

# Population Projections by Aboriginal Identity in Canada



2006 to 2031



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Statistics Canada  
Demography Division

# Population Projections by Aboriginal Identity in Canada

2006 to 2031

by the Demosim team

Report prepared by **Éric Caron Malenfant and Jean-Dominique Morency**

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- <sup>p</sup> preliminary
- <sup>r</sup> revised
- x suppressed to meet the confidentiality requirements of the *Statistics Act*
- <sup>E</sup> use with caution
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## Occasional

Beaujot, R., K.G. Basavarajappa and R.B.P. Verma. 1988. *Income of Immigrants*, Statistics Canada Catalogue no. 91-527E.

Beaujot, R., E.M. Gee, F. Rajulton and Z.R. Ravanera. 1995. *Family over the Life Course*, Statistics Canada Catalogue no. 91-543E.

Desjardins, B. 1993. *Aging of the Population and Seniors in Canada*, Statistics Canada Catalogue no. 91-533E.

Dumas, J. and Y. Péron. 1992. *Marriage and Conjugal Life in Canada*, Statistics Canada Catalogue no. 91-534E.

Ram, B. 1990. *New Trends in the Family*, Statistics Canada Catalogue no. 91-535E.

Richmond, A.H. 1988. *Caribbean Immigrants*, Statistics Canada Catalogue no. 91-536E.

Romaniuc, A. 1984. *Fertility in Canada: from Baby-boom to Baby-bust*, Statistics Canada Catalogue no. 91-524E.

## Canadian Demographics at a Glance (Statistics Canada Catalogue no. 91-003-X)

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## Demographic Documents (Statistics Canada Catalogue no. 910015MPE)

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## Highlights\*

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### Aboriginal population in Canada

- The Aboriginal identity population in Canada, estimated at 1.3 million in 2006, could reach between 1.7 million and 2.2 million in 2031 according to the scenarios developed in these population projections. Aboriginal peoples would then represent between 4.0% and 5.3% of the Canadian population, compared to 3.9% in 2006.
- The average annual growth rate of the Aboriginal population would range between 1.1% and 2.2% from 2006 to 2031. In comparison, the growth rate of the non-Aboriginal population would average 1.0% annually.
- The growth rate of the Aboriginal identity population in Canada between 2006 and 2031 will be closely related to the future scope of intragenerational ethnic mobility, the phenomenon that results from changes in the reporting of Aboriginal identity during an individual's lifetime.
- The Aboriginal population would remain younger than the non-Aboriginal population throughout the projected period but would also age. Aboriginal peoples' median age would go from 26.6 years in 2006 to a value between 35.0 and 36.7 years in 2031. By comparison, the median age would reach 43.1 years in 2031 among the non-Aboriginal population, up from 39.4 years in 2006.
- According to these projections, Saskatchewan and Manitoba would be the provinces with the largest proportions of Aboriginal people. Between 21% and 24% of the population of Saskatchewan and between 18% and 21% of the population of Manitoba would have an Aboriginal identity in 2031. The proportion was close to 16% in each of those provinces in 2006.
- Aboriginal peoples would continue to comprise a large proportion of the population of the territories in 2031, with between 22% and 23% in Yukon, between 51% and 52% in the Northwest Territories and between 85% and 86% in Nunavut.
- In 2031, between 36% and 40% of Aboriginal people would live in a census metropolitan area, compared to nearly three persons in four for non-Aboriginal people. In 2006, these proportions were 34% for Aboriginal people and 69% for non-Aboriginal people.
- In 2031, according to the scenarios developed, five CMAs could have a population in which Aboriginal peoples would comprise more than 10% if ethnic mobility was to continue: Thunder Bay, Winnipeg, Regina, Saskatoon and Greater Sudbury.

### North American Indians

- According to the results of these projections, the North American Indian population would grow at an average annual rate of between 1.2% and 1.9% from 2006 to 2031. By the end of this period, that population would be between 1.1 million and 1.2 million, compared to 785,000 in 2006.
- If, throughout the entire projection period, intragenerational ethnic mobility was to continue at the level observed between 1996 and 2006, it would be responsible for approximately 30% of the increase in the North American Indian identity population.
- In 2031, despite its aging, the North American Indian population would continue to be younger than the Métis population and the non-Aboriginal population but older than the Inuit population, with a median age between 32.8 and 34.6 years. The median age of North American Indians was 25.3 years in 2006.
- In 2031, like in 2006, more than four North American Indians in five would live in either Ontario or the Western provinces.
- According to all of the projection scenarios, in 2031 North American Indians would represent at least 5% of the population of five census metropolitan areas: Thunder Bay, Brantford, Saskatoon, Regina and Winnipeg. Conversely, less than half of one percent of the population of Toronto would identify as North American Indian.
- In absolute numbers, the North American Indian population living on reserve would grow during the 25 years covered by the projections. From 361,000 in 2006, that population would increase to between 511,000 and 585,000 in 2031.

## Métis

- In 2006, the Métis identity population stood at 404,000. By 2031, it would reach just over 500,000 if ethnic mobility was to cease in 2006, but would rise to more than 850,000 if ethnic mobility were to continue at the level observed between 1996 and 2006.
- If ethnic mobility was to continue, the population reporting a Métis identity would be the fastest growing of the Aboriginal populations, with an average annual growth rate of about 3.1% until 2031. On the other hand, if ethnic mobility were to cease in 2006, this population would grow the most slowly, with an average increase of 0.9% per year.
- According to all of the projection scenarios, the Métis population would age in the coming years. The median age of this population, which was 29.4 years in 2006, could reach approximately 39 years in 2031.
- In 2006, nearly nine Métis in 10 (87%) were living in the Western provinces and Ontario. In 2031, this distribution would remain almost the same, according to all the projection scenarios.
- In 2031, Manitoba and Saskatchewan would be the two provinces with the largest proportions of Métis in their population. Between 6% and 9% of Manitoba's population and between 6% and 7% of Saskatchewan's would then have a Métis identity. Quebec would be the province with the lowest proportion of Métis, with less than 1% according to all scenarios.
- In 2031, five census metropolitan areas could have a population with at least 5% identifying as Métis. These are census metropolitan areas located in the westernmost part of Ontario (Thunder Bay and Greater Sudbury), and the CMAs of Manitoba (Winnipeg) and Saskatchewan (Regina and Saskatoon).

## Inuit

- According to these projections, the Inuit population in Canada would reach between 73,000 and 77,000 in 2031, compared to 53,000 in 2006.
- The Inuit population, augmented solely by natural increase, would grow at an average annual rate of between 1.3% and 1.5% from 2006 to 2031. Throughout this period, the Inuit rate of natural increase would remain the highest of all Aboriginal identity groups, regardless of the scenario considered.
- In 2006, the Inuit were the youngest Aboriginal identity group, with a median age of 22.0 years. A quarter century later, the Inuit population would have aged, but it would still be the youngest Aboriginal identity group. The median age of Inuit would then be between 30.6 and 32.3 years.
- In 2006, slightly more than three-quarters of Inuit in Canada (78%), or nearly 42,000 persons, resided in one of the four regions of Inuit Nunangat, the Inuit homelands. In 2031, this proportion would remain almost unchanged.

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\* Data for 2006 were adjusted for net undercoverage and partially enumerated reserves. For this reason, the data shown in this section may differ from 2006 Census data disseminated by Statistics Canada.

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## Introduction

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It is well established that in the first centuries following the settlement of Europeans in America, the Aboriginal populations in Canada declined substantially. However, it is equally clear that the 20th century was marked by a demographic rebound that shows every sign of continuing in these early years of the 21st century (Charbonneau, 1984; Romaniuc, 2003; Statistics Canada, 2008-1). Based on the data collected from the census question on ethnic origin (or ancestry) that has been asked in censuses since the late 19th century, the number of people reporting an Aboriginal ancestry, estimated at scarcely more than 100,000 at the turn of the 20th century, rose to more than 160,000 in 1951 and exceeded one million in 1991 (Guimond, Robitaille and Sénécal, 2009).<sup>1</sup> In more recent years, Aboriginal peoples, whether they are defined on the basis of ancestry or self-reported Aboriginal identity<sup>2</sup>, have seen their numbers grow faster than the rest of the Canadian population, and accordingly their weight within the Canadian population is currently increasing. Persons with Aboriginal ancestry—that is with at least one Aboriginal ancestor—represented 5.4% of the population in 2006, compared to 3.8% 10 years earlier. Persons who reported an Aboriginal identity (basically a subset of the population with Aboriginal ancestry) in turn made up 3.8% of the population in 2006, compared to 2.8% in 1996 (Statistics Canada, 2008-1; Statistics Canada, 2008-2; Statistics Canada, 2003).

This larger population growth in recent years has occurred in the three main groups targeted since 1996 by the census question on Aboriginal identity—North American Indians (or of First Nations people<sup>3</sup>), Métis and Inuit—to varying degrees and for different reasons. The rapid increase in the Inuit and North American Indian populations is largely due to their having much higher fertility than the rest of the population, which is not the case for the Métis, whose fertility is only slightly higher. Yet it is the latter population which, from 1996 to 2006, experienced the strongest growth: 91%, or almost a doubling in 10 years. This is because the Métis saw their numbers increase as the result of a phenomenon known as “ethnic mobility,” whereby people changed their reporting of identity to Métis in one census or another. This phenomenon was also observed, although to a lesser extent, in the North American Indian population.

It was in this context that Statistics Canada developed a new set of projections which, based on the 2006 Census, seek to estimate what the North American Indian, Métis and Inuit identity populations might be in 2031, according to a limited number of scenarios. Prospective data are important for the planning of various public policies relating to Aboriginal populations, and because of this, combined with the release of the results of the 2006 Census which shed light on the speed of demographic changes affecting these populations, it was necessary to update projections of Aboriginal identity, since the most recent ones were based on the 2001 Census (Statistics Canada, 2005). For this purpose, Statistics Canada's Demography Division undertook a thorough overhaul of its methods of projecting Aboriginal populations, taking advantage of recent developments in microsimulation. This led to a number of innovations. Unlike earlier models, the current model can be employed to project Aboriginal and non-Aboriginal populations coherently and simultaneously and to take into account, in the course of projection, an increased number of dimensions such as education and marital status. Also, the projections presented here are the first of Statistics Canada's to explicitly take account of changes in the reporting of Aboriginal identity over a lifetime, and therefore to estimate the potential impact of this component on future Aboriginal populations.

These methodological aspects of the projections are briefly described in Section 1 of this report. Section 2 concerns the assumptions and scenarios used in this exercise. Section 3 describes a few of the limitations of these projections that readers should keep in mind, while Section 4 presents an analysis of the main results of the projections with respect to the demographic growth, age structure and geographic distribution of the North American Indian, Métis and Inuit populations, which are examined separately. Appended to this report, the reader will also find tables summarizing the results for each of the groups projected.

Finally, it should be noted that these projections received financial support from Aboriginal Affairs and Northern Development Canada in the context of investment in research and development, as well as from Human Resources and Skills Development Canada, Canadian Heritage, and Citizenship and Immigration Canada. Those departments also actively contributed to the development of the methods, assumptions and scenarios used in these projections.

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## 1 - Methods and concepts

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The Demosim microsimulation population projections model was used to develop the projected data that are the subject of this report. This model, which simulates the individuals in the population one by one rather than proceeding on the basis of aggregate data, was also used to prepare *Projections of the Diversity of the Canadian Population, 2006 to 2031*, released in 2010. However, a number of additions have since been made to that model to make it possible to carry out the projections presented here. As a result of these recent developments, Demosim lends itself to a detailed projection of Aboriginal populations at the same time as non-Aboriginal populations (see Box 1).

Although the more general capabilities of Demosim have already been described elsewhere (Statistics Canada, 2010), it is useful to present here, albeit briefly, a few of its characteristics that will give the reader a better understanding of the exercise that was carried out. In this section, the emphasis is on the features of the model that are more specific to Aboriginal populations. Readers interested in other aspects of the model are invited to refer to the existing documentation. The section that follows, which merely supplements that body of information, contains a few inevitable repetitions.

### 1.1 Base population

The microdata file for the 20% sample of the 2006 Census serves as the base population for projections of populations according to Aboriginal identity to 2031. That file was initially adjusted to take account of net undercoverage in the census by age, sex and province/territory<sup>4</sup> of residence of the population living off reserve. This adjustment was made by modifying the sampling weights for the records in the initial file, for both Aboriginal and non-Aboriginal populations, who are consequently assumed to be equally undercovered in the targeted areas.<sup>5</sup> A similar adjustment was subsequently made for the population enumerated on Indian reserves, this time using undercoverage rates for two major regions: one consisting of all reserves enumerated in 2006 and located in Ontario or provinces further east, and the other consisting of the reserves in the rest of Canada. For these reserves, the distribution of net undercoverage by age and sex was assumed to be identical to that for the population living off reserve. For reserves incompletely enumerated in 2006, we assumed a population size equal to that estimated by Statistics Canada's Social Survey Methods Division, and we then carried out imputation so that their population would have characteristics representative of the populations of enumerated reserves.<sup>6</sup> These adjustments were made with a view to ultimately obtaining a total population that would be representative of the population estimated by the Demography Division at May 16, 2006, by single year of age, sex and province/territory.

The base population includes a large number of variables such as Aboriginal identity, Registered Indian status, place of residence, age, sex, highest level of education, number of children at home, marital status, place of birth, visible minority group, generation status and immigration period. Aboriginal identity, which is the main variable of analysis in this report, includes, as in the 2006 Census, the following categories:

- North American Indian, single response;
- Métis, single response;
- Inuit, single response;
- Other Aboriginal responses;<sup>7</sup>
- Non-Aboriginal identity population.

The geography on which the projections are based corresponds to the standard geographic structure of the 2006 Census. It includes the following geographic entities:

- The 33 census metropolitan areas (CMAs), including the distinction between the Ontario portion and the Quebec portion of the Ottawa-Gatineau CMA;<sup>8</sup>
- The portion of each province that is not included in a CMA (e.g., Non-CMA Manitoba);
- Indian reserves;
- Regions comprising Inuit Nunangat.

## Box 1. A few concepts

### Aboriginal population

In this projection exercise, the Aboriginal population is understood to comprise all those who reported, in the 2006 Census, that they had at least one Aboriginal identity (North American Indian, Métis or Inuit) and/or were Registered Indians or Treaty Indians and/or members of an Indian band or First Nation. The population reporting an Aboriginal identity should not be confused with the population reporting Aboriginal ancestry. The latter concept refers to the ethnic or cultural group of a person's ancestors, but it does not mean that the person identifies with the Aboriginal group to which his/her ancestors belonged.

### Population living on reserve

In accordance with the concepts of the 2006 Census, the on-reserve population includes people who live in one of eight types of census subdivisions (CSDs) legally affiliated with First Nations or Indian bands, which includes Indian reserves, Indian settlements, Indian Government Districts, Terres réservées aux Cris, Terres réservées aux Naskapis, the CSDs classified as Nisga'a village, Nisga'a land and Teslin land, as well as various other types of CSDs that are essentially communities in northern Saskatchewan that include large concentrations of Registered Indians. However, in this report, unlike in the 2006 Census, reserves do not include any CSDs in the territories.

### Inuit Nunangat

Inuit Nunangat, which means "place where the Inuit live", includes four regions in Northern Canada: 1) Nunavut, 2) Nunavik, located in northern Quebec, 3) the Inuvialuit area, mainly located in the Northwest Territories, and 4) Nunatsiavut, located in Northern Labrador.

### Ethnic mobility

Ethnic mobility is "the phenomenon by which individuals and families change their ethnic affiliation" (Guimond, 2003). Ethnic mobility has two components: intragenerational and intergenerational (Boucher, Robitaille and Guimond, 2009). Intragenerational ethnic mobility results from a change in an individual's ethnic affiliation over time. For example, a person who reports no Aboriginal identity in one census but a Métis identity in the following census is deemed to have experienced intragenerational ethnic mobility (Boucher, Robitaille and Guimond, 2009; Guimond, 2003). Intergenerational ethnic mobility results from a change in ethnic affiliation between parents and their children, with the parent(s) not having the same ethnic affiliation as the child(ren). This mobility does not imply any change in ethnic group for an individual and is based on comparing the ethnic identity of an individual with that of his/her parents.

As for the other variables, even though they are not emphasized in the analysis provided in Section 4, they are nevertheless projected and updated in the course of simulation. Among other things, this ensures that they can be taken into consideration as explanatory variables for events likely to affect how Aboriginal and/or non-Aboriginal populations evolve in the future. For example, highest level of education serves as a determinant of mortality, fertility and also internal migration. Similarly, Registered Indian status is used in projecting fertility, highest level of education and internal migration.

