874	1.093	1.552	0.966	1.165	2.249	0.878
2009	1.000	1.241	0.689	0.761	0.775	0.815	0.950	0.876	1.337	1.656	0.945	1.242	2.331	0.988
2010	1.000	1.038	0.756	0.799	0.826	0.860	0.987	0.902	1.246	1.433	0.955	1.357	1.995	1.010
2011	1.000	1.140	0.754	0.800	0.821	0.847	0.983	0.893	1.233	1.480	0.940	1.367	2.277	1.174
2012	1.000	1.239	0.731	0.774	0.809	0.835	0.965	0.884	1.361	1.533	0.935	1.366	2.110	1.154
2013	1.000	1.159	0.731	0.763	0.799	0.835	0.967	0.911	1.367	1.532	0.929	1.344	1.919	1.207
2014	1.000	1.231	0.739	0.760	0.783	0.823	0.950	0.909	1.402	1.597	0.919	1.301	1.901	1.226

Source: Appendix Table 15b.

Appendix Table 15d: Provincial and Territorial Estimates Proportional to 2011 HDR Estimates for Canada, 2005 PPP adjusted US dollars, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	29,231	18,744	19,147	22,456	21,790	25,865	33,355	25,731	23,527	32,961	28,806	46,895	-	-
2000	35,567	24,922	24,961	27,404	28,243	31,667	39,135	30,887	33,017	43,413	33,265	40,003	64,423	32,632
2005	38,660	35,228	27,123	30,474	30,210	33,461	39,929	32,432	38,624	55,704	36,229	43,142	96,727	34,701
2006	39,794	39,169	27,918	31,016	30,929	33,457	40,230	33,106	40,910	61,459	37,734	44,621	92,734	34,650
2007	40,150	42,177	28,128	30,556	31,403	33,369	40,022	34,522	40,776	62,993	38,887	46,165	90,055	35,268
2008	39,988	47,721	28,098	30,337	31,716	33,249	39,401	34,943	43,689	62,068	38,629	46,568	89,929	35,114
2009	38,343	47,598	26,421	29,185	29,717	31,238	36,424	33,580	51,259	63,501	36,244	47,618	89,378	37,869
2010	39,049	40,536	29,504	31,194	32,238	33,598	38,539	35,218	48,644	55,949	37,278	53,003	77,900	39,449
2011	41,333	47,119	31,168	33,076	33,927	34,994	40,623	36,922	50,965	61,180	38,839	56,487	94,102	48,527
2012	41,539	51,487	30,352	32,132	33,604	34,699	40,092	36,714	56,554	63,695	38,836	56,736	87,639	47,942
2013	41,887	48,548	30,638	31,978	33,472	34,970	40,500	38,179	57,260	64,173	38,924	56,292	80,373	50,564
2014	42,155	51,902	31,142	32,040	33,016	34,692	40,065	38,312	59,121	67,314	38,729	54,824	80,134	51,698

**Source:** Appendix Table 15b,c, Canada data taken from the International Human Development Indicators website (<http://hdrstats.undp.org/en/indicators/90406.html>).

Appendix Table 15e: Income Index Based on 2011 HDR Proportional Estimates, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	0.858	0.791	0.794	0.818	0.813	0.839	0.878	0.838	0.825	0.876	0.855	0.929	-	-
2000	0.887	0.834	0.834	0.848	0.852	0.870	0.902	0.866	0.876	0.917	0.877	0.905	0.977	0.874
2005	0.900	0.886	0.846	0.864	0.863	0.878	0.905	0.873	0.900	0.955	0.890	0.916	1.038	0.884
2006	0.904	0.902	0.851	0.867	0.866	0.878	0.906	0.876	0.908	0.970	0.896	0.922	1.032	0.883
2007	0.906	0.913	0.852	0.864	0.868	0.878	0.905	0.883	0.908	0.974	0.901	0.927	1.028	0.886
2008	0.905	0.932	0.852	0.863	0.870	0.877	0.903	0.885	0.918	0.971	0.900	0.928	1.027	0.885
2009	0.899	0.931	0.842	0.857	0.860	0.868	0.891	0.879	0.943	0.975	0.890	0.931	1.026	0.897
2010	0.901	0.907	0.859	0.867	0.872	0.879	0.899	0.886	0.935	0.956	0.894	0.948	1.006	0.903
2011	0.910	0.930	0.867	0.876	0.880	0.885	0.907	0.893	0.942	0.969	0.901	0.957	1.034	0.934
2012	0.911	0.943	0.863	0.872	0.879	0.884	0.905	0.892	0.957	0.975	0.901	0.958	1.024	0.932
2013	0.912	0.934	0.865	0.871	0.878	0.885	0.907	0.898	0.959	0.976	0.901	0.957	1.010	0.940
2014	0.913	0.944	0.867	0.872	0.876	0.884	0.905	0.899	0.964	0.984	0.900	0.953	1.010	0.944

**Source:** Appendix Table 15d; HDR 2011 for minimum=100 and maximum=107,721 (Qatar, 2011).

Appendix Table 16: Human Development Index Based on 2011 HDR Consistent Estimates, Canada, Provinces and Territories, 1990, 2000, and 2005-2014

Year	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU
1990	0.848	0.815	0.818	0.836	0.829	0.844	0.869	0.842	0.841	0.864	0.857	-	-	-
2000	0.867	0.835	0.835	0.850	0.842	0.859	0.877	0.846	0.852	0.873	0.873	0.839	0.869	0.765
2005	0.892	0.869	0.862	0.870	0.867	0.884	0.899	0.869	0.876	0.902	0.892	0.863	0.901	0.795
2006	0.894	0.876	0.863	0.873	0.869	0.887	0.900	0.871	0.878	0.906	0.894	0.865	0.900	0.803
2007	0.895	0.881	0.871	0.875	0.872	0.887	0.902	0.873	0.879	0.907	0.894	0.865	0.897	0.801
2008	0.896	0.887	0.864	0.870	0.873	0.889	0.903	0.875	0.880	0.906	0.898	0.855	0.891	0.798
2009	0.895	0.889	0.861	0.869	0.866	0.886	0.899	0.870	0.888	0.908	0.896	0.854	0.895	0.804
2010	0.896	0.879	0.869	0.875	0.870	0.891	0.902	0.873	0.887	0.904	0.899	0.862	0.884	0.800
2011	0.900	0.887	0.872	0.879	0.872	0.895	0.905	0.875	0.889	0.908	0.903	0.874	0.900	0.808
2012	0.901	0.892	0.873	0.878	0.872	0.896	0.905	0.874	0.893	0.909	0.903	0.875	0.896	0.812
2013	0.902	0.892	0.873	0.879	0.873	0.897	0.906	0.875	0.895	0.910	0.904	0.875	0.891	0.819
2014	0.913	0.905	0.887	0.889	0.882	0.910	0.915	0.886	0.910	0.924	0.912	0.886	0.901	0.836
Compound Annual Growth Rate														
1990-2014	0.31	0.44	0.34	0.26	0.26	0.31	0.22	0.21	0.33	0.28	0.26	-	-	-
1990-2000	0.23	0.23	0.21	0.17	0.15	0.17	0.09	0.04	0.13	0.10	0.18	-	-	-
2000-2014	0.37	0.58	0.44	0.32	0.34	0.42	0.31	0.33	0.47	0.41	0.31	0.39	0.25	0.64
2000-2005	0.55	0.82	0.66	0.46	0.59	0.58	0.51	0.55	0.57	0.67	0.44	0.55	0.71	0.77
2005-2014	0.27	0.45	0.31	0.25	0.20	0.32	0.20	0.22	0.42	0.27	0.24	0.30	0.00	0.56

Source: Appendix Table 11d, 14, 15d.

Appendix Table 17: International Rankings from 2014 HDR with Provinces and Territories Inserted on an Individual Basis, HDI and Component Indicators, 2014

Table 17a: International Rankings for Life Expectancy			Table 17b: International Rankings for Average Educational Attainment			Table 17c: International Ranking for Expected Years of Schooling			Table 17d: International Rankings for GNI per capita			Table 17e: International Rankings for HDI		
Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
1	Hong Kong, China (SAR)	84.0	1	YT	13.4	1	Australia	20.2	1	Qatar	123,124	1	Norway	0.944
2	Japan	83.5	1	BC	13.2	2	New Zealand	19.2	2	Kuwait	83,961	2	Australia	0.935
3	Italy	83.1	1	AB	13.1	3	Iceland	19.0	3	NWT	80,134	3	Switzerland	0.930
4	Switzerland	83.0	1	ON	13.1	4	Denmark	18.7	3	Liechtenstein	79,851	4	AB	0.924
5	Singapore	83.0	1	Germany	13.1	5	Ireland	18.6	4	Singapore	76,628	4	Denmark	0.923
6	BC	83.0	2	United Kingdom	13.1	6	Argentina	17.9	5	Brunei Darussalam	72,570	5	Netherlands	0.922
6	Iceland	82.6	3	Canada	13.0	7	Netherlands	17.9	6	AB	67,314	6	Germany	0.916
7	Spain	82.6	4	Australia	13.0	8	Greece	17.6	6	Norway	64,992	7	Ireland	0.916
8	Australia	82.4	5	NS	13.0	9	Norway	17.5	7	United Arab Emirates	60,868	8	ON	0.915
9	Israel	82.4	5	United States	12.9	10	Spain	17.3	8	SK	59,121	8	United States	0.915
10	ON	82.3	6	QC	12.9	11	Finland	17.1	8	Luxembourg	58,711	9	New Zealand	0.913
10	QC	82.3	6	NWT	12.9	12	Korea (Republic of)	16.9	9	Switzerland	56,431	9	Canada	0.913
10	Sweden	82.2	6	SK	12.8	13	Slovenia	16.8	10	YT	54,824	11	BC	0.912
11	France	82.2	6	Switzerland	12.8	14	QC	16.6	10	Hong Kong, China (SAR)	53,959	11	Singapore	0.912
12	Canada	82.0	7	PEI	12.8	14	Estonia	16.5	11	United States	52,947	12	SK	0.910
13	Korea (Republic of)	81.9	7	MB	12.8	15	United States	16.5	12	Saudi Arabia	52,821	12	QC	0.910
14	New Zealand	81.8	7	Denmark	12.7	16	Germany	16.5	13	NFLD	51,902	12	Hong Kong, China (SAR)	0.910
15	Luxembourg	81.7	8	NB	12.7	17	Czech Republic	16.4	13	NU	51,698	13	Liechtenstein	0.908
16	Chile	81.7	8	NFLD	12.7	18	Lithuania	16.4	13	Sweden	45,636	14	Sweden	0.907
17	Norway	81.6	8	Norway	12.6	19	Belgium	16.3	14	Netherlands	45,435	15	NWT	0.907
18	Netherlands	81.6	9	Israel	12.5	20	Portugal	16.3	15	Denmark	44,025	15	United Kingdom	0.907