The fact that the current model, unlike earlier models used in similar exercises, takes not only Aboriginal but also non-Aboriginal populations as a starting point and projects them simultaneously, offers certain advantages:

- It makes it possible to calculate, for each scenario, percentages of Aboriginal people within the overall population of a given region in a coherent manner; that is, without resorting to a set of external projections—which can be difficult to compare because of their methodology and assumptions—in order to obtain denominators;
- It lends itself to the dynamic simulation of transfers to and from Aboriginal populations, through either intergenerational or intragenerational ethnic mobility (see Box 1), with persons making "entries" and "exits" being selected within continually updated "populations at risk";
- It increases the analytical potential of the results obtained, in particular by increasing the number of points of comparison.

## 1.2 Updating of variables, estimation of parameters and data sources

The updating of variables during the projection process, as well as the addition of births and immigrants, is done in continuous time in Demosim. This updating is facilitated by Modgen, a programming language developed and maintained at Statistics Canada that is dedicated to microsimulation, and is performed using waiting times between a given moment in the life of an individual and the occurrence of events that the individual is likely to “experience” in the course of simulation.<sup>9</sup> Waiting times depend on a random process, individuals’ characteristics and the probabilities of experiencing each of the events included in the projection model (death, migration, etc.). They are recalculated a number of times in the course of simulation to take account of the changes that individuals “experience”; changes that are likely to alter their probabilities of subsequently “experiencing” other events. These probabilities, or parameters, which may vary over time and are dependent on various factors, are obtained from models or rates that were calculated using various data sources:

- Population censuses;
- Surveys;
- Administrative data;
- Population estimates;
- Data linkages.

The availability of high-quality data for making these calculations poses a major challenge, especially regarding Aboriginal populations. The choice of the methods and independent variables selected when developing the projections was based on the available data, just as the choice of data sources (when more than one was available) was based on their quality, frequency and content. Sometimes, as was the case for mortality, it was necessary to use more than one source to calculate probabilities. Doing so necessarily entailed limitations with respect to coherence, but these limitations were considered preferable to those inherent in simply ignoring part of the available information.

The rest of this section will briefly describe the main methods and data sources used to calculate the parameters utilized in these projections. For a number of Demosim modules,<sup>10</sup> the methods used are identical to those used to develop the *Projections of the Diversity of the Canadian Population, 2006 to 2031* (Statistics Canada, 2010), especially regarding the simulation of non-Aboriginal populations. Therefore, not all of those modules are described here (in which case, see their description in Statistics Canada, 2010). Table 1 summarizes the Aboriginal-related content of the main modules of the model used to prepare the results presented in this report.

### Fertility

Since there were no direct data on the fertility of the three main Aboriginal identity groups projected, an indirect method—the own-children method,<sup>11</sup> was applied to data from the 2006 Census to obtain an estimate of this component.<sup>12</sup> On this basis, the fertility module was created in two main stages. In the first stage, we calculated the base risks of giving birth to a child, derived from fertility rates, age and number of children in the home. These rates were estimated separately for Aboriginal and non-Aboriginal peoples. In the second stage, using log-log regression models stratified by age group, number of children in the home and Aboriginal/non-Aboriginal status, we calculated the relative risks of giving birth to a child, and we used them to increase or decrease the base risks according to various independent variables. For the models relating to Aboriginal peoples, these variables are: Aboriginal identity, Registered Indian status, detailed place of birth (including CMAs, non-CMA portions of provinces, Indian reserves and Inuit Nunangat), marital status, highest level of education and age.<sup>13</sup> Since the fertility rates of Aboriginal and non-Aboriginal populations were modelled separately, projection assumptions were created for these two groups.

### Intergenerational ethnic mobility

These data, derived from the 2006 Census by means of the own-children method, were also used to create parameters for intergenerational ethnic mobility. These parameters, which are intended to model the transmission of identity to newborns during simulation, were obtained by cross-tabulating the Aboriginal identity of the youngest children with that of their mother. The matrixes that were created take account of the mother’s place of birth, Registered Indian status and visible minority group. Thus, some Aboriginal women will give birth to children who will not be Aboriginal persons—or who will have an Aboriginal identity different from theirs—just as some non-Aboriginal women will give birth to children who will have an Aboriginal identity, in accordance with the estimates of the 2006 Census.



Table 1

Key methods, data sources and variables used for parameter estimates specific to Aboriginal peoples<sup>1</sup> in Demosim

Module	Method(s)	Data source(s)	Variables
Fertility	1 - Base risks: projected fertility rates 2 - Relative risks: log-log regressions	2006 Census to which we applied the own-children method and Vital Statistics	Aboriginal identity, Registered Indian status, detailed place of residence, age, number of children at home, level of education and marital status <sup>2</sup>
Intergenerational ethnic mobility	Transition matrices	2006 Census to which we applied the own-children method	Mother's Aboriginal identity and mother's registered Indian status
Registered Indian status transmission	1 - Transition matrices 2 - Deterministic imputations	2006 Census to which we applied the own-children method	Registered Indian Status of the mother, marital status, mixed or non-mixed union status of the mother, Aboriginal identity of the child
Mortality	1 - Base risks: projected mortality rates 2 - Relative risks: proportional hazards regressions	Vital Statistics, 1991 to 2001 censuses mortality follow-up file and Indian register	Aboriginal identity, age, sex, place of residence, level of education, visible minority group, immigrant status and time elapsed since immigration
Internal migrations	1 - Interregional migration: log-log regressions, origin-destination matrices and distribution 2 - Intraregional migration: migration rates	1996, 2001 and 2006 censuses to which a constant geography was applied	Age group, Aboriginal identity, Registered Indian status, place of residence, level of education, marital status, number of children at home, age of the youngest child at home, mother tongue, place of birth, time elapsed since immigration and visible minority group
Intragenerational ethnic mobility	Net mobility rates based on cohort follow-up from one census to the other	1996, 2001 and 2006 censuses	Age, Aboriginal identity and place of residence

1. Methods, data sources and variables linked to the key parameters for the rest of the population are similar to those presented in Statistics Canada. 2010. *Projections of the Diversity of the Canadian Population, 2006-2031*, Statistics Canada Catalogue no. 91-551.
2. Model's variables estimated separately for Aboriginal peoples only. Models for non-Aboriginal people include different variables.

### Intergenerational transmission of Registered Indian status

The assignment of Registered Indian status to newborns is subject to rules determined by the *Indian Act* that take the status of both the mother and the father into account, and therefore it was modelled somewhat differently. The link between children and their father was not simulated, unlike the link between the mother and her children. Accordingly, to determine the status of the newborn, we first considered both the mother's status and the mixed/non-mixed nature of the union (i.e., Demosim can determine, by modelling, whether or not a woman in a union has a registered spouse) that she was in when she gave birth.<sup>14</sup> The general principle is as follows. If the mother is a Registered Indian in a non-mixed union, that is, if she is in a union with a Registered Indian, then the child will also be registered. If the mother is not registered and is not in a mixed union, then the child will also be non-registered.<sup>15</sup> If the woman is in a mixed union, regardless of whether she is registered, then we use mother-to-child status transmission matrices constructed like those used for modelling intergenerational ethnic mobility. These matrices take into account the marital status and Registered Indian status of mothers in mixed unions, as well as the identity of the newborns. Matrices are also used if the mother is not in a union at the time she gives birth. Registered Indian status is also assigned to newborns during the simulation in accordance with the provisions of paragraphs 1 and 2 of article 6 of the *Indian Act of 1985*, where possible. This status is then used to assign Registered Indian status to their own children.

### Mortality

There are sizable data gaps in the case of Aboriginal mortality since, at the national level, vital statistics do not contain information on Aboriginal groups. Therefore, several data sources, each with a number of limitations, had to be combined to create this module.

For the non-Inuit population aged 25 and over, a two-stage method was used, similar to the one employed to develop fertility parameters. First, base risks of dying were derived from mortality rates by age and sex for the overall population, which were projected using a variant of the Lee-Carter model (Li and Lee, 2005) applied to vital

statistics data from 1981 to 2006.<sup>16</sup> Relative risks of dying were then calculated using proportional risk regressions estimated on a database that matches the 1991 Census with vital statistics from 1991 to 2001 (census mortality follow-up study, 1991 through 2001).<sup>17</sup> The relative risks take the following variables into account: Aboriginal identity,<sup>18</sup> residence on or off reserve, province, visible minority group, immigrant status and immigration period, highest level of education and age. The models were calculated by broad age group and sex.

The latter database—the census mortality follow-up study, 1991 through 2001—does not include the population under 25 years of age. Moreover, because of the limitations inherent in the matching process that was used to create it, the database did not lend itself to modelling the mortality of Inuit aged 25 and over, unlike for the rest of the population. Therefore, alternative methods were used for those populations:

- For North American Indians under 25 years of age, we used mortality tables for Registered Indians<sup>19</sup> from the Indian Register for the period 1996-2000 (most recent tables available). We then calculated differences between Registered Indians and the population as a whole during this period and held these mortality differences constant until 2031;
- For Métis under 25 years of age, lacking tables specific to this population, we used the census mortality follow-up study, 1991 through 2001, to calculate differences between the Métis and the rest of the population aged 25 and over; we then applied these same differences below age 25 and held them constant until 2031;
- For the Inuit population, mortality rates by age and sex were obtained from vital statistics data from 2004 to 2007 for regions with a large proportion of Inuit, using the same method as described in Wilkins, Uppal, Finès, Senécal, Guimond and Dion (2008). Those rates were then projected until 2031, holding constant the differences between the rates for the Inuit population and those projected for Canada as a whole.<sup>20</sup> In the course of simulation, these mortality rates are applied to all Inuit and to them alone, regardless of their place of residence.

## Internal migration

Internal migration parameters were developed so as to project two separate types of migration. The first type, interregional migration, refers to migration between the 47 main geographic entities included in the model, namely census metropolitan areas and the rest of each province. The second, intraregional migration, refers to migration between the reserve and off-reserve portions, as well as between Inuit Nunangat and non-Inuit Nunangat areas, within the portions of the 47 main regions that include Indian reserves and/or Inuit-owned lands. Interregional migration was modelled in two stages. First, the probabilities of leaving each of the 47 regions were obtained from log-log regression models that took account of age group, Aboriginal identity, Registered Indian status, living/not living on reserve or on Inuit-owned land where applicable, education, marital status, number of children at home and age of the youngest of these children, mother tongue, living/not living in province of birth, time elapsed since immigration and visible minority group.<sup>21</sup> Second, origin-destination matrices were calculated taking account of Aboriginal identity, Registered Indian status, age group, province of birth and mother tongue, in order to allocate migrants among the 46 possible destinations. Additional models were also produced to determine, where applicable, whether or not in-migrants would go to an Indian reserve or Inuit-owned land. In turn, the parameters for intraregional migration consist of migration rates by age group, Aboriginal identity and Registered Indian status.

A final point is that data on interregional and intraregional migration were produced using information on place of residence one year earlier reported in the 1996, 2001 and 2006 censuses, which were aggregated and to which a constant geography was applied. Despite major limitations (for example, see Norris and Clatworthy, 2003), in particular related to sample sizes, these data make it possible to model migration at detailed geographical levels according to a large number of characteristics.<sup>22</sup>

## Intragenerational ethnic mobility

Finally, intragenerational ethnic mobility—in other words, changes in the reporting of Aboriginal identity during an individual's lifetime—is projected on the basis of results from a cohort flow analysis based first on the 1996 and 2001 censuses, and then the 2001 and 2006 censuses. This method, similar to the one used by Guimond (1999) to analyse this phenomenon for previous periods, is based on a comparison of population counts for a given identity population at age X to counts at age X+5 in the following census. The difference, either positive or negative, is then considered as an estimation of net gains or losses through ethnic mobility. This method was applied, for these

population projections, to adjusted census data in order to control for net undercoverage, fertility, mortality and migration. The estimates of net ethnic mobility computed were translated into net rates of ethnic mobility allowing, by region, for changes in Aboriginal identity from non-Aboriginal people to Métis, from non-Aboriginal people to North American Indian and, for a small number of regions, from North American Indian to non-Aboriginal people. The rates, which arise from an average for the periods 1996 to 2001 and 2001 to 2006, also take into account large age groups. They were computed for the population living off-reserve and outside the territories, and excluded Inuit, immigrants and person belonging to visible minority groups. The assumption made for the current projections is that these populations do not experience ethnic mobility. Moreover, for consistency purposes with the databases used to compute the different parameters, "ethnic migrants" continue to be submitted to the probabilities associated with their initial identity during the simulation, even after changing identity.

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## 2 - Assumptions and scenarios

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The prospective data presented here are based on a set of assumptions on both the population of the groups projected at the outset and the future evolution of the components likely to affect the size and composition of that population. These assumptions were grouped together in a limited number of scenarios designed to show what would happen in the coming years if the underlying assumptions were proven correct. These scenarios were developed on the basis of the following criteria:

- They had to be plausible based on our knowledge of the present and past demography of Aboriginal and non-Aboriginal populations;
- Together, they had to form a broad enough range of future possibilities to reflect uncertainty regarding the demographic future of Aboriginal populations. This uncertainty, which is inherently central to any projection exercise, has an added dimension in the case of projections of Aboriginal identity due to the limitation of the available data and the difficulty to foresee the role that intragenerational ethnic mobility could play over a span of 25 years;
- Finally, they had to be useful for the planning of public policies that affect the populations of interest.

The scenarios chosen consist of two sets of assumptions that differ in their content and their genesis. The first set, described in Section 2.1, consists of assumptions specific to Aboriginal peoples. These assumptions were developed by the Statistics Canada population projections team, together with representatives of the departments funding the projections, namely Aboriginal Affairs and Northern Development Canada, Human Resources and Skills Development Canada, Canadian Heritage, and Citizenship and Immigration Canada. They were also brought to the attention of the members of the project's scientific committee (composed of academics and demographers interested in Aboriginal issues, population projections and microsimulation) whose mandate was to make comments and suggestions on the methods, assumptions and scenarios used for these projections.

The second set, very briefly summarized in Section 2.2, consists of assumptions regarding non-Aboriginal populations. These were drawn from the assumptions developed for the *Projections of the Diversity of the Canadian Population, 2006 to 2031*. The assumptions and scenarios for these projections are the result of a detailed analysis of recent demographic data, a consensus among several federal departments and discussions with the scientific committee formed in conjunction with this project. They were also discussed in consultations with demographers and data users.

### 2.1 Assumptions regarding Aboriginal peoples

This section describes the main projection assumptions regarding Aboriginal populations (see Table 2), as well as the reasons why they were selected from among an infinite number of possible assumptions. The assumptions described are those relating to the more traditional demographic components, namely fertility, mortality and migration, as well as those concerning intergenerational and intragenerational ethnic mobility. For more information on other components (e.g., education, marital status), the reader is invited to consult the document *Projections of the Diversity of the Canadian Population, 2006 to 2031*.

#### Fertility

Since the late 1960s, the fertility of Aboriginal populations has declined substantially. This finding applies both to populations of Aboriginal origin (Ram, 2004) and to Registered Indian populations (Guimond and Robitaille, 2009). Despite this decline, the fertility of Aboriginal populations remains higher than that observed among the rest of the Canadian population. In 2005/2006, the total fertility rate was estimated at approximately 2.7 children for women of Inuit identity, 2.4 for those of North American Indian identity and 1.8 for women of Métis identity, compared to 1.6 for the rest of the population. These fertility levels are quite similar to those for 2000/2001 for the three Aboriginal groups,<sup>23</sup> indicating that the decline in recent decades did not continue into the most recent period. The analyses conducted in connection with these projections also reveal that these fertility differences between the Aboriginal identity groups remain even when controlling for Registered Indian status, detailed place of residence, marital status,

Table 2

Key assumptions relating to Aboriginal peoples<sup>1</sup> being used for the analysis of the population projections by Aboriginal identity in Canada, 2006 to 2031

Component	Number of assumption(s)	Details
Fertility	2	1 - Constant: constant level and maintenance of the gap in fertility between Aboriginal and non-Aboriginal populations 2 - Converging: decrease of 50% in the gap between the Aboriginal and non-Aboriginal populations
Intergenerational ethnic mobility	1	Constant to the level estimated in 2006
Registered Indian status transmission	1	Constant to the level estimated in 2006
Mortality	1	Moderate life expectancy increase and maintenance of the gap between the Aboriginal and non-Aboriginal populations
International migration	1	Zero international net migration for Aboriginal population
Internal migration	2	1 - Average: estimated in 1995/1996, 2000/2001 and 2005/2006 2 - Zero net migration on reserve
Intragenerational ethnic mobility	2	1 - No intragenerational ethnic mobility 2 - Constant mobility to the level estimated between 1996 and 2006

1. Assumptions related to the rest of the population are presented further in the text.

education, age and number of children at home. As Table 3 shows, the odds of bearing a child in 2005/2006 were 2.05 for Inuit women, 1.49 for North American Indian women and 1.23 for Métis women, all higher than that of the non-Aboriginal women (1.00). These data also show that for women, being a Registered Indian and living on a reserve are independently associated with fertility, positively so in both cases.