Table 17a: International Rankings for Life Expectancy			Table 17b: International Rankings for Average Educational Attainment			Table 17c: International Ranking for Expected Years of Schooling			Table 17d: International Rankings for GNI per capita			Table 17e: International Rankings for HDI		
Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
19	Austria	81.4	10	New Zealand	12.5	21	Saudi Arabia	16.3	16	Andorra	43,978	16	NFLD	0.905
20	Andorra	81.3	11	Estonia	12.5	22	United Kingdom	16.2	17	Germany	43,919	16	Iceland	0.899
21	AB	81.1	12	Lithuania	12.4	23	ON	16.1	18	Austria	43,869	17	Korea (Republic of)	0.898
21	Germany	80.9	13	Palau	12.3	23	Italy	16.0	19	Australia	42,261	18	Israel	0.894
22	Ireland	80.9	14	Czech Republic	12.3	24	France	16.0	20	Canada	42,155	19	Luxembourg	0.892
23	Greece	80.9	15	Slovakia	12.2	25	Israel	16.0	21	Belgium	41,187	20	Japan	0.891
24	Portugal	80.9	16	Ireland	12.2	26	Canada	15.9	22	ON	40,065	21	Belgium	0.890
25	Belgium	80.8	17	Georgia	12.1	27	Sweden	15.8	22	Ireland	39,568	22	NS	0.889
26	Finland	80.8	18	Sweden	12.1	28	Grenada	15.8	23	United Kingdom	39,267	22	YT	0.888
27	United Kingdom	80.7	19	Belarus	12.0	29	PEI	15.8	24	BC	38,729	22	France	0.888
28	NS	80.6	20	Russian Federation	12.0	29	Switzerland	15.8	24	Finland	38,695	23	PEI	0.887
28	Malta	80.6	21	Slovenia	11.9	30	Austria	15.7	25	Bahrain	38,599	23	MB	0.886
29	PEI	80.5	22	Korea (Republic of)	11.9	31	Fiji	15.7	26	MB	38,312	23	Austria	0.885
29	Slovenia	80.4	23	Netherlands	11.9	32	Belarus	15.7	26	France	38,056	24	Finland	0.883
30	NB	80.4	24	Liechtenstein	11.8	33	NS	15.6	27	Japan	36,927	25	NB	0.882
30	Denmark	80.2	25	Poland	11.8	33	NFLD	15.6	28	Iceland	35,182	25	Slovenia	0.880
31	Cyprus	80.2	26	Luxembourg	11.7	33	Hong Kong, China (SAR)	15.6	29	Oman	34,858	26	Spain	0.876
32	Liechtenstein	80.0	27	Hungary	11.6	34	Mauritius	15.6	30	QC	34,692	27	Italy	0.873
33	SK	79.7	28	Cyprus	11.6	35	Uruguay	15.5	30	Korea (Republic of)	33,890	28	Czech Republic	0.870
33	NFLD	79.7	29	Japan	11.5	36	BC	15.5	31	Italy	33,030	29	Greece	0.865
33	Cuba	79.4	30	Cuba	11.5	36	Poland	15.5	32	NB	33,016	30	Estonia	0.861
34	Costa Rica	79.4	31	Latvia	11.5	37	Barbados	15.4	32	New Zealand	32,689	31	Brunei Darussalam	0.856
35	MB	79.4	32	Kazakhstan	11.4	38	Singapore	15.4	33	Spain	32,045	32	Qatar	0.850
35	Lebanon	79.3	33	Ukraine	11.3	39	Hungary	15.4	34	NS	32,040	33	Cyprus	0.850
36	United States	79.1	34	Belgium	11.3	40	Japan	15.3	34	PEI	31,142	34	Andorra	0.845

Table 17a: International Rankings for Life Expectancy			Table 17b: International Rankings for Average Educational Attainment			Table 17c: International Ranking for Expected Years of Schooling			Table 17d: International Rankings for GNI per capita			Table 17e: International Rankings for HDI		
Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
37	Brunei Darussalam	78.8	35	Moldova (Republic of)	11.2	41	Chile	15.2	34	Israel	30,676	35	Slovakia	0.844
38	Czech Republic	78.6	36	Hong Kong, China (SAR)	11.2	42	Latvia	15.2	35	Cyprus	28,633	36	Poland	0.843
39	Qatar	78.2	37	Azerbaijan	11.2	43	MB	15.2	36	Malta	27,930	37	Lithuania	0.839
40	Albania	77.8	38	Montenegro	11.2	43	SK	15.2	37	Slovenia	27,852	38	Malta	0.839
41	Dominica	77.8	39	France	11.1	43	Brazil	15.2	38	Czech Republic	26,660	39	Saudi Arabia	0.837
42	Panama	77.6	40	Croatia	11.0	44	Montenegro	15.2	39	Trinidad and Tobago	26,090	40	Argentina	0.836
43	NWT	77.5	35	NU	10.9	45	Ukraine	15.1	40	Slovakia	25,845	41	United Arab Emirates	0.835
43	Poland	77.4	41	Bahamas	10.9	46	NB	15.1	41	Portugal	25,757	42	Chile	0.832
44	Croatia	77.3	42	Trinidad and Tobago	10.9	46	Iran (Islamic Republic of)	15.1	42	Estonia	25,214	43	Portugal	0.830
45	Uruguay	77.2	43	Armenia	10.9	47	Slovakia	15.1	43	Greece	24,524	44	Hungary	0.828
46	United Arab Emirates	77.0	44	Uzbekistan	10.9	48	Kazakhstan	15.0	44	Lithuania	24,500	45	Bahrain	0.824
47	YT	76.9	45	Austria	10.8	49	AB	15.0	45	Seychelles	23,300	46	NU	0.819
47	Estonia	76.8	46	Sri Lanka	10.8	49	Liechtenstein	15.0	46	Poland	23,177	46	Latvia	0.819
48	Oman	76.8	47	Romania	10.8	50	Croatia	14.8	47	Hungary	22,916	47	Croatia	0.818
49	Mexico	76.8	48	Tonga	10.7	51	Kuwait	14.7	48	Malaysia	22,762	48	Kuwait	0.816
50	Maldives	76.8	49	Singapore	10.6	52	Tonga	14.7	49	Russian Federation	22,352	49	Montenegro	0.802
51	Bahrain	76.6	50	Iceland	10.6	53	Russian Federation	14.7	50	Latvia	22,281	50	Belarus	0.798
52	Bosnia and Herzegovina	76.5	51	Kyrgyzstan	10.6	54	Tunisia	14.6	51	Argentina	22,050	51	Russian Federation	0.798
53	Slovakia	76.3	52	Bulgaria	10.6	55	NWT	14.6	52	Bahamas	21,336	52	Oman	0.793
54	Argentina	76.3	53	Belize	10.5	55	Mongolia	14.6	53	Chile	21,290	53	Romania	0.793
55	Montenegro	76.2	54	Serbia	10.5	56	Turkey	14.5	54	Equatorial Guinea	21,056	54	Uruguay	0.793
56	Antigua and Barbuda	76.1	55	Barbados	10.5	57	Brunei Darussalam	14.5	55	Kazakhstan	20,867	55	Bahamas	0.790
57	Ecuador	75.9	56	Tajikistan	10.4	58	Malta	14.4	56	Saint Kitts and Nevis	20,805	56	Kazakhstan	0.788

Table 17a: International Rankings for Life Expectancy			Table 17b: International Rankings for Average Educational Attainment			Table 17c: International Ranking for Expected Years of Schooling			Table 17d: International Rankings for GNI per capita			Table 17e: International Rankings for HDI		
Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
58	China	75.8	57	Malta	10.3	59	Bahrain	14.4	57	Antigua and Barbuda	20,070	57	Barbados	0.785
59	Viet Nam	75.8	58	Samoa	10.3	60	Serbia	14.4	58	Croatia	19,409	58	Antigua and Barbuda	0.783
60	Jamaica	75.7	59	Finland	10.3	61	Bulgaria	14.4	59	Uruguay	19,283	59	Bulgaria	0.782
61	Barbados	75.6	60	Greece	10.3	62	Venezuela (Bolivarian Republic of)	14.2	60	Turkey	18,677	60	Palau	0.780
62	Bahamas	75.4	61	Italy	10.1	63	Romania	14.2	61	Panama	18,192	61	Panama	0.780
63	Iran (Islamic Republic of)	75.4	62	Malaysia	10.0	64	Ecuador	14.2	62	Romania	18,108	62	Malaysia	0.779
64	The former Yugoslav Republic of Macedonia	75.4	63	South Africa	9.9	65	YT	14.2	63	Mauritius	17,470	63	Mauritius	0.777
65	Turkey	75.3	64	Fiji	9.9	65	Libya	14.0	64	Belarus	16,676	64	Seychelles	0.772
66	Hungary	75.2	65	Jordan	9.9	66	Cyprus	14.0	65	Botswana	16,646	65	Trinidad and Tobago	0.772
67	Saint Lucia	75.1	66	Turkmenistan	9.9	67	Algeria	14.0	66	Lebanon	16,509	66	Serbia	0.771
68	Serbia	74.9	67	Argentina	9.8	68	Antigua and Barbuda	14.0	67	Azerbaijan	16,428	67	Cuba	0.769
69	Sri Lanka	74.9	68	Chile	9.8	69	Luxembourg	13.9	68	Gabon	16,367	68	Lebanon	0.769
70	Georgia	74.9	69	Micronesia (Federated States of)	9.7	70	Costa Rica	13.9	69	Venezuela (Bolivarian Republic of)	16,159	69	Costa Rica	0.766
71	Nicaragua	74.9	70	Jamaica	9.7	71	Cuba	13.8	70	Mexico	16,056	70	Iran (Islamic Republic of)	0.766
72	Algeria	74.8	71	Spain	9.6	72	Georgia	13.8	71	Suriname	15,617	71	Venezuela (Bolivarian Republic of)	0.762
73	Tunisia	74.8	72	Andorra	9.6	73	Qatar	13.8	72	Bulgaria	15,596	72	Turkey	0.761