Do the cultural and socio-economic specificities that can be assumed to be related to Aboriginal peoples' different fertility ensure that the fertility of these populations will exceed that of non-Aboriginal people on a lasting basis? Or, on the contrary, should we expect that in adopting a lifestyle that they largely share—increasingly so—with non-Aboriginal people, Aboriginal peoples will see their fertility behaviours become more similar to those of the overall population? Since we were unable to resolve these questions, we decided to formulate two fertility assumptions for Aboriginal peoples. Under the first assumption, fertility remains constant until 2031.<sup>24</sup> This implies a continuation of the relative fertility differences between Aboriginal peoples and the rest of the population, and between the different subgroups that comprise the Aboriginal population, as we were able to estimate them using the 2006 Census.<sup>25</sup> Under the second assumption, the fertility of Aboriginal groups gradually declines, a process whereby the gap separating those groups from the rest of the population is reduced by half by 2031. Since under this assumption, the size of the decrease in fertility is a function of the “excess fertility” of each of the groups considered, it seems clear that the reduction will be greater for the Inuit group than for North American Indians and will be marginal for the Métis.

Table 3

Odds ratio of giving birth to a child according to a selection of variables, Canada, 2005/2006

Characteristic	Odds ratio
Aboriginal identity	
North American Indian	1.49
Métis	1.23
Inuit	2.05
Non-Aboriginal people	Reference
Registered Indian status	
Registered	1.28
Non registered	Reference
Place of residence on and off Indian reserve	
On reserve	1.23
Off reserve	Reference

**Note:** Controlling for age, number of children at home, province of residence, CMA/non-CMA residence, marital status and education.

**Source:** Statistics Canada, 2006 Census of Population, to which the own-children method was applied.

### Intergenerational ethnic mobility

Generally favourable to Aboriginal populations, especially the Métis, intergenerational ethnic mobility—or the transmission of Aboriginal identity from one generation to the next—appears to be a phenomenon closely linked with the mixed nature of conjugal unions, as shown by one of the few recent studies of this phenomenon (Boucher, Robitaille and Guimond, 2009). For their part, the analyses conducted in connection with these projections point to a great similarity between the data drawn from the 2001 Census and those based on the 2006 Census: stronger retention of identity among Inuit than among North

American Indians, and stronger retention among the latter than among the Métis, along with a greater propensity of non-Aboriginal mothers to report their children as Métis than North American Indian or Inuit when those children are reported as having an Aboriginal identity. It is because of this relative stability that a single assumption was formulated regarding this component, namely a continuation of the phenomenon until 2031 based on the 2006 estimates.

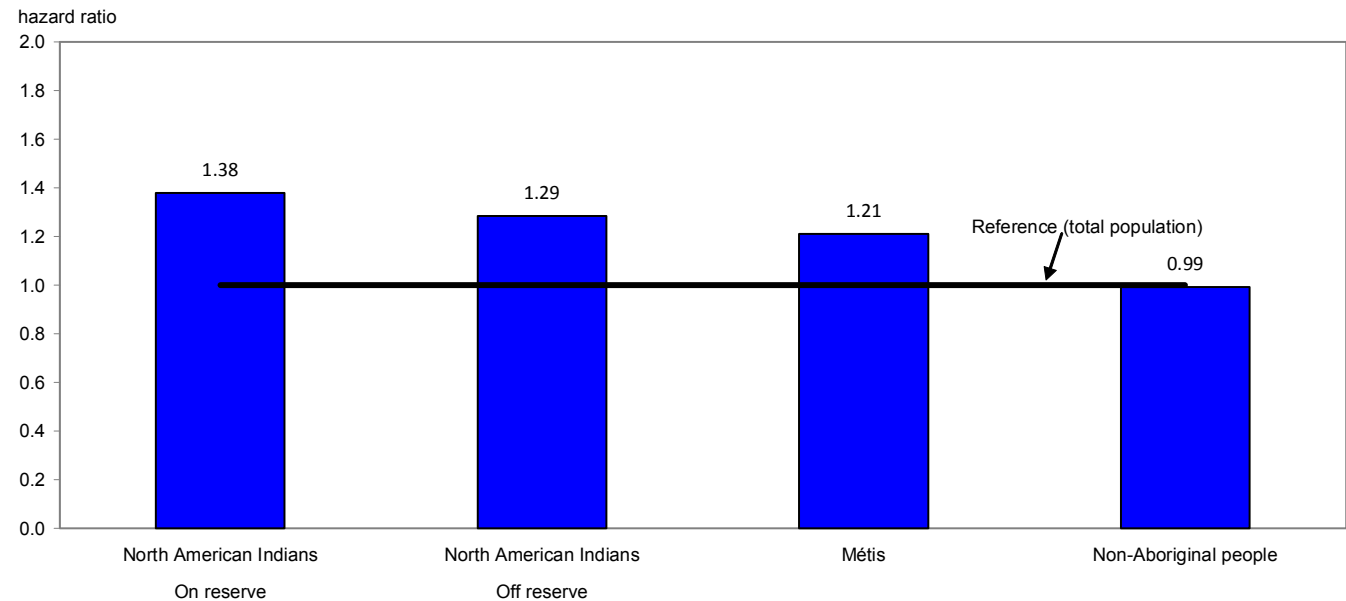
**Mortality**

Studies focusing on the mortality of the Aboriginal peoples in Canada (Verma, Michalowski and Gauvin, 2004; Wilkins, Tjepkema, Mustard and Choinière, 2008; Wilkins, Uppal, Finès, Sénécal, Guimond and Dion, 2008; Tjepkema and Wilkins, 2011) have shown that their mortality remains higher than that of non-Aboriginal people. The results of the studies conducted for these projections tend to corroborate those findings. The data input into the model for Inuit mortality (based on a geographic approach) indicate, for the period 2004 to 2007, a life expectancy of 68 years for men and 74 years for women, approximately 10 years less than for the Canadian population as a whole. Proportional hazards models estimated for men and women aged 25 and over based on 1991 Census data combined with vital statistics for 1991 to 2001 in turn show that North American Indians, whether they live on or off reserve, have a higher mortality than Métis, which in turn is higher than that of non-Aboriginal people, even when controlling for age, place of residence, education, immigration period and visible minority group (see Figures 1a and 1b). For women, the estimated risks of dying were more than 1.5 times higher for each Aboriginal group than for the total population. For men, they were between 1.21 and 1.38 times higher.

Because of the relatively limited sensitivity of the projection results to mortality over a time span of only 25 years, a single mortality assumption was formulated. Under this assumption, the life expectancy of Aboriginal peoples would rise at the same rate as the rate assumed for non-Aboriginal people, which means that the mortality differences between these populations are assumed to remain constant.

**Figure 1a**

**Hazard ratios of dying for men according to Aboriginal identity group, Canada, 1991 to 2001**

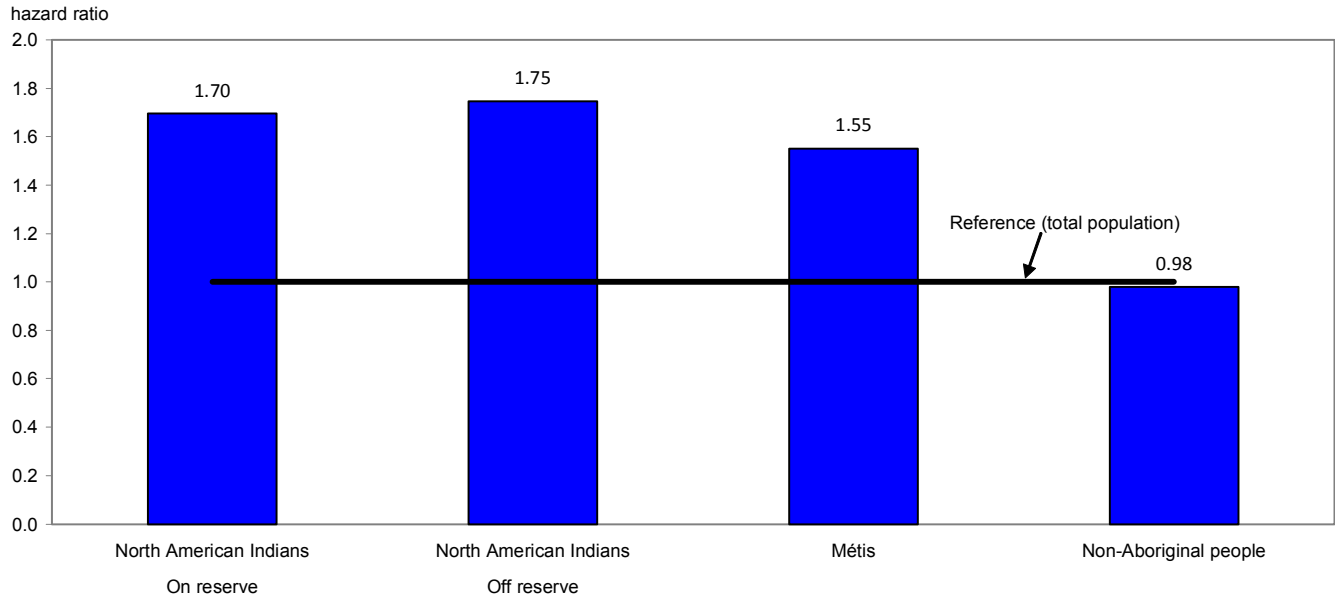


**Note:** Controlling for age, province of residence, level of education, visible minority group, immigrant status and time elapsed since immigration.

**Source:** Statistics Canada, Canadian census mortality follow-up study, 1991 to 2001.

**Figure 1b**

**Hazard ratios of dying for women according to Aboriginal identity group, Canada, 1991 to 2001**



**Note:** Controlling for age, province of residence, level of education, visible minority group, immigrant status and time elapsed since immigration.

**Source:** Statistics Canada, Canadian census mortality follow-up study, 1991 to 2001.

**International migration**

The number of immigrants with an Aboriginal identity, all immigration periods combined, was estimated at approximately 7,000 in the 2006 Census, representing approximately 0.6% of all Aboriginal people. The vast majority of these immigrants were North American Indians born in the United States. On the other hand, while we have no information on the number of emigrants with an Aboriginal identity, it seems likely that this number is also low and that the United States is the main destination for that emigration. Owing to the low numbers involved and the lack of a measure of emigration, in these projections we assume zero net international migration for Aboriginal peoples through to 2031.

**Internal migration**

Aboriginal peoples’ profile with respect to internal migration differs in several respects from that of the rest of the population. The study by Dion and Coulombe (2008) in particular showed that from 2005 to 2006, Aboriginal peoples had a greater propensity to migrate than non-Aboriginal people, and that in comparison to the latter, migrants with an Aboriginal identity tended less often to settle in the CMAs of Toronto, Montreal and Vancouver but tended more often to choose remote rural areas or the territories as their destination. It has also been found (Norris and Clatworthy, 2003; Cooke and Bélanger, 2006)—and confirmed by data from the 1996, 2001 and 2006 censuses analyzed for these projections—that Indian reserves generally tend to have positive net internal migration, with migration therefore contributing recurrently to their population growth. Lastly, Aboriginal peoples’ propensity to migrate, like that of the rest of the population, is tending to decline over time. This is largely due to demographic aging, since older people are, on average, less “mobile” than younger people.

Two assumptions on internal migration were developed in connection with these projections. The first is based on migration patterns for the periods 1995/1996, 2000/2001 and 2005/2006, estimated from the last three censuses. It calls for a slight decrease in the probabilities of migrating over time, estimated for each Aboriginal identity group from 1996 to 2006.<sup>26</sup> Basing the assumption on three periods serves to reduce the analytical difficulties related to the small numbers involved and to lessen temporary effects—often sizable in the case of migration—which can affect data based on a single period. The second assumption is identical to the first except that net migration on

Indian reserves is assumed to be nil. The justification for this is that because of potential limitations on real estate development, some reserves might not be able to accommodate a steady influx of migrants at the levels seen in the past.

### Intragenerational ethnic mobility

Studies on intragenerational ethnic mobility—in this case, the change in the reporting of Aboriginal identity over time—have shown that in the recent past, this has been a major component of the increase in Métis populations and, to a lesser extent, North American Indian populations (Guimond, 1999; Guimond, 2003; Lebel, Caron Malenfant and Guimond, 2011). It is estimated that ethnic mobility was responsible for an increase of 34% in the Métis population between 1996 and 2001, and of 27% between 2001 and 2006. Among North American Indians living off reserve, the corresponding increases are 9% and 10% during the same periods. Net ethnic mobility rates, computed by dividing those increases over the population most likely to be submitted to the risk of ethnic mobility, that is, the non-Aboriginal population born in Canada and not belonging to any visible minority group, are shown in Table 4. The net rate of a non-Aboriginal person declaring him or herself as a Métis five years later was 0.31% in 1996 and 0.35% in 2001. The net rates towards the North American Indians were 0.11% in 1996 and 0.15% in 2001. These rates differ from one region to the next and are likely to decrease with age.

**Table 4**  
**Estimated net ethnic mobility, Canada, 1996 to 2006 and 2001 to 2006**

Net ethnic mobility	1996 to 2001	2001 to 2006
Non-Aboriginal people <sup>1</sup> towards Métis		
Number (thousands)	68	78
Net ethnic mobility rate (percentage)	0.31	0.35
Non-Aboriginal people <sup>1</sup> towards North American Indian		
Number (thousands)	25	35
Net ethnic mobility rate (percentage)	0.11	0.15

1. Excluding immigrants, visible minority people, Inuit, population living in the territories and Indian reserves.

Sources: Statistics Canada, 1996, 2001 and 2006 censuses of population and Demography Division.

Are we to believe that ethnic mobility will continue to augment Métis and North American Indian populations at the same rate for another 25 years? Or is it instead possible that within the Canadian-born non-Aboriginal population, persons likely to report an Aboriginal identity will have already done so? The uncertainty as to how this component will evolve, along with its impact on the future size of Aboriginal populations, led to the use of two assumptions for intragenerational ethnic mobility. The first holds constant until the end of the projection period net rates of ethnic mobility computed from 1996 to 2001 and from 2001 to 2006. The second assumption foresees no ethnic mobility from 2006 to 2031.

## 2.2 Assumptions regarding non-Aboriginal people

For populations with no Aboriginal identity, a single assumption was adopted for each of the components considered in the model. These are the assumptions that comprise the reference scenario in *Projections of the Diversity of the Canadian Population, 2006 to 2031*. That scenario, which shows what would happen if the most recent trends were to continue to 2031, includes the following assumptions:

- An average fertility of approximately 1.7 children per woman at the national level at the outset, and constant fertility gaps between the subgroups that comprise the population;
- A moderate increase in life expectancy, and constant mortality gaps between the subgroups that comprise the population;
- A constant immigration rate at 7.5 per thousand, with the composition by country of birth being representative of the immigration observed during the period from 2001 to 2006;
- A total emigration rate constant at the starting rate of 1.6 per thousand, and constant emigration gaps between the subgroups that comprise the population;
- Internal migration patterns based on those observed in the 1996, 2001 and 2006 censuses.

Readers interested in learning more details about these assumptions and the reasoning behind them, or in knowing the assumptions about the other components projected (education, marital status, departure of children from the home, etc.) are invited to consult Section 2 of *Projections of the Diversity of the Canadian Population, 2006 to 2031*.



## 2.3 Projection scenarios

Five projection scenarios were selected for analyzing the results contained in Section 4 of this report (see Table 5). Scenario 1, “No ethnic mobility and constant fertility,” combines the constant fertility assumption, the nil intragenerational ethnic mobility assumption and the assumption that the migration patterns observed in 1996, 2001 and 2006 will continue to 2031. Scenario 2, “No ethnic mobility and converging fertility,” is identical to Scenario 1 except for fertility, which is assumed to be convergent rather than constant. Scenario 3, “Constant ethnic mobility and constant fertility,” differs from Scenario 1 only in that it assumes that intragenerational ethnic mobility will continue to 2031 instead of ceasing. Scenario 4, “Constant ethnic mobility and converging fertility,” differs from Scenario 3 only in its assumption on fertility, which is convergent rather than constant. Finally, Scenario 5, “Nil net migration on reserves,” assumes constant fertility, no intragenerational ethnic mobility and nil net migration on Indian reserves.