Table 17a: International Rankings for Life Expectancy			Table 17b: International Rankings for Average Educational Attainment			Table 17c: International Ranking for Expected Years of Schooling			Table 17d: International Rankings for GNI per capita			Table 17e: International Rankings for HDI		
Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
74	Romania	74.7	73	United Arab Emirates	9.5	74	Lebanon	13.8	73	Iran (Islamic Republic of)	15,440	73	Sri Lanka	0.757
75	Malaysia	74.7	74	Bahrain	9.4	75	Sri Lanka	13.7	74	Brazil	15,175	74	Mexico	0.756
76	Armenia	74.7	75	Seychelles	9.4	76	Palau	13.7	75	Libya	14,911	75	Brazil	0.755
77	Peru	74.6	76	Panama	9.3	77	Oman	13.6	76	Montenegro	14,558	76	Georgia	0.754
78	Brazil	74.5	77	Saint Lucia	9.3	78	Bosnia and Herzegovina	13.6	77	Iraq	14,003	77	Saint Kitts and Nevis	0.752
79	Kuwait	74.4	78	Mongolia	9.3	79	South Africa	13.6	78	Palau	13,496	78	Azerbaijan	0.751
80	Mauritius	74.4	79	The former Yugoslav Republic of Macedonia	9.3	80	Belize	13.6	79	Costa Rica	13,413	79	Grenada	0.750
81	Thailand	74.4	80	Albania	9.3	81	Colombia	13.5	80	Thailand	13,323	80	Jordan	0.748
82	Saudi Arabia	74.3	81	Antigua and Barbuda	9.2	82	Egypt	13.5	81	Turkmenistan	13,066	81	The former Yugoslav Republic of Macedonia	0.747
83	Latvia	74.2	82	Qatar	9.1	83	Andorra	13.5	82	Algeria	13,054	82	Ukraine	0.747
84	Bulgaria	74.2	83	Peru	9.0	84	Jordan	13.5	83	China	12,547	83	Algeria	0.736
85	Venezuela (Bolivarian Republic of)	74.2	84	Venezuela (Bolivarian Republic of)	8.9	85	Zambia	13.5	84	Barbados	12,488	84	Peru	0.734
86	Jordan	74.0	85	Philippines	8.9	86	Thailand	13.5	85	Maldives	12,328	85	Armenia	0.733
87	Colombia	74.0	86	Palestine, State of	8.9	87	Cabo Verde	13.5	86	Serbia	12,190	86	Albania	0.733
88	Morocco	74.0	87	Botswana	8.9	88	Saint Vincent and the Grenadines	13.4	87	South Africa	12,122	87	Bosnia and Herzegovina	0.733
89	Saint Kitts and Nevis	73.8	88	Brunei Darussalam	8.8	89	Seychelles	13.4	88	Colombia	12,040	88	Ecuador	0.732

Table 17a: International Rankings for Life Expectancy			Table 17b: International Rankings for Average Educational Attainment			Table 17c: International Ranking for Expected Years of Schooling			Table 17d: International Rankings for GNI per capita			Table 17e: International Rankings for HDI		
Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
90	Dominican Republic	73.5	89	Saudi Arabia	8.7	90	The former Yugoslav Republic of Macedonia	13.4	89	Dominican Republic	11,883	89	Saint Lucia	0.729
91	Grenada	73.4	90	Saint Vincent and the Grenadines	8.6	91	United Arab Emirates	13.3	90	The former Yugoslav Republic of Macedonia	11,780	90	China	0.727
92	Samoa	73.4	91	Grenada	8.6	92	Panama	13.3	91	Jordan	11,365	91	Fiji	0.727
93	Lithuania	73.3	92	Mauritius	8.5	93	Bolivia (Plurinational State of)	13.2	92	Peru	11,015	92	Mongolia	0.727
94	Cabo Verde	73.3	93	Guyana	8.5	94	Dominican Republic	13.1	93	Grenada	10,939	93	Thailand	0.726
95	Seychelles	73.1	94	Mexico	8.5	95	China	13.1	94	Mongolia	10,729	94	Libya	0.724
96	Honduras	73.1	95	Uruguay	8.5	96	Peru	13.1	95	Ecuador	10,605	95	Dominica	0.724
97	El Salvador	73.0	96	Saint Kitts and Nevis	8.4	97	Mexico	13.1	96	Egypt	10,512	96	Tunisia	0.721
98	Saint Vincent and the Grenadines	72.9	97	Costa Rica	8.4	98	Palestine, State of	13.0	97	Tunisia	10,404	97	Colombia	0.720
99	Paraguay	72.9	98	Bosnia and Herzegovina	8.3	99	Indonesia	13.0	98	Dominica	9,994	98	Saint Vincent and the Grenadines	0.720
100	Palestine, State of	72.9	99	Portugal	8.2	100	Maldives	13.0	99	Albania	9,943	99	Jamaica	0.719
101	Tonga	72.8	100	Iran (Islamic Republic of)	8.2	101	Samoa	12.9	100	Saint Vincent and the Grenadines	9,937	100	Tonga	0.717
102	Palau	72.7	101	Bolivia (Plurinational State of)	8.2	102	Saint Kitts and Nevis	12.9	101	Indonesia	9,788	101	Dominican Republic	0.715
103	NU	72.3	102	Oman	8.0	103	Malaysia	12.7	102	Sri Lanka	9,779	102	Belize	0.715
103	Vanuatu	71.9	103	Lebanon	7.9	104	Suriname	12.7	103	Saint Lucia	9,765	103	Suriname	0.714
104	Guatemala	71.8	104	Dominica	7.9	105	Dominica	12.7	104	Bosnia and Herzegovina	9,638	104	Maldives	0.706
105	Libya	71.6	105	Kiribati	7.8	106	Bhutan	12.6	105	Namibia	9,418	105	Samoa	0.702
106	Moldova (Republic of)	71.6	106	Gabon	7.8	107	NU	12.6	106	Ukraine	8,178	106	Botswana	0.698

Table 17a: International Rankings for Life Expectancy			Table 17b: International Rankings for Average Educational Attainment			Table 17c: International Ranking for Expected Years of Schooling			Table 17d: International Rankings for GNI per capita			Table 17e: International Rankings for HDI		
Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
107	Bangladesh	71.6	107	Paraguay	7.7	107	Bahamas	12.6	107	Armenia	8,124	107	Moldova (Republic of)	0.693
108	Belarus	71.3	108	Brazil	7.7	108	Saint Lucia	12.6	108	Philippines	7,915	108	Egypt	0.690
109	Suriname	71.1	109	Suriname	7.7	109	Kyrgyzstan	12.5	109	Paraguay	7,643	109	Turkmenistan	0.688
110	Egypt	71.1	110	Algeria	7.6	110	Gabon	12.5	110	Belize	7,614	110	Indonesia	0.684
111	Ukraine	71.0	111	Indonesia	7.6	111	Botswana	12.5	111	Fiji	7,493	111	Gabon	0.684
112	Azerbaijan	70.8	112	Ecuador	7.6	112	Jamaica	12.4	112	Jamaica	7,415	112	Paraguay	0.679
113	Kyrgyzstan	70.6	113	Turkey	7.6	113	Nepal	12.4	113	El Salvador	7,349	113	Palestine, State of	0.677
114	Trinidad and Tobago	70.4	114	Dominican Republic	7.6	114	Trinidad and Tobago	12.3	114	Cuba	7,301	114	Uzbekistan	0.675
115	Russian Federation	70.1	115	China	7.5	115	Kiribati	12.3	115	Bhutan	7,176	115	Philippines	0.668
116	Fiji	70.0	116	Viet Nam	7.5	116	Armenia	12.3	116	Georgia	7,164	116	South Africa	0.666
117	Belize	70.0	117	Colombia	7.3	117	Syrian Arab Republic	12.3	117	Guatemala	6,929	117	El Salvador	0.666
118	Syrian Arab Republic	69.6	118	Thailand	7.3	118	El Salvador	12.3	118	Morocco	6,850	118	Viet Nam	0.666
119	Nepal	69.6	119	Libya	7.3	119	Togo	12.2	119	Angola	6,822	119	Bolivia (Plurinational State of)	0.662
120	Bhutan	69.5	120	Zimbabwe	7.3	120	Azerbaijan	11.9	120	Guyana	6,522	120	Kyrgyzstan	0.655
121	Kazakhstan	69.4	121	Kuwait	7.2	121	Paraguay	11.9	121	Cabo Verde	6,094	121	Iraq	0.654
122	Mongolia	69.4	122	Swaziland	7.1	122	Viet Nam	11.9	122	Congo	6,012	122	Cabo Verde	0.646
123	Iraq	69.4	123	Ghana	7.0	123	Moldova (Republic of)	11.9	123	Bolivia (Plurinational State of)	5,760	123	Micronesia (Federated States of)	0.640
124	Tajikistan	69.4	124	Tunisia	6.8	124	Albania	11.8	124	Uzbekistan	5,567	124	Guyana	0.636
125	Micronesia (Federated States of)	69.1	125	Vanuatu	6.8	125	India	11.7	125	Swaziland	5,542	125	Nicaragua	0.631
126	Indonesia	68.9	126	Zambia	6.6	126	Micronesia (Federated)	11.7	126	India	5,497	126	Morocco	0.628