**Table 5**  
**Selected scenarios for the population projections by Aboriginal identity in Canada, 2006 to 2031**

Scenario	Fertility of Aboriginal population	Intragenerational ethnic mobility	Internal migrations	Assumptions for non-Aboriginal population
1. No ethnic mobility and constant fertility	Constant	None		
2. No ethnic mobility and converging fertility	50% convergence	None		
3. Constant ethnic mobility and constant fertility	Constant	Constant		Identical to the assumptions of the <i>Projections of the Diversity of the Canadian Population, 2006-2031</i>
4. Constant ethnic mobility and converging fertility	50% convergence	Constant	1995/1996, 2000/2001 and 2005/2006	
5. Zero net migration on reserve	Constant	None	Zero net migration on reserve	

Together, these five scenarios meet the criteria set out above and lend themselves to an analysis of the impact of fertility, intragenerational ethnic mobility and some aspects of internal migration on future Aboriginal populations. For example, by comparing scenarios 1 and 3, or 2 and 4, we can see how the ethnic mobility of Aboriginal peoples is likely to leave its mark on the demography of the projected populations if everything else remains constant. By comparing scenarios 1 and 2, or 3 and 4, we can estimate the effects of a reduction in the fertility gap between Aboriginal and non-Aboriginal peoples. Finally, a comparison of scenarios 1 and 5 will show what would happen in the coming years if internal migration ceased to be favourable to Indian reserves. For this reason, Scenario 5 is presented only when analysing future trends for the population living on reserve.

The decision to match each of these five scenarios with a single set of assumptions for non-Aboriginal populations was motivated by the objective of facilitating comparisons of one scenario with another. The use of that single set of assumptions for non-Aboriginal populations in no way means that those assumptions are considered as having a greater probability of proving correct than those that make up the other scenarios that could have been formulated.

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### 3 - Cautionary notes

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This report contains the results of population projections rather than forecasts. This is an important nuance, because we expect forecasts to tell us what the future will most likely be, whereas projections instead tell us what would happen if the assumptions and scenarios chosen were to prove correct. Thus, this is a prospective exercise whose purpose is more to support the planning of public policies than to predict the future.

In this report, we present the results of five projection scenarios. The sometimes sizable gap separating the results of these different scenarios reflects the uncertainty surrounding this projection exercise. This uncertainty, which is inherent in any projection exercise, is all the greater for Aboriginal populations in that the future evolution of intragenerational ethnic mobility is quite difficult to assess. The limitations of the data available on Aboriginal peoples, described in greater detail in Section 1, also contribute to this uncertainty, as does the variance associated with many parameters introduced in Demosim. These limitations are even more important at the regional level because of the internal migration component and small populations. For these reasons, the reader is invited to consider the full range of results obtained from the five scenarios rather than to try to look for one scenario that is more probable than the others. This is also why data was rounded to the nearest thousand.

Also, it should be kept in mind that despite the sizable number of variables that Demosim projects, this model cannot, in determining the events that it simulates, take account of all the independent variables identified by the literature. This is because for a variable to be used in this way, it must itself be projected, which assumes that it is included (with some exceptions) in the base population and therefore appears in the long form questionnaire for the 2006 Census.

Finally, the data shown in the section “Analysis of results” were adjusted to take into account census net undercoverage and partially enumerated reserves. For this reason, the data included in this document may differ from census data disseminated by Statistics Canada.

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## 4 - Analysis of results

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This section presents the results of the population projections for the Aboriginal population as a whole and then, in separate subsections, for each Aboriginal identity group: North American Indians, Métis and Inuit. Although each subsection deals with population growth, age structure and geographic distribution, the analysis seeks to bring out the particularities of how each Aboriginal identity group may evolve between now and 2031. The fact is that, far from being a homogeneous population, the Aboriginal population is composed of groups that are quite distinct as to their identity, their culture, their history and—likely related to these distinguishing features—their demography. Readers are also invited to consult Appendix 1 to 3, which summarize the main results for each of the groups.

### 4.1 Aboriginal identity population in general

In 2006, the number of persons declaring an Aboriginal identity was estimated at approximately 1.3 million persons, compared to roughly 900,000 10 years earlier in 1996. Among them, 785,000 were North American Indians, 404,000 were Métis and 53,000 were Inuit.

Overall, these populations accounted for some 3.9% of the Canadian population. In comparison, the corresponding proportion at the same time was 1.7% in the United States, 2.4% in Australia and 14.6% in New Zealand (Maori).<sup>27</sup> Like the Aboriginal populations of Australia, the Aboriginal population in Canada grew more rapidly than the non-Aboriginal population between 1996 and 2006.<sup>28</sup>

Since international migration is low for Aboriginal peoples in Canada, that increase is essentially due to strong natural increase, favoured by a young age structure and high fertility, as well as changes in the reporting of identity or intragenerational ethnic mobility (see Box 1).

The projection results show that the proportion of Aboriginal people would continue to grow between now and 2031, reaching between 4.0% and 5.3% according to the scenarios developed for the purpose of these projections. The Aboriginal population would then number between 1.7 million and 2.2 million (Figure 2). Also, within this population, North American Indians would continue to be in the majority, with their numbers ranging between 1,071,000 and 1,248,000, followed by the Métis at 506,000 to 863,000 and the Inuit at 73,000 to 77,000.

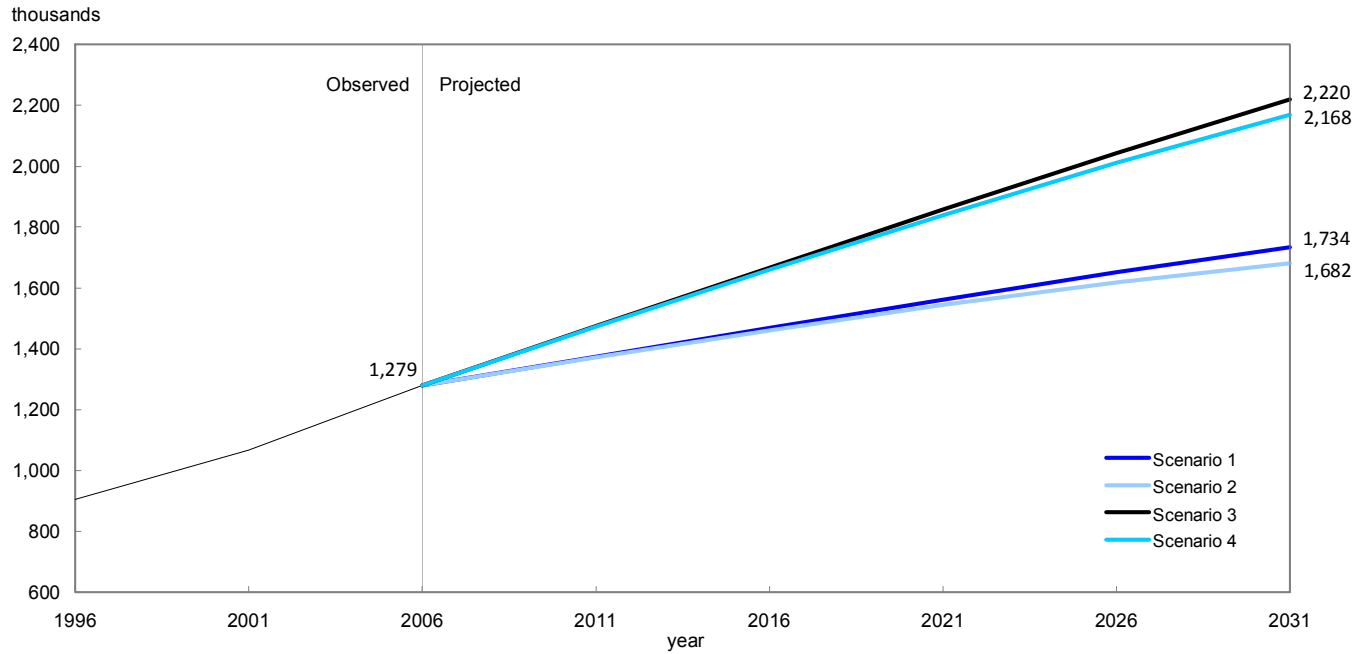
Figure 3 shows that during the period extending from 2006 to 2031, the Aboriginal population as a whole would have an average annual growth rate ranging between 1.1% (scenario 2 - no ethnic mobility and converging fertility) and 2.2% (scenario 3 - constant ethnic mobility and constant fertility). In all cases, the growth would be greater than that of the non-Aboriginal population despite the fact that it is assumed that the latter population would benefit from important international migratory gains up to 2031, which is not the case for Aboriginal populations which are assumed to have nil net international migration.

The average annual growth rate would also vary considerably from one Aboriginal group to another. For North American Indians, it would be between 1.2% and 1.9%; for Métis, between 0.9% and 3.1%; and for Inuit, between 1.3% and 1.5%, as will be seen below.

A comparison of the results of the different projection scenarios shows how sensitive the future growth of the Aboriginal population as a whole might be to intragenerational ethnic mobility, that is, to changes in the reporting of identity over a lifetime. Under the assumption that ethnic mobility will continue between now and 2031 at the levels estimated from 1996 to 2006 (scenarios 3 and 4), the increase would be one percentage point higher than what it would have been if there were no intragenerational ethnic mobility (scenarios 1 and 2). In absolute numbers, the average annual increase in the Aboriginal identity population would be between 40,000 and 42,000 in the scenarios projecting continued intragenerational ethnic mobility, whereas it would be between 17,000 and 19,000 in the other scenarios.

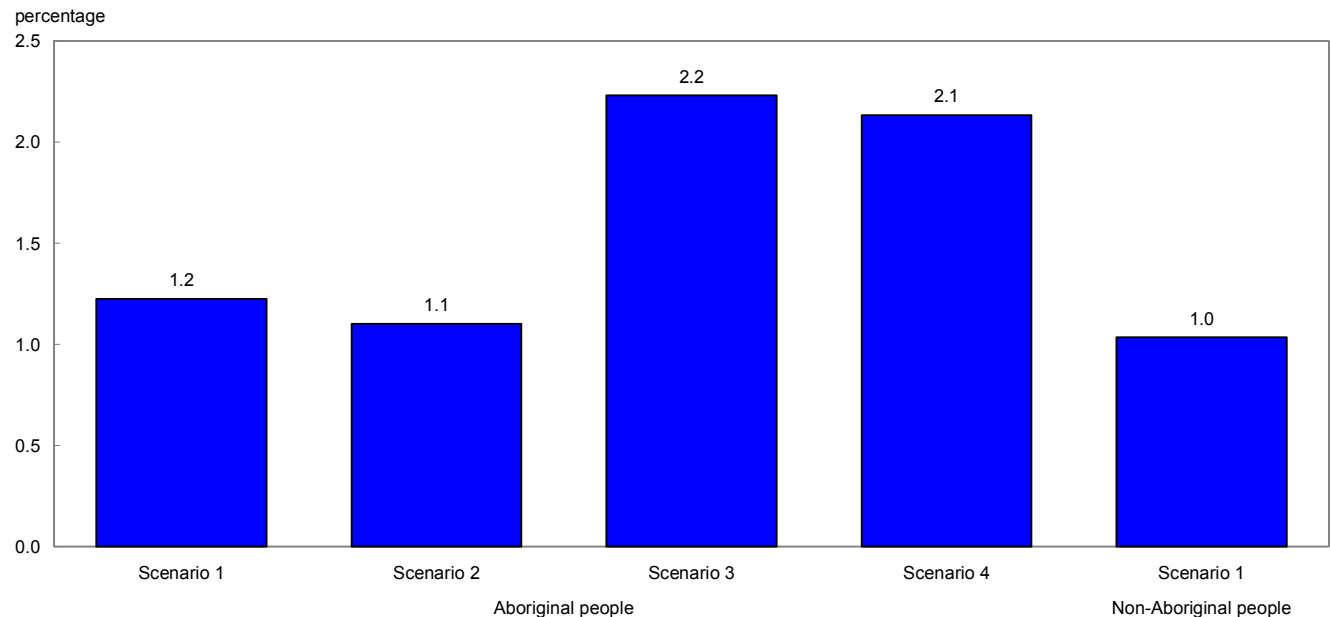
The projection results also show that if the fertility gap between Aboriginal and non-Aboriginal populations were reduced by half between now and 2031 (scenarios 2 and 4), the average annual growth rate of the Aboriginal population would be approximately 0.1 percentage point lower than if fertility remained constant at the levels measured in 2006. This convergence, which would ultimately lead to a reduction of approximately 0.3 children per woman among Aboriginal peoples, would translate into approximately 2,100 fewer births per year on average over the period (data not shown).

**Figure 2**  
**Aboriginal identity population, Canada, 1996 to 2031, four projection scenarios**



**Sources:** Statistics Canada, Demography Division, for 2006 to 2031; Statistics Canada. 2005. *Projections of the Aboriginal Populations, Canada, provinces et territoires, 2001-2017*, Statistics Canada Catalogue no. 91-547 and Verma, Ravi. 2005. "Evaluation of Projections of Populations for the Aboriginal Identity Groups in Canada, 1996 to 2001", in *Canadian Studies in Population*, volume 32, no. 2 for 1996 and 2001.

**Figure 3**  
**Average annual growth rate of Aboriginal and non-Aboriginal identity populations, Canada, 2006 to 2031, four projection scenarios**



**Source:** Statistics Canada, Demography Division.

### 4.1.1 Age structure of the Aboriginal population

While the Aboriginal population is known to be younger than the non-Aboriginal population, less well-known is the fact that it is aging. Between 2001 and 2006, Aboriginal peoples' median age increased by about two years, going from 24.7 years to 26.6 years. Median age is the age that separates a population into two equal groups, one younger and the other older. The aging of the Aboriginal population is mainly due to a decrease in fertility over recent decades and an increase in life expectancy.

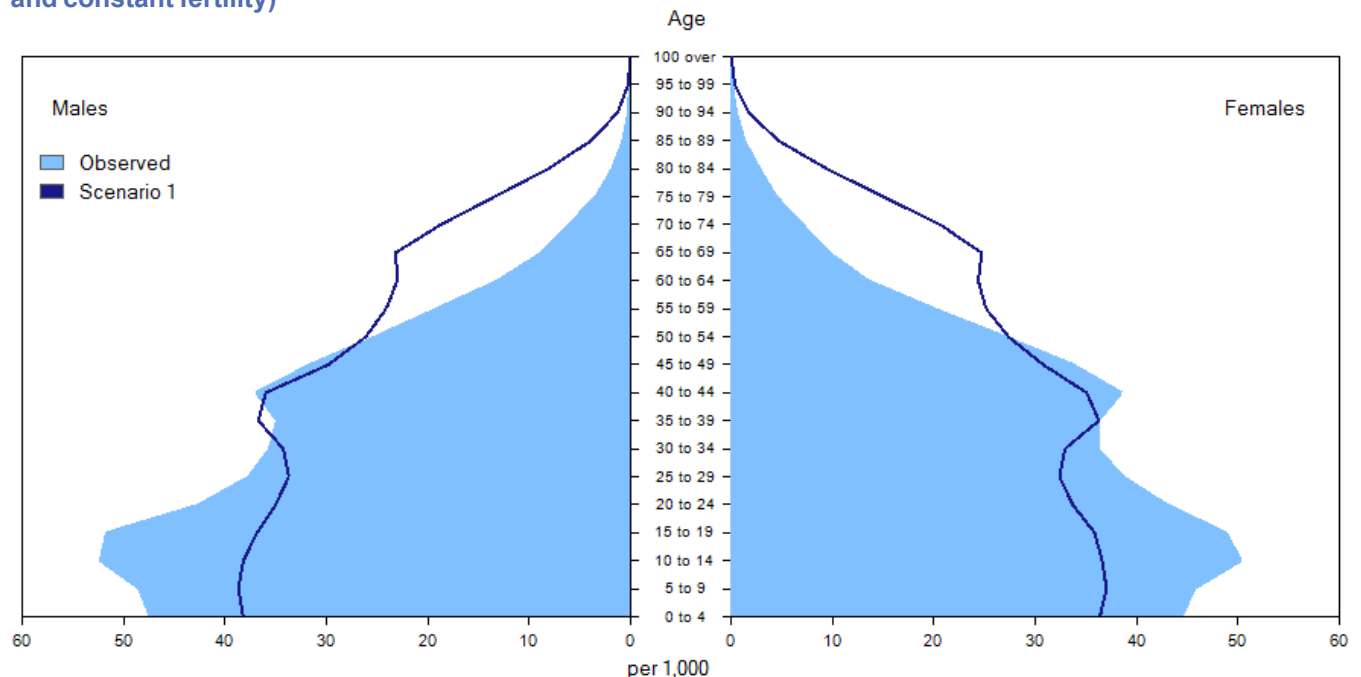
The results of these projections show that this aging of the Aboriginal population would continue over the next 20 years under all of the scenarios (Table 6 and Figure 4). By 2031, the median age of Aboriginal peoples in general would rise to between 35.0 years under Scenario 1 (no ethnic mobility and constant fertility) and 36.7 years under Scenario 4 (constant ethnic mobility and converging fertility). Thus, it appears that aging would be more rapid if Aboriginal peoples' fertility was to decrease and ethnic mobility were to continue. The aging impact of intragenerational ethnic mobility (which is slight) is basically due to the fact that net population gains are mainly at the expense of an older population, essentially the Canadian-born non-Aboriginal population.

**Table 6**  
Age structure indicators of the population by Aboriginal identity, Canada, 2006 and 2031, four projection scenarios

Indicators	Aboriginal people					Non-Aboriginal people	
	2006	2031				2006	2031
	Observed	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Observed	Scenario 1
	percentage						
0 to 14 years	28.9	22.5	20.6	21.2	19.7	16.9	16.5
15 to 64 years	66.4	62.9	64.4	63.7	64.9	69.5	60.2
65 years and over	4.7	14.5	15	15.1	15.4	13.6	23.3
	year						
Median age	26.6	35	36.1	35.9	36.7	39.4	43.1

Source: Statistics Canada, Demography Division.

**Figure 4**  
Aboriginal identity population by age group and sex, Canada, 2006 and 2031, scenario 1 (no ethnic mobility and constant fertility)



Source: Statistics Canada, Demography Division.

Despite this aging, the Aboriginal population would continue to be younger than the non-Aboriginal population according to all scenarios. As may be seen from the data in Table 6, the median age of Aboriginal peoples would be between 6 and 8 years less than that of the non-Aboriginal population, whose median age would be approximately 43 years. Also, the percentage of seniors would remain lower for Aboriginal peoples than for non-Aboriginal people, while the percentage of youths under 15 years of age would remain considerably higher for Aboriginal peoples, even under the assumption of a gradual convergence of fertility.

In 2031, the populations of specific Aboriginal identity groups would continue to have different age structures. The Inuit population would remain younger than the North American Indian population, which would in turn remain younger than the Métis population.

#### 4.1.2 Geographic distribution of the Aboriginal population

The geographic distribution of the Aboriginal population throughout Canada differs from that of the non-Aboriginal population. In 2006, people with an Aboriginal identity were generally overrepresented in the western part of the country and in the territories, and underrepresented in the rest of Canada. As a consequence, the proportion of Aboriginal people was higher in the western provinces and in the territories (Table 7). According to the scenarios of these projections, this situation would remain unchanged in 2031.

**Table 7**  
Population counts and proportion of persons with an Aboriginal identity by province and territory of residence, Canada, 2006 and 2031, four projection scenarios

Province and territory of residence	2006 (observed)		2031 (projected)							
			Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	thousands	%	thousands	%	thousands	%	thousands	%	thousands	%
Newfoundland and Labrador	24	4.7	21	4.8	21	4.8	28	6.5	28	6.5
Prince Edward Island	2	1.3	2	1.5	2	1.5	5	3.6	5	3.7
Nova Scotia	25	2.7	31	3.4	30	3.3	46	5.0	45	4.9
New Brunswick	18	2.4	19	2.7	19	2.7	31	4.4	31	4.4
Quebec	127	1.7	178	2.0	174	2.0	234	2.6	230	2.6
Ontario	268	2.1	348	2.0	341	1.9	518	2.9	511	2.9
Manitoba	188	15.9	257	18.8	247	18.2	294	21.5	285	21.0
Saskatchewan	153	15.4	227	22.5	214	21.5	240	23.7	228	22.8
Alberta	207	6.1	299	6.0	291	5.9	378	7.6	370	7.5
British Columbia	209	4.9	281	4.7	274	4.6	374	6.3	367	6.2
Yukon	8	25.5	8	21.9	8	22.1	8	22.8	8	22.9
Northwest Territories	23	52.3	25	51.9	24	51.0	25	52.4	24	51.5
Nunavut	26	84.8	39	85.9	37	85.3	39	86.1	37	85.5
Canada	1,279	3.9	1,734	4.1	1,682	4.0	2,220	5.3	2,168	5.2

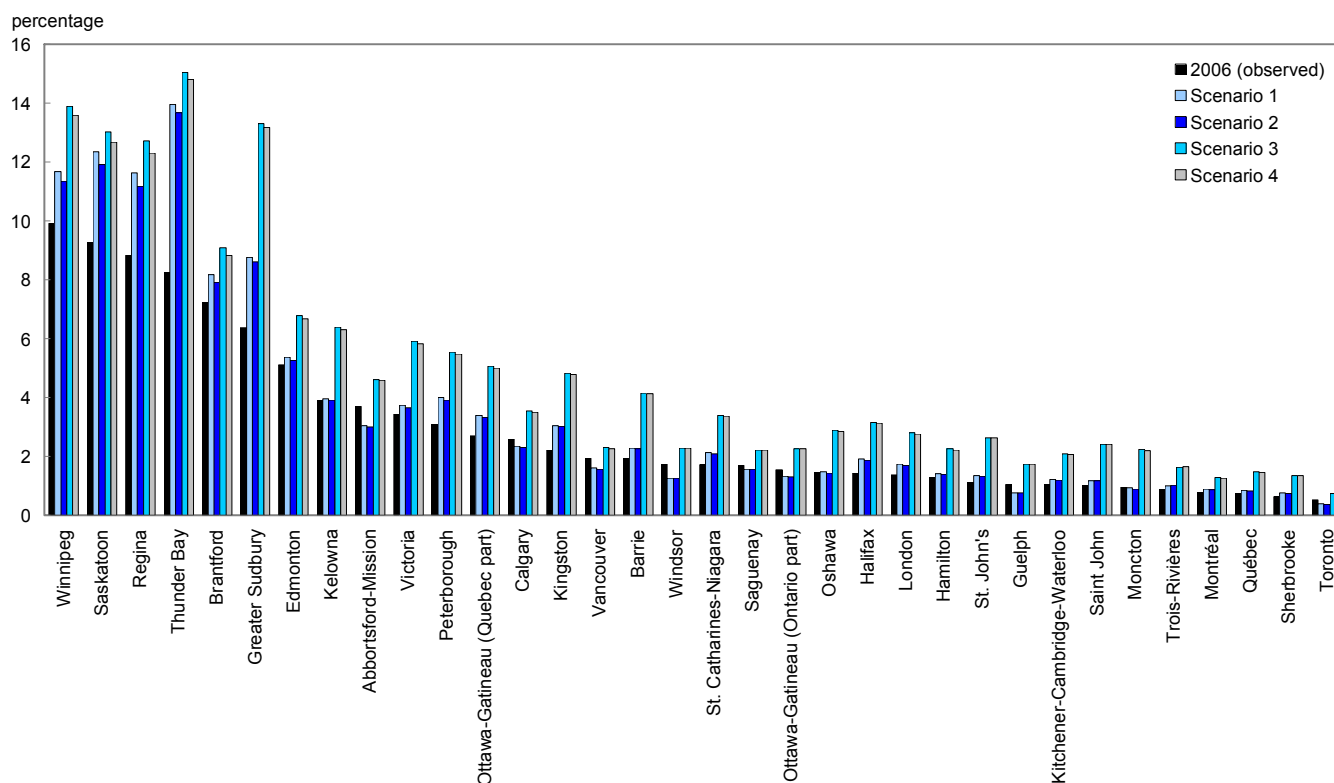
Source: Statistics Canada, Demography Division.

As was the case in 2006, Saskatchewan and Manitoba would have the largest proportion of Aboriginal people among the provinces. Between 21% and 24% of the population of Saskatchewan and between 18% and 21% of the population of Manitoba would have an Aboriginal identity in 2031. The proportion was close to 16% in each of those provinces in 2006. The three territories would also continue to be a place with a strong concentration of Aboriginal populations. Thus, in 2031, the proportion of the population having an Aboriginal identity would be between 22% and 23% in Yukon, between 51% and 52% in the Northwest Territories and between 85% and 86% in Nunavut. As observed in 2006, Prince Edward Island, Quebec and Ontario would have the lowest proportions of Aboriginal people within their population in 2031, regardless of the scenario considered.

In 2006, Aboriginal people (34%) were also proportionally less likely to live in a census metropolitan area (CMA) than non-Aboriginal people (69%). In 2031, between 36% and 40% of Aboriginal people would live in a CMA, compared to nearly three persons in four for non-Aboriginal people. Therefore, regardless of the scenario considered, the majority of Aboriginal persons would continue to live outside CMAs.

Figure 5

Proportion of persons with an Aboriginal identity by census metropolitan area, Canada, 2006 and 2031, four projection scenarios



Source: Statistics Canada, Demography Division.

It is important to note that Aboriginal peoples' geographic distribution varies from one Aboriginal group to another. North American Indians and Métis live mainly in Ontario, the Prairie provinces and British Columbia. On the other hand, unlike the Métis, a large proportion of North American Indians live on Indian reserves. Also, a larger proportion of North American Indians than of Métis live outside CMAs. As for the Inuit, the great majority of them (80%) live in Inuit Nunangat regions (see Box 1). The geographic distribution of each of the groups will be described in more detail in the sections that follow.

If the situations and trends selected as assumptions in the different scenarios were to prove correct, the percentage of persons with an Aboriginal identity would also continue to vary considerably from one CMA to another (Figure 5). In 2031, if ethnic mobility were to continue, five CMAs would have a population in which Aboriginal people would comprise more than 10%: Thunder Bay, Winnipeg, Regina, Saskatoon and Greater Sudbury. The fact that these CMAs are in Saskatchewan, Manitoba and Western Ontario reflects the provincial distribution described above. However, it should also be noted that overall, the interregional migration of Aboriginal peoples is more favourable to all of these CMAs, at the exception of Greater Sudbury, than is the migration of non-Aboriginal people.

According to the two scenarios that assume a complete halt in intragenerational ethnic mobility starting in 2006, six CMAs would have a population in which Aboriginal people accounted for less than 1% in 2031, namely Moncton, Montréal, Québec, Sherbrooke, Guelph and Toronto, whereas in the two scenarios calling for ethnic mobility to remain at the levels observed between 1996 and 2006, only Toronto would be below this threshold.

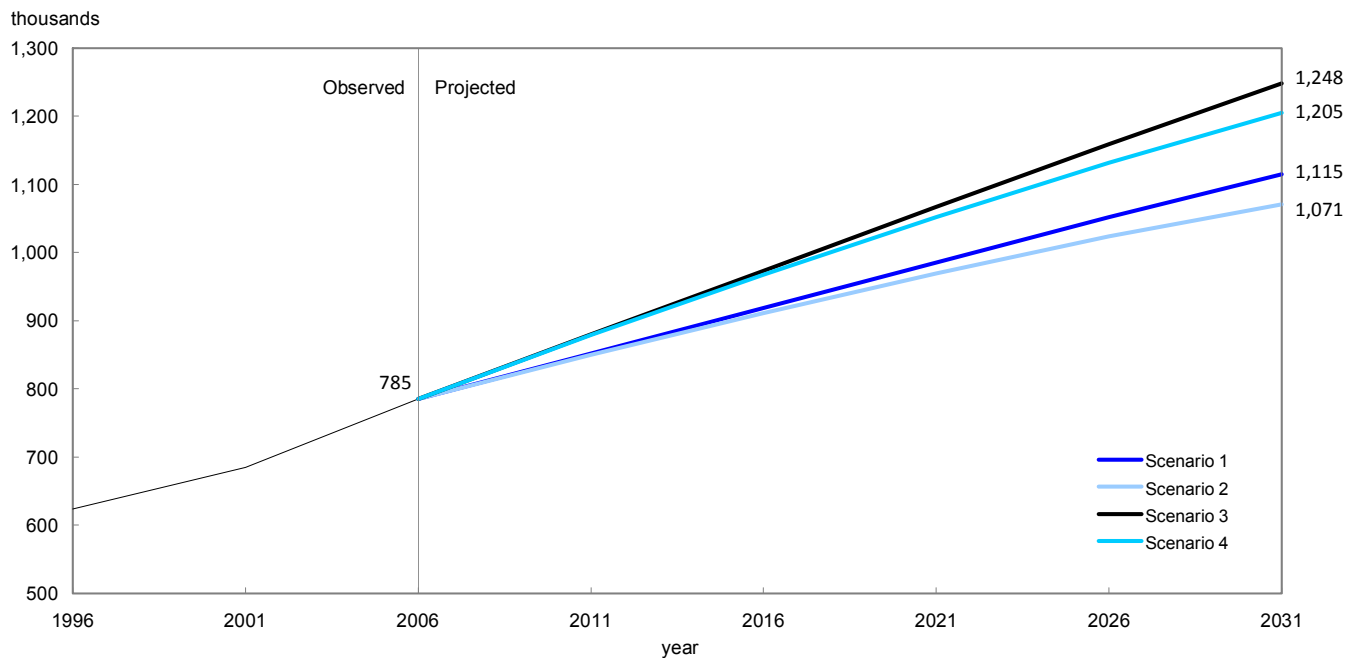
## 4.2 North American Indian population

In 2006, approximately 785,000 persons identified as North American Indians. They accounted for 2.4% of the Canadian population and constituted the largest Aboriginal identity group, ahead of the Métis.

Between 1996 and 2006, the North American Indian population grew on average 2.3% per year; more rapidly than the non-Aboriginal population, which increased by less than 1% per year. This growth was driven by high fertility and an age structure that was younger and therefore more conducive to births and less conducive to deaths, as well as population gains through changes in ethnic affiliation during a lifetime.

According to the projection results, the North American Indian population would continue to grow in the coming years (Figure 6). In 2031, it would stand at between 1.1 million according to Scenario 2 (no ethnic mobility and converging fertility) and 1.2 million according to Scenario 3 (constant ethnic mobility and constant fertility) and would constitute between 2.5% and 3.0% of the Canadian population according to these same scenarios. In all the scenarios, the North American Indian population would remain larger than the Métis and Inuit populations.

**Figure 6**  
North American Indian identity population, Canada, 1996 to 2031, four projection scenarios



**Sources:** Statistics Canada, Demography Division, for 2006 to 2031; author's calculations based on Statistics Canada. 2005. *Projections of the Aboriginal Populations, Canada, provinces et territoires, 2001-2017*, Statistics Canada Catalogue no. 91-547 and Verma, Ravi. 2005. "Evaluation of Projections of Populations for the Aboriginal Identity Groups in Canada, 1996 to 2001", in *Canadian Studies in Population*, volume 32, no. 2 for 1996 and 2001.

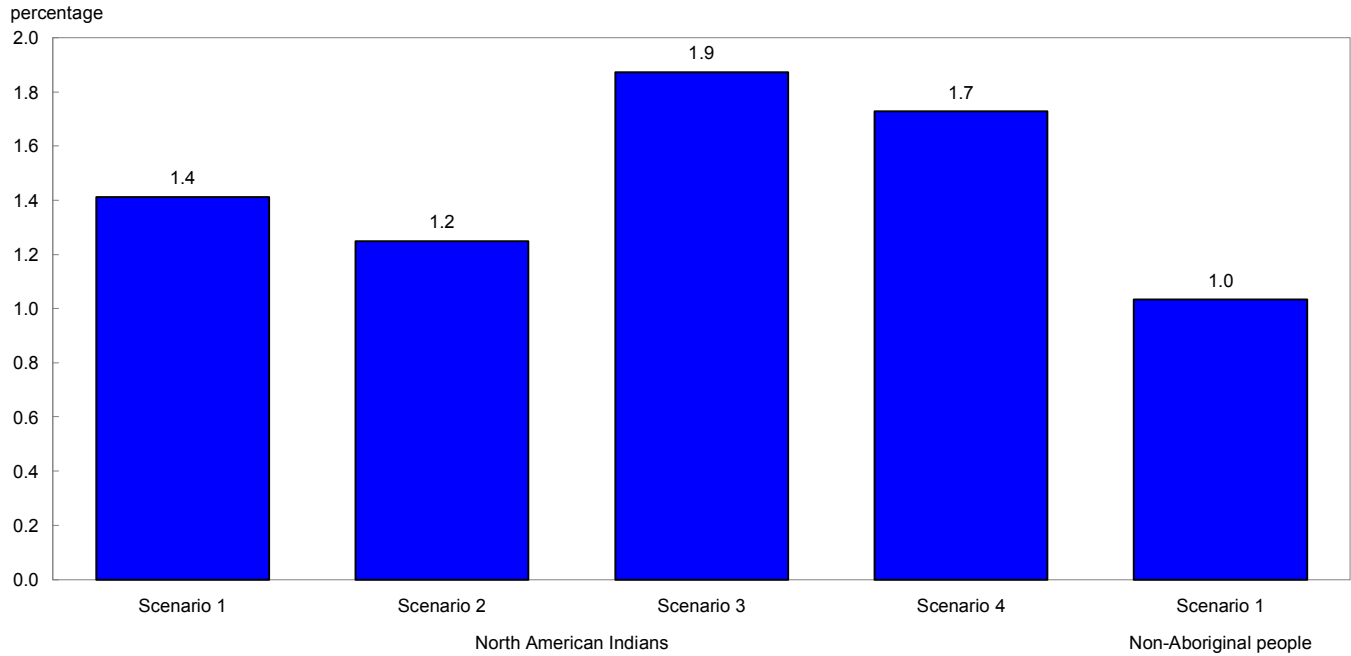
Between 2006 and 2031, the average annual growth rate of the North American Indian population would be between 1.2%, under the assumption of their fertility moving toward convergence with that of non-Aboriginal people combined with a lack of ethnic mobility, and 1.9% if fertility and ethnic mobility were to remain at the levels observed recently in Canada (Figure 7).