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Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
							States of)							
127	Uzbekistan	68.4	127	Egypt	6.6	127	Timor-Leste	11.7	127	Timor-Leste	5,363	127	Namibia	0.628
128	Cambodia	68.4	128	El Salvador	6.5	128	Morocco	11.6	128	Nigeria	5,341	128	Guatemala	0.627
129	Bolivia (Plurinational State of)	68.3	129	Iraq	6.4	129	Uzbekistan	11.5	129	Samoa	5,327	129	Tajikistan	0.624
130	Philippines	68.2	130	Kenya	6.3	130	Nicaragua	11.5	130	Moldova (Republic of)	5,223	130	India	0.609
131	Timor-Leste	68.2	131	Syrian Arab Republic	6.3	131	Ghana	11.5	131	Viet Nam	5,092	131	Honduras	0.606
132	India	68.0	132	Namibia	6.2	132	Comoros	11.5	132	Tonga	5,069	132	Bhutan	0.605
133	Solomon Islands	67.9	133	Congo	6.1	133	Angola	11.4	133	Pakistan	4,866	133	Timor-Leste	0.595
134	Sao Tome and Principe	66.5	134	Madagascar	6.0	134	Namibia	11.3	134	Palestine, State of	4,699	134	Vanuatu	0.594
135	Senegal	66.5	135	Congo (Democratic Republic of the)	6.0	135	Swaziland	11.3	135	Lao People's Democratic Republic	4,680	135	Syrian Arab Republic	0.594
136	Guyana	66.4	136	Nicaragua	6.0	136	Sao Tome and Principe	11.3	136	Myanmar	4,608	136	Congo	0.591
137	Lao People's Democratic Republic	66.2	137	Cameroon	6.0	137	Philippines	11.3	137	Nicaragua	4,457	137	Kiribati	0.590
138	Pakistan	66.2	138	Nigeria	5.9	138	Tajikistan	11.2	138	Honduras	3,938	138	Equatorial Guinea	0.587
139	Kiribati	66.0	139	Lesotho	5.9	139	Lesotho	11.1	139	Ghana	3,852	139	Zambia	0.586
140	Myanmar	65.9	140	Maldives	5.8	140	Congo	11.1	140	Sudan	3,809	140	Ghana	0.579
141	Turkmenistan	65.6	141	Guatemala	5.6	141	Honduras	11.1	141	Zambia	3,734	141	Lao People's Democratic Republic	0.575
142	Madagascar	65.1	142	Honduras	5.5	142	Benin	11.1	142	Mauritania	3,560	142	Bangladesh	0.570
143	Tanzania (United Republic of)	65.0	143	Equatorial Guinea	5.5	143	Kenya	11.0	143	Yemen	3,519	143	Sao Tome and Principe	0.555

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Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
144	Namibia	64.8	144	Uganda	5.4	144	Cambodia	10.9	144	Micronesia (Federated States of)	3,432	144	Cambodia	0.555
145	Botswana	64.5	145	India	5.4	145	Zimbabwe	10.9	145	Lesotho	3,306	145	Kenya	0.548
146	Gabon	64.4	146	South Sudan	5.4	146	Turkmenistan	10.8	146	Djibouti	3,276	146	Nepal	0.548
147	Rwanda	64.2	147	Tanzania (United Republic of)	5.1	147	Malawi	10.8	147	Bangladesh	3,191	147	Pakistan	0.538
148	Ethiopia	64.1	148	Bangladesh	5.1	148	Guatemala	10.7	148	Côte d'Ivoire	3,171	148	Myanmar	0.536
149	Yemen	63.8	149	Solomon Islands	5.0	149	Vanuatu	10.6	149	Kyrgyzstan	3,044	149	Angola	0.532
150	Eritrea	63.7	150	Lao People's Democratic Republic	5.0	150	Lao People's Democratic Republic	10.6	150	Cambodia	2,949	150	Swaziland	0.531
151	Sudan	63.5	151	Haiti	4.9	151	Cameroon	10.4	151	Sao Tome and Principe	2,918	151	Tanzania (United Republic of)	0.521
152	Comoros	63.3	152	Pakistan	4.7	152	Madagascar	10.3	152	Cameroon	2,803	152	Nigeria	0.514
153	Mauritania	63.1	153	Angola	4.7	153	Guyana	10.3	153	Vanuatu	2,803	153	Cameroon	0.512
154	Haiti	62.8	154	Cabo Verde	4.7	154	Rwanda	10.3	154	Kenya	2,762	154	Madagascar	0.510
155	Malawi	62.8	155	Sao Tome and Principe	4.7	155	Burundi	10.1	155	Syrian Arab Republic	2,728	155	Zimbabwe	0.509
156	Papua New Guinea	62.6	156	Comoros	4.6	156	Iraq	10.1	156	Tajikistan	2,517	156	Mauritania	0.506
157	Congo	62.3	157	Togo	4.5	157	Bangladesh	10.0	157	Papua New Guinea	2,463	157	Solomon Islands	0.506
158	Djibouti	62.0	158	Timor-Leste	4.4	158	Papua New Guinea	9.9	158	Kiribati	2,434	158	Papua New Guinea	0.505
159	Kenya	61.6	159	Cambodia	4.4	159	Uganda	9.8	159	Tanzania (United Republic of)	2,411	159	Comoros	0.503
160	Ghana	61.4	160	Morocco	4.4	160	Congo (Democratic Republic of the)	9.8	160	South Sudan	2,332	160	Yemen	0.498
161	Niger	61.4	161	Malawi	4.3	161	Liberia	9.5	161	Nepal	2,311	161	Lesotho	0.497
162	Liberia	60.9	162	Côte d'Ivoire	4.3	162	Mozambique	9.3	162	Senegal	2,188	162	Togo	0.484