In all cases, the North American Indian population would grow at a faster pace than the non-Aboriginal population. This means that even if intragenerational ethnic mobility were to cease and fertility were to decline in the coming years, the growth of the North American Indian population would continue to exceed that of non-Aboriginal people, for whom most of the increase would come from international migration.



**Figure 7**

**Average annual growth rate of North American Indian identity population and non-Aboriginal population, Canada, 2006 to 2031, four projection scenarios**



**Source:** Statistics Canada, Demography Division.

Natural increase would remain the main driver of the growth of the North American Indian population according to all scenarios, at least until 2031. However, natural increase would decline in importance over time in that deaths could be expected to increase more rapidly than births, an inevitable corollary to the aging that the North American Indian population could experience in the coming decades, as will be seen further on.

In turn, the net population gains from intragenerational ethnic mobility could add an average of approximately 0.5 percentage points per year to the growth of the North American Indian population between now and 2031. This would constitute slightly more than 30% of this group’s population growth. However, this component could decline in importance over time, primarily owing to the relative stagnation of the main population likely to make an ethnic transfer in the direction of North American Indians, namely Canadian-born non-Aboriginal persons not belonging to a visible minority group.

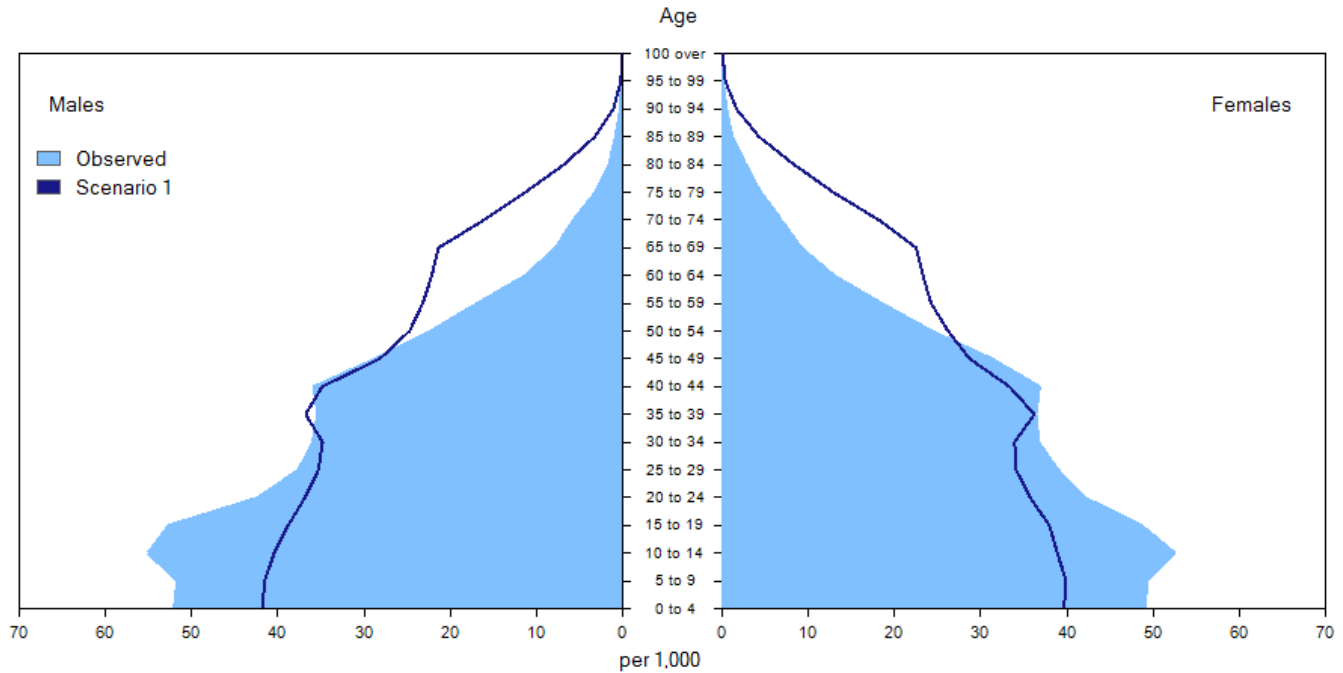
#### 4.2.1 Age structure of the North American Indian population

In 2006, North American Indians as a population were younger than the Métis and non-Aboriginal populations but older than the Inuit population. To illustrate, their median age of 25 years was approximately four years lower than that of the Métis but three years higher than that of the Inuit. To better understand these results, it should be kept in mind that North American Indians have higher fertility than the Métis but lower fertility than the Inuit, while their life expectancy is lower than that of the Métis but higher than that of the Inuit.

According to the scenarios developed in this projection exercise, the North American Indian population, like the rest of the population, would experience a gradual aging between now and 2031. The median age of this population would rise to between 33 and 35 years in 2031. The proportion of seniors within this population would also rise, while the proportion of young persons would decline (Figure 8).

Figure 8

North American Indian identity population by age group and sex, Canada, 2006 and 2031, scenario 1 (no ethnic mobility and constant fertility)



Source: Statistics Canada, Demography Division.

The rate at which this aging could occur would be more rapid under the assumption of fertility converging with that of non-Aboriginal people. The resulting decrease in births, by reducing the number of young people, would lead to a median age slightly more than one year higher than if fertility was to remain at 2006 levels. The continuation of intragenerational ethnic mobility flows would also have an aging effect, with net population gains occurring at a higher age on average than that of the North American Indian population. However, this effect would be limited, since the median age would then be about half a year higher compared to the scenarios where changes in the reporting of identity during a lifetime are assumed to cease.<sup>29</sup>

Despite this aging, the North American Indian population would remain younger than the Métis and non-Aboriginal populations in all of the scenarios.

#### 4.2.2 Geographic distribution of North American Indians

According to 2006 Census data, the majority of North American Indians were living in Ontario and the Western provinces. In fact, more than four North American Indians in five were living in those provinces. In 2031, that distribution would remain practically unchanged.

Furthermore, in 2006, 30% of North American Indians were living in a census metropolitan area. In 2031, that proportion would be between 32% and 34% and would thus be slightly higher than in 2006. The proportion would increase most rapidly in the scenarios in which ethnic mobility continues at the levels estimated between 1996 and 2006. This result reflects the fact that the net population gains from intragenerational ethnic mobility registered by the North American Indian population are larger within CMAs than outside them, or in other words, in the regions where most of the non-Aboriginal population born in Canada not belonging to a visible minority group resides.

At the regional scale, the CMAs whose population comprises the largest proportions of North American Indians are located generally in the Western provinces and Ontario. Accordingly, Thunder Bay, Brantford,<sup>30</sup> Saskatoon, Regina and Winnipeg CMAs would be those with the largest proportions of North American Indians in 2031, with at least 5% each in all the scenarios (data not shown).

Table 8

Population counts and proportion of North American Indians by province and territory of residence, Canada, 2006 and 2031, four projection scenarios

Province and territory of residence	2006 (observed)		2031 (projected)							
			Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	thousands	%	thousands	%	thousands	%	thousands	%	thousands	%
Newfoundland and Labrador	8	1.5	7	1.6	7	1.6	9	2.2	9	2.2
Prince Edward Island	1	0.9	1	1.0	1	1.0	2	1.8	2	1.8
Nova Scotia	16	1.7	21	2.3	20	2.2	27	2.9	26	2.8
New Brunswick	13	1.7	14	2.0	14	2.0	19	2.7	19	2.7
Quebec	83	1.1	115	1.3	112	1.3	146	1.6	143	1.6
Ontario	180	1.4	238	1.3	232	1.3	289	1.6	283	1.6
Manitoba	111	9.4	168	12.3	160	11.8	171	12.5	163	12.0
Saskatchewan	101	10.2	163	16.1	152	15.2	163	16.1	152	15.2
Alberta	111	3.3	174	3.5	168	3.4	188	3.8	181	3.7
British Columbia	141	3.3	191	3.2	185	3.1	212	3.6	206	3.5
Yukon	7	21.3	6	17.5	6	17.4	6	17.7	6	17.6
Northwest Territories	14	32.9	15	31.4	15	30.9	15	31.5	15	30.9
Nunavut	0	0.4	0	0.7	0	0.7	0	0.7	0	0.8
Canada	785	2.4	1,115	2.6	1,071	2.5	1,248	3.0	1,205	2.9

Source: Statistics Canada, Demography Division.

At the other extreme, Toronto would continue to be the CMA with the smallest proportion of North American Indians, with less than half of one percent according to all the scenarios. As was the case in 2006, the North American Indian populations would be concentrated in some regions outside census metropolitan areas, regions where the majority of this population would live in 2031. Thus, between 23% and 25% of the population of Manitoba living outside Winnipeg would have a North American Indian identity, while in all areas of Saskatchewan other than Regina and Saskatoon the corresponding proportion would be between 23% and 24%. The Northwest Territories, in which there are no CMAs, would have a sizable proportion of North American Indians within its population, with more than three persons out of ten both in 2006 and 2031.

### Indian reserves<sup>31</sup>

One of the distinguishing characteristics of North American Indians is their geographic distribution, with a large proportion (47% in 2006<sup>32</sup>), for historical reasons, living on Indian reserves (see Box 1). Most but not all Indian reserves are located outside of census metropolitan areas. In 2006, 361,000 persons self-identifying as North American Indians were living on reserve. A small number of persons not reporting a North American Indian identity (approximately 50,000) were also living on reserve in 2006.

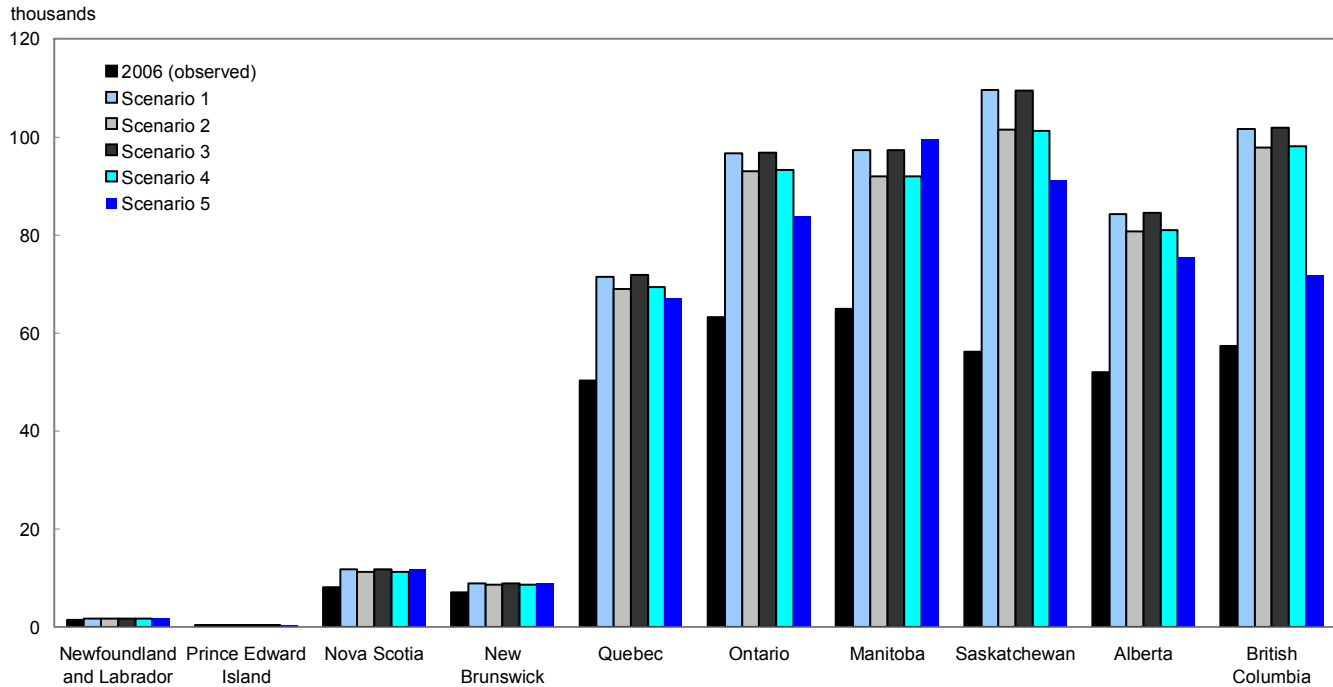
According to the results of these projections, the North American Indian population living on reserve would continue growing throughout the projection period. By 2031, it would reach between 511,000 under the scenario of no migration on reserves and approximately 585,000 under the two scenarios that assume constant fertility and a continuation of internal migration patterns (scenarios 1 and 3). These population would comprise respectively 47% and 53% of the North American Indian population as a whole.

The scenario most favourable to the growth of the North American Indian population living on reserve differs from the least favourable scenario only in its assumption of internal migration. This shows the importance that this component could have in the future. Natural increase would nevertheless remain an important factor in the growth of the North American Indian population living on reserve, as shown by the fact that these populations would increase by more than 42% if they were augmented only by the excess of births over deaths between now and 2031.

Finally, the projection results show that the on-reserve North American Indian population could increase in almost all provinces during the projection period, although at different rates<sup>33</sup> (Figure 9). It could even almost double in Saskatchewan if fertility remained constant and internal migration were maintained between now and 2031.

Figure 9

North American Indian identity population living on reserve by province, Canada, 2006 and 2031, five projection scenarios



Source: Statistics Canada, Demography Division.

### 4.3 Métis population

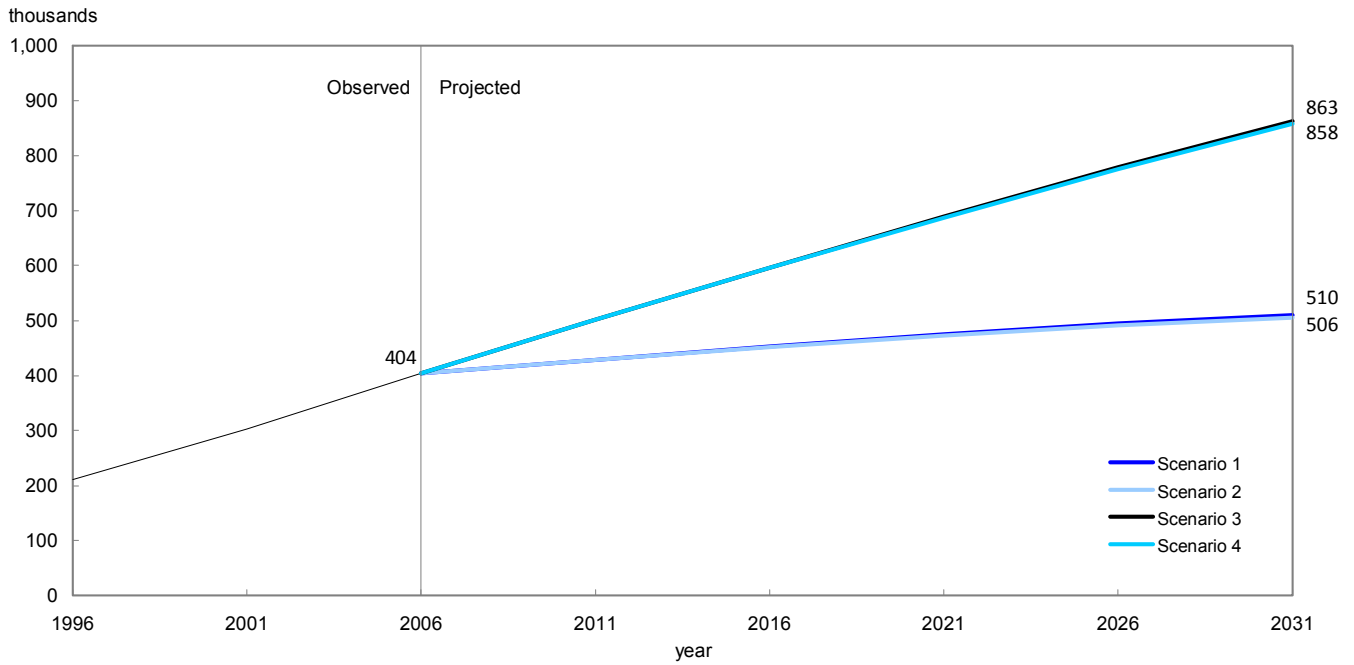
In 2006, the Métis population stood at 404,000, almost double the number ten years earlier. During the period from 1996 to 2006, the Métis were the fastest growing Aboriginal identity group, with an annual growth rate averaging 6.7%. This rate, which exceeds the maximum growth rate of 5.5% that it is theoretically possible to obtain in the absence of immigration (Guimond, 1999; Guimond, 2003), cannot be explained solely by the traditional components of population growth, namely births and deaths, especially since the fertility rate of the Métis is below the replacement level (which is currently around 2.1 children per woman). The only explanation for this is ethnic mobility (see Box 1), primarily intragenerational, which was especially favourable to the Métis identity population in Canada during the recent period.

In the coming years, the Métis population would continue to grow, but there is considerable uncertainty as to the pace of this growth, since it will depend very heavily on whether recent trends in ethnic mobility continue (Figures 10 and 11). In 2031, the Métis population would reach barely more than 500,000 according to the scenarios that assume no intragenerational ethnic mobility, but would rise to more than 850,000 if ethnic mobility was to be maintained. In the latter case, 37% of the Métis population would, in 2031, consist of persons who had acquired that identity by changing their ethnic affiliation after 2006.

A convergence of fertility toward that of non-Aboriginal populations would have only a marginal impact on the future Métis population, since their fertility is already at levels similar to those of the non-Aboriginal population.

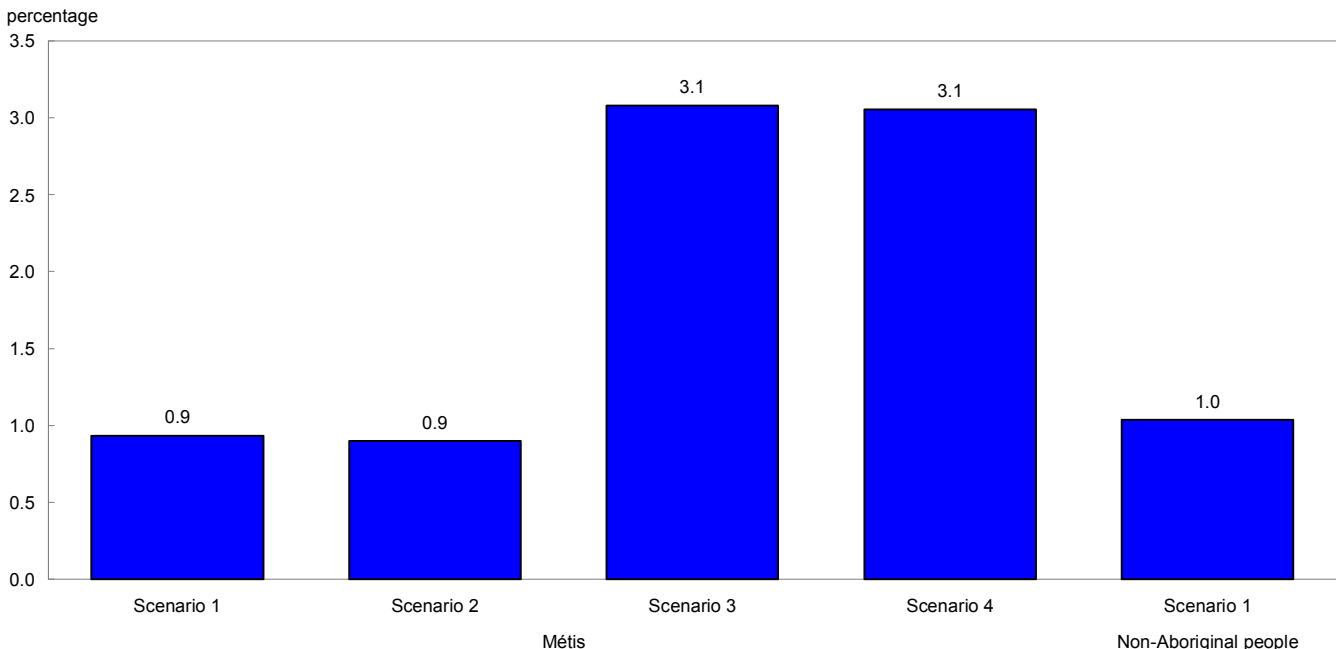
According to the two scenarios in which intragenerational ethnic mobility would cease in 2006, the annual growth rate of the Métis population from 2006 to 2031 (approximately 0.9% according to both scenarios) would not only be lower than those of North American Indians and Inuit, but it would also be slightly lower than that of the non-Aboriginal population (1.0%), since the latter population would benefit from the strong contribution of international

**Figure 10**  
**Métis identity population, Canada, 1996 to 2031, four projection scenarios**



**Sources:** Statistics Canada, Demography Division, for 2006 to 2031; author's calculations based on Statistics Canada. 2005. *Projections of the Aboriginal Populations, Canada, provinces et territoires, 2001-2017*, Statistics Canada Catalogue no. 91-547 and Verma, Ravi. 2005. "Evaluation of Projections of Populations for the Aboriginal Identity Groups in Canada, 1996 to 2001", in *Canadian Studies in Population*, volume 32, no. 2 for 1996 and 2001.

**Figure 11**  
**Average annual growth rate of Métis identity and non-Aboriginal populations, Canada, 2006 to 2031, four projection scenarios**



**Source:** Statistics Canada, Demography Division.

migration in all of the scenarios selected for the purpose of these projections. However, according to the two scenarios mentioned above, natural increase would remain higher than for the non-Aboriginal population, owing to slightly higher fertility, a younger age structure and the contribution of intergenerational ethnic mobility (data not shown).

If intragenerational ethnic mobility were to continue, the average annual growth rate would be 3.1% on average from 2006 to 2031. Ethnic mobility would then, on average, account for nearly three-quarters of the increase in the Métis population during this period.

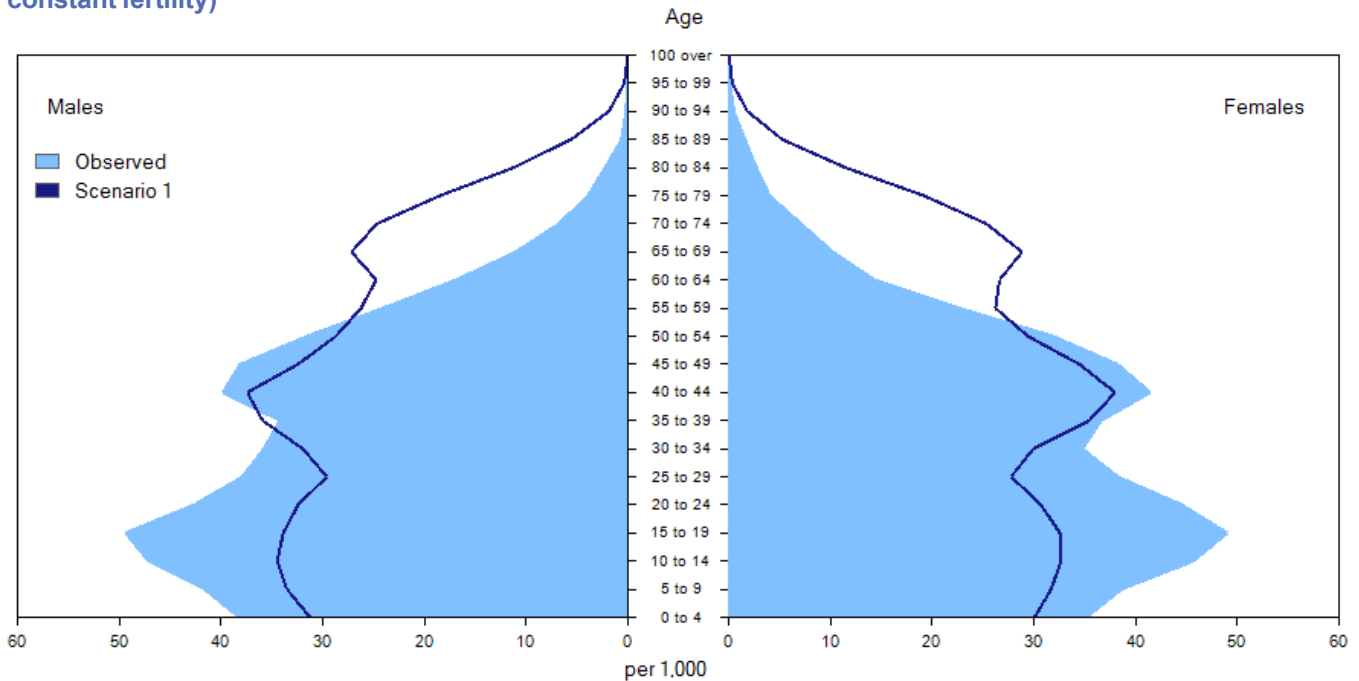
#### 4.3.1 Age structure of the Métis population

In 2006, the Métis population, like the North American Indian and Inuit populations, was younger than the non-Aboriginal population. The median age of Métis (29.4 years), while 10 years younger than that of non-Aboriginal people (39.4), was higher than that of North American Indians (25.3) and Inuit (22.0).

In the coming years, the Métis population would remain younger than the non-Aboriginal population but would age considerably (Figure 12). The median age of Métis would gradually rise to approximately 39 years according to all of the scenarios chosen for these projections. The proportion of persons aged 65 and over would go from 5% in 2006 to about 18% in 2031, while the proportion of young persons under 15 years of age would decline, reaching between 17.6% and 19.4% in 2031 compared to 24.6% in 2006.

The projected age structure in 2031 would be similar according to all of the scenarios developed. In all cases, the Métis population would continue to be older than the North American Indian and Inuit populations.

**Figure 12**  
**Métis identity population by age group and sex, Canada, 2006 and 2031, scenario 1 (no ethnic mobility and constant fertility)**



Source: Statistics Canada, Demography Division.

### 4.3.2 Geographic distribution of the Métis population

In 2006, nearly nine Métis in 10 (87%) were living in the Western provinces and Ontario; in 2031, that distribution would remain nearly identical, according to all of the projection scenarios.

Manitoba and Saskatchewan were, in 2006, the two provinces with the largest proportions of Métis within their population. This would still be the case in 2031 regardless of the scenario considered. Those proportions would range between 6% and 9% in Manitoba and between 6% and 7% in Saskatchewan, respectively. As in 2006, Quebec would be the province with the lowest proportion of Métis in 2031, at less than 1% in all the scenarios (Table 9).

**Table 9**

**Population counts and proportion of Métis by province and territory of residence, Canada, 2006 and 2031, four projection scenarios**

Province and territory of residence	2006 (observed)		2031 (projected)							
			Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	thousands	%	thousands	%	thousands	%	thousands	%	thousands	%
Newfoundland and Labrador	7	1.3	6	1.4	6	1.4	10	2.4	10	2.4
Prince Edward Island	0	0.3	1	0.4	1	0.4	2	1.7	2	1.7
Nova Scotia	8	0.9	9	1.0	9	1.0	18	2.0	18	2.0
New Brunswick	4	0.6	4	0.5	4	0.5	11	1.6	11	1.6
Quebec	29	0.4	43	0.5	43	0.5	68	0.8	68	0.8
Ontario	77	0.6	99	0.6	98	0.6	217	1.2	217	1.2
Manitoba	74	6.3	85	6.2	84	6.2	120	8.8	119	8.8
Saskatchewan	50	5.0	61	6.0	59	5.9	74	7.3	73	7.3
Alberta	89	2.6	117	2.3	116	2.3	182	3.7	182	3.7
British Columbia	62	1.5	82	1.4	81	1.4	154	2.6	153	2.6
Yukon	1	2.7	1	3.2	1	3.3	1	3.8	1	3.9
Northwest Territories	4	8.7	3	7.2	4	7.4	4	7.7	4	7.9
Nunavut	0	0.4	0	0.3	0	0.3	0	0.4	0	0.5
Canada	404	1.2	510	1.2	506	1.2	863	2.0	858	2.0

Source: Statistics Canada, Demography Division.

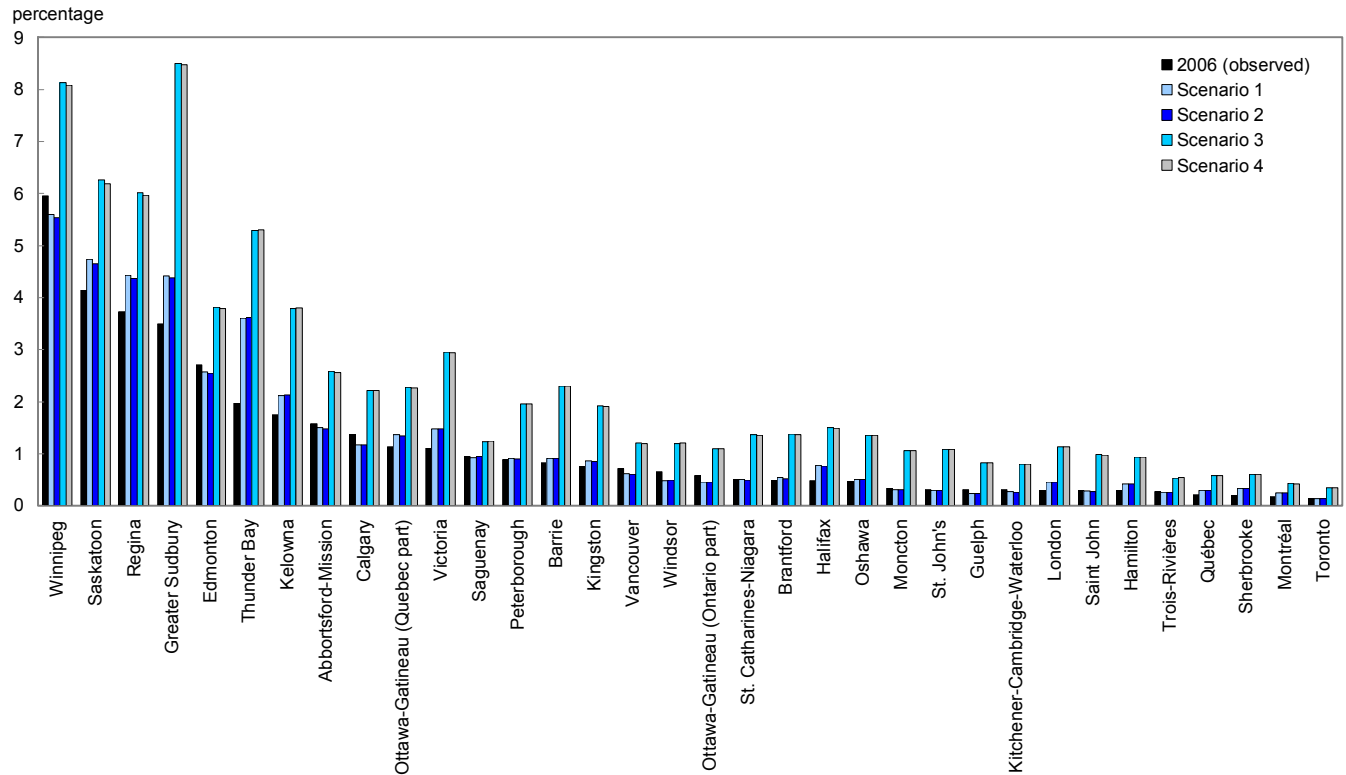
### Census metropolitan areas

In 2006, 45% of the 404,000 Métis were living in one of the 33 census metropolitan areas, a much larger proportion than for North American Indians, and larger still compared to the Inuit. In 2031, the proportion would be between 48% and 50%.

In 2031, Métis would comprise at least 5% of the population of five CMAs (Figure 13). These are Ontario's westernmost CMAs (Thunder Bay and Greater Sudbury) and the CMAs of Manitoba (Winnipeg) and Saskatchewan (Regina and Saskatoon). Conversely, two major immigration centres, Montreal and Toronto, would continue to be the CMAs with the lowest proportions of Métis in 2031, with 0.4% or less according to all the scenarios.

Figure 13

Proportion of persons with a Métis identity by census metropolitan area, Canada, 2006 and 2031, four projection scenarios



Source: Statistics Canada, Demography Division.