Table 17a: International Rankings for Life Expectancy			Table 17b: International Rankings for Average Educational Attainment			Table 17c: International Ranking for Expected Years of Schooling			Table 17d: International Rankings for GNI per capita			Table 17e: International Rankings for HDI		
Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
163	Afghanistan	60.4	163	Central African Republic	4.2	163	Afghanistan	9.3	163	Chad	2,085	163	Haiti	0.483
164	Gambia	60.2	164	Myanmar	4.1	164	Solomon Islands	9.2	164	Afghanistan	1,885	164	Rwanda	0.483
165	Zambia	60.1	165	Liberia	4.1	165	Tanzania (United Republic of)	9.2	165	Sierra Leone	1,780	165	Uganda	0.483
166	Togo	59.7	166	Papua New Guinea	4.0	166	Yemen	9.2	166	Benin	1,767	166	Benin	0.480
167	Benin	59.6	167	Eritrea	3.9	167	Guinea-Bissau	9.0	167	Haiti	1,669	167	Sudan	0.479
168	Guinea	58.8	168	Djibouti	3.8	168	Nigeria	9.0	168	Zimbabwe	1,615	168	Djibouti	0.470
169	Congo (Democratic Republic of the)	58.7	169	Mauritania	3.8	169	Equatorial Guinea	9.0	169	Uganda	1,613	169	South Sudan	0.467
170	Burkina Faso	58.7	170	Rwanda	3.7	170	Côte d'Ivoire	8.9	170	Burkina Faso	1,591	170	Senegal	0.466
171	Uganda	58.5	171	Nepal	3.3	171	Gambia	8.8	171	Mali	1,583	171	Afghanistan	0.465
172	Mali	58.0	172	Benin	3.3	172	Guinea	8.7	172	Solomon Islands	1,540	172	Côte d'Ivoire	0.462
173	Equatorial Guinea	57.6	173	Mozambique	3.2	173	Haiti	8.7	173	Gambia	1,507	173	Malawi	0.445
174	Zimbabwe	57.5	174	Afghanistan	3.2	174	Myanmar	8.6	174	Rwanda	1,458	174	Ethiopia	0.442
175	South Africa	57.4	175	Sudan	3.1	175	Sierra Leone	8.6	175	Comoros	1,456	175	Gambia	0.441
176	Burundi	56.7	176	Sierra Leone	3.1	176	Mauritania	8.5	176	Ethiopia	1,428	176	Congo (Democratic Republic of the)	0.433
177	South Sudan	55.7	177	Bhutan	3.0	177	Ethiopia	8.5	177	Guinea-Bissau	1,362	177	Liberia	0.430
178	Cameroon	55.5	178	Guinea-Bissau	2.8	178	Mali	8.4	178	Madagascar	1,328	178	Guinea-Bissau	0.420
179	Guinea-Bissau	55.2	179	Gambia	2.8	179	Senegal	7.9	179	Togo	1,228	179	Mali	0.419
180	Mozambique	55.1	180	Burundi	2.7	180	Pakistan	7.8	180	Eritrea	1,130	180	Mozambique	0.416
181	Nigeria	52.8	181	Yemen	2.6	181	Burkina Faso	7.8	181	Mozambique	1,123	181	Sierra Leone	0.413
182	Angola	52.3	182	Senegal	2.5	182	South Sudan	7.6	182	Guinea	1,096	182	Guinea	0.411
183	Chad	51.6	183	Guinea	2.4	183	Chad	7.4	183	Niger	908	183	Burkina Faso	0.402

Table 17a: International Rankings for Life Expectancy			Table 17b: International Rankings for Average Educational Attainment			Table 17c: International Ranking for Expected Years of Schooling			Table 17d: International Rankings for GNI per capita			Table 17e: International Rankings for HDI		
Rank	Country	Life Expectancy at Birth, years	Rank	Country	Average Educational Attainment, years	Rank	Country	Expected Years of Schooling	Rank	Country	GNI per capita (2005 PPP adjusted US dollars)	Rank	Country	Human Development Index (HDI) value
184	Côte d'Ivoire	51.5	184	Ethiopia	2.4	184	Central African Republic	7.2	184	Liberia	805	184	Burundi	0.400
185	Sierra Leone	50.9	185	Mali	2.0	185	Sudan	7.0	185	Burundi	758	185	Chad	0.392
186	Central African Republic	50.7	186	Chad	1.9	186	Djibouti	6.4	186	Malawi	747	186	Eritrea	0.391
187	Lesotho	49.8	187	Niger	1.5	187	Niger	5.4	187	Congo (Democratic Republic of the)	680	187	Central African Republic	0.350
188	Swaziland	49.0	188	Burkina Faso	1.4	188	Eritrea	4.1	188	Central African Republic	581	188	Niger	0.348

Source: most recent HDR.