#### 4.4 Inuit population

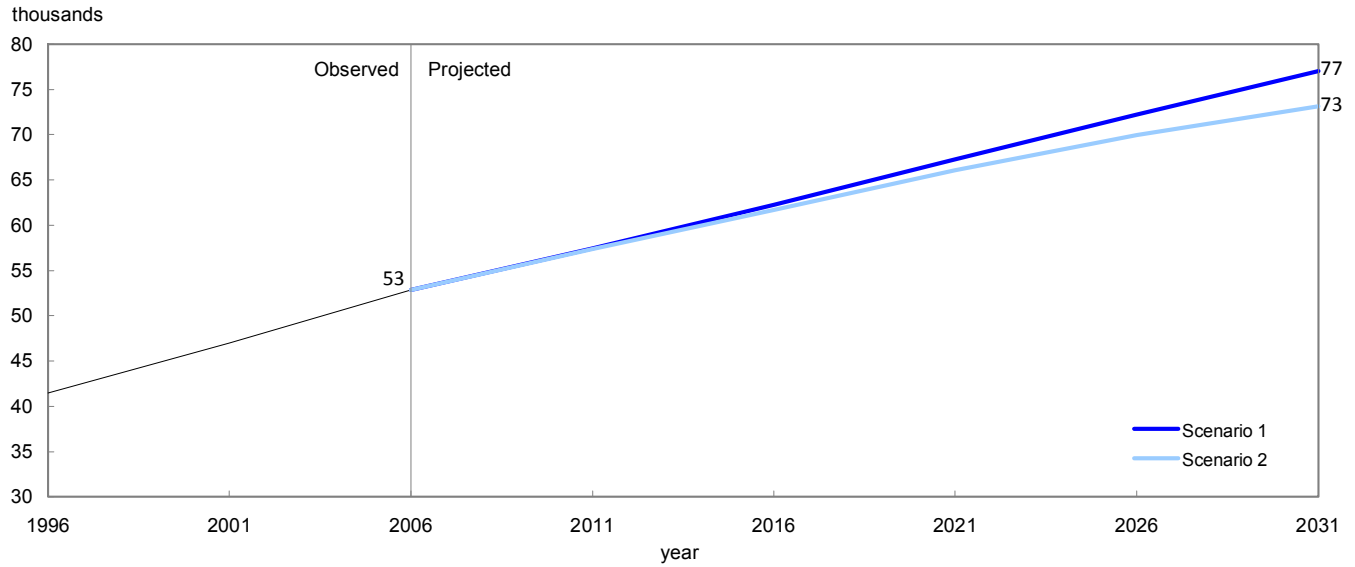
In 2006, of the 1.3 million persons who identified as Aboriginal people, approximately 53,000, or 4.1%, reported being Inuit (Figure 14). Between 1996 and 2006, the Inuit population grew more than two times faster than the non-Aboriginal population, even though they do not benefit from net population gains from intragenerational ethnic mobility as was the case for Métis and North American Indians.<sup>34</sup> In fact, the Inuit, of all the Aboriginal identity groups, had the largest natural increase, relatively speaking.

Between 2006 and 2031, the Inuit population would grow at a steady pace and could reach between 73,000 according to the converging fertility scenario (Scenario 2) and 77,000 according to the constant fertility scenario (Scenario 1). Since the Inuit's fertility gap in relation to the non-Aboriginal population is the largest for any Aboriginal group, they would be impacted more than the Métis and North American Indians by a convergence of fertility with that of non-Aboriginal people. A gradual decrease of 50% in the fertility gap between the two groups would translate into approximately 150 fewer Inuit children per year on average from 2006 to 2031 or approximately 15% fewer births in comparison to the number that would result from maintaining fertility at a constant level (data not shown).

Despite the fact that the two scenarios shown do not assume either international migration or intragenerational ethnic mobility for the Inuit, and therefore assume that Inuit population growth would be solely due to the interplay of births and deaths, the Inuit population would grow at a more rapid rate than the non-Aboriginal population between now and 2031 (Figure 15). This is a continuation of past trends. The average annual growth rate would be between 1.3% and 1.5% during the period from 2006 to 2031, compared to 1.0% for non-Aboriginal people. It would also be higher than the rates for North American Indians and Métis if these groups ceased in 2006 to benefit from the ethnic mobility phenomenon. This is because the Inuit's rate of natural increase would remain the highest of the three Aboriginal identity groups.

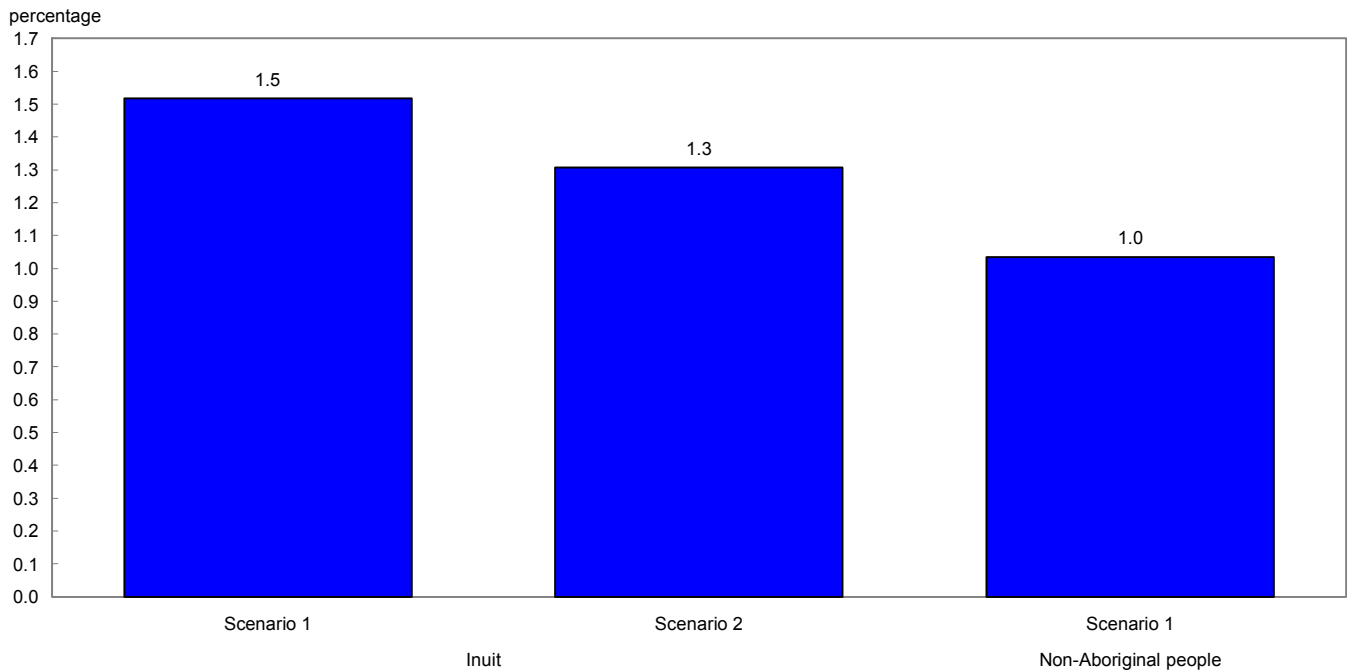


**Figure 14**  
**Inuit identity population, Canada, 1996 to 2031, two projection scenarios**



**Sources:** Statistics Canada, Demography Division, for 2006 to 2031; author's calculations based on Statistics Canada. 2005. *Projections of the Aboriginal Populations, Canada, provinces et territoires, 2001-2017*, Statistics Canada Catalogue no. 91-547 and Verma, Ravi. 2005. "Evaluation of Projections of Populations for the Aboriginal Identity Groups in Canada, 1996 to 2001", in *Canadian Studies in Population*, volume 32, no. 2 for 1996 and 2001.

**Figure 15**  
**Average annual growth rate of Inuit identity population and non-Aboriginal population, Canada, 2006 to 2031, two projection scenarios**



**Source:** Statistics Canada, Demography Division.

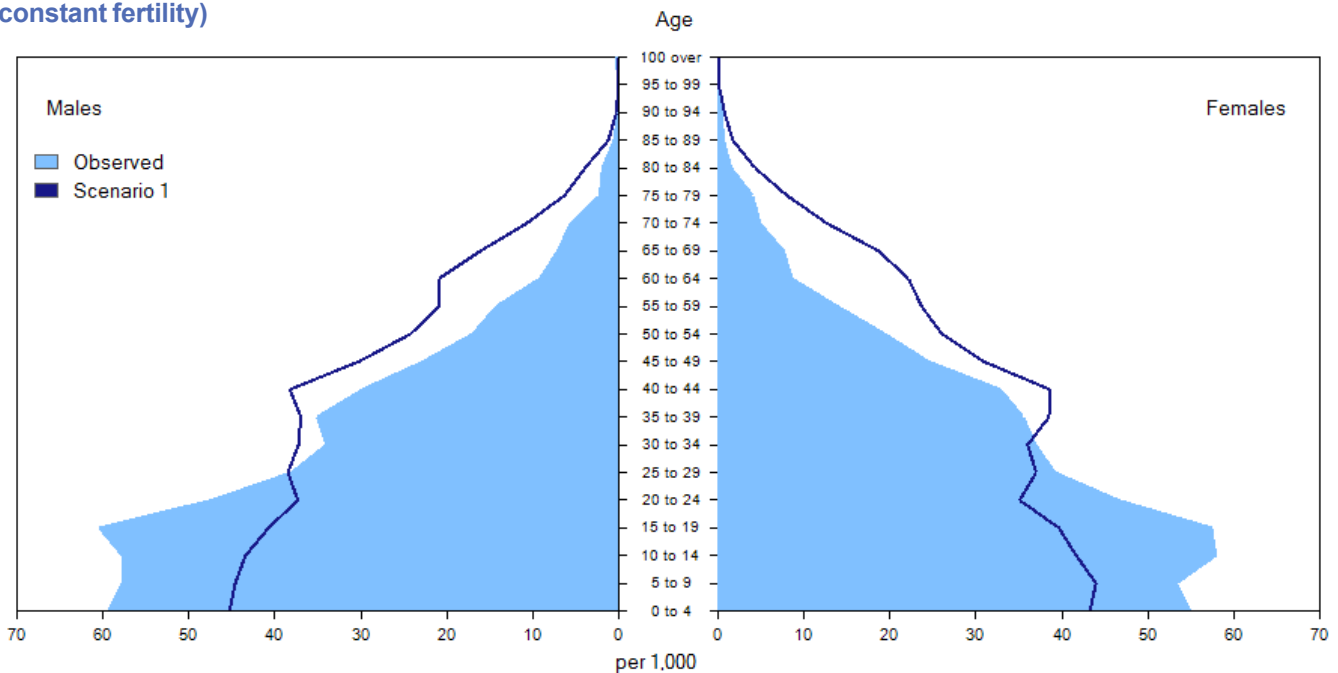
#### 4.4.1 Age structure of the Inuit population

In 2006, the Inuit were the youngest Aboriginal identity group with a median age of 22.0 years, nearly three years lower than that of North American Indians (25.3). This reflects a demography characterized over a long period by high fertility and high mortality, both of which are higher than those of all other groups projected (see Section 2).

A quarter of a century later, in 2031, the Inuit population, like the North American Indian and Métis populations, would have aged (Figure 16), but would remain younger than the other Aboriginal identity groups as well as the non-Aboriginal population. Thus, among the Inuit, the proportion of young persons aged 0 to 14 would decline between the beginning and the end of the projection period, going from 34% in 2006 to a value between 23% and 26% in 2031, while the proportion of persons aged 65 and over could more than double, reaching between 8% and 9% depending on the assumptions selected. The Inuit population would age more rapidly under the assumption of converging fertility; its median age would reach 32.3 years in 2031 compared to 30.6 years if fertility were to remain at the recent level.

Figure 16

Inuit identity population by age group and sex, Canada, 2006 and 2031, scenario 1 (no ethnic mobility and constant fertility)



Source: Statistics Canada, Demography Division.

#### 4.4.2 Geographic distribution of the Inuit population

The Inuit population stands out from the rest of the population, including the other Aboriginal groups, in its geographic distribution within Canada. According to the 2006 Census of Population, slightly more than three-quarters of the Inuit in Canada (78%), or nearly 42,000 persons, resided in one of the four regions of Inuit Nunangat (see Box 1). Although the Inuit population is projected to grow relatively rapidly in the coming years, this would have little effect on its geographic distribution. According to the results of the two projection scenarios, 80% of the Inuit population would live in Inuit Nunangat in 2031, almost the same proportion as observed 25 years earlier (Table 10).

Table 10

Population counts and proportion of Inuit in selected regions, Canada, 2006 and 2031, two projection scenarios

Region	2006 (observed)		2031 (projected)			
	thousands	percentage	Scenario 1		Scenario 2	
			thousands	percentage	thousands	percentage
Live inside Inuit Nunangat	42	78.4	61	79.6	58	79.5
Live outside Inuit Nunangat	11	21.6	16	20.4	15	20.5

Source: Statistics Canada, Demography Division.

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## Conclusion

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The objective of this projection exercise was to draw a portrait of what the population of the Aboriginal identity groups in Canada—North American Indians, Métis and Inuit—might be in 2031, according to several growth scenarios. These scenarios take into account not only fertility, mortality and migration, but also ethnic mobility and other factors such as education and marital status. For this purpose, the Demosim microsimulation projection model was used. Beyond the fact that it takes a large number of characteristics into account, it also has the advantage of allowing the Aboriginal and non-Aboriginal populations to be projected simultaneously and coherently.

From the results presented in this report, it emerges that regardless of the scenario considered, the Aboriginal population as a whole and the populations that comprise it, namely the North American Indians, the Métis and the Inuit, would continue to grow between now and 2031. This growth would occur at a faster pace than for the non-Aboriginal population, except perhaps in the case of the Métis if the population gains due to ethnic mobility were to cease. For the Métis population and, to a lesser extent, the North American Indian population, the scope of this growth is subject to great uncertainty owing to the difficulty of foreseeing how intragenerational ethnic mobility will evolve in the future.

The results of all scenarios also show that the populations of the three Aboriginal identity groups would remain younger than the non-Aboriginal population, despite the aging that Aboriginal populations would undergo between now and 2031. As for their geographic distribution, it would remain generally similar to what it was in 2006.

In preparing the prospective data contained in this report, care was taken to make the most of existing data sources. However, the available data have some limitations, especially related to coverage of the target populations, sample sizes and the data available. These limitations should be kept in mind when considering the results presented here, especially those at a small geographic scale.

Finally, it should be noted that this report contains the results of population projections rather than forecasts. In other words, the goal here was not to predict the future, but instead to have an idea of what would happen if the assumptions and scenarios chosen were to prove correct. In this sense, this was an exercise primarily intended to support the planning of public policies regarding Aboriginal populations, in light of how those populations might evolve in the coming decades.

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## Endnotes

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1. Since the concept of Aboriginal ancestry has undergone a number of changes in the past century, this historical comparison is made here only to show an order of magnitude. As well, the data shown in this introduction were not adjusted for net undercoverage, while the data presented later in this document were.
2. See Box 1 for a definition of these concepts
3. In this document and according to the wording of the question included in the 2006 Census, the expression “North American Indians” is used to refer to this population.
4. To be more precise, the rates used for Newfoundland and Labrador, Quebec and the Northwest Territories excluded Inuit Nunangat regions (see definition in Box 1). Specific rates were created for Inuit Nunangat as a whole and then applied to the residents of these regions.
5. The available information for the population living off reserve did not support another assumption.
6. The imputation was based on reserves of similar size enumerated in 2006 in the same province or, where possible, on data available in 2001 for reserves that had been enumerated at that time.
7. This category includes multiple Aboriginal responses as well as persons who, without reporting themselves as North American Indians, Métis or Inuit at question 18 of the 2006 Census, reported being Registered Indians or Treaty Indians at question 21, or members of an Indian band at question 20.
8. This makes for a total of 34 census metropolitan areas.
9. See the documentation on Modgen on the Statistics Canada website at Modgen (Model generator). For an overview of the use of microsimulations in the field of population projections, see Van Imhoff and Post (1997).
10. Demosim employs one module per simulated event.
11. This method associates young children (in this case, under one year of age) with the woman in the same census family who is the most likely to be the mother, and it considers this woman as having given birth recently (in this case, in the past year). See Grabill and Cho (1965) and Desplanques (1993) for a description of this method and Ram (2004) for an example of how it is applied for purposes of estimating the fertility of the Aboriginal populations in Canada.
12. Adjustments were made to the data in order to take account of the mortality of young children and women of childbearing age by Aboriginal identity, as well as the fact that some children were not living with their mother at the time of the census. Also, the 2006 Census data were adjusted for net undercoverage.
13. For non-Aboriginal people, the variables considered are immigrant status, immigration period, generation status, visible minority group, place of residence, place of birth, schooling, marital status and age.
14. Only children with an Aboriginal identity can be attributed Registered Indian status during simulation, which means that children are assigned identity prior to status.
15. Although this principle applies in the vast majority of cases, the analysis revealed a small number of registered children both of whose parents were non-registered as well non-registered children living with two registered parents. These numbers are taken into account in the projection.
16. This method is also used to project the mortality of the non-Aboriginal population under 25 years of age by province of residence.
17. For a description of this database, see Wilkins, Tjepkema, Mustard and Choinière (2008).
18. Since there was no question on Aboriginal identity in the 1991 Census, the latter was approximated using the variables available in 1991.
19. Data from the 1991 Census mortality follow-up database show only very small differences between Registered Indians and non-registered North American Indians regarding mortality beyond age 25. Accordingly, the assumption of a match between the mortality of Registered Indians and that of North American Indians overall seems reasonable.
20. Projection for Canada as a whole is carried out in the same way as for the population aged 25 and over.

21. The variables used differ from one region to another, based on population size and the composition of the region.
22. A number of actions were taken to offset the limitations of the data used. For example, the model makes no provision for migration in some regions where the numbers of migrants were insufficient, as well as for incompletely enumerated reserves, whose population was imputed. Additionally, despite the fact that models of internal migration were created so as to be able to simulate the migratory movements of the population as a whole, methodological choices were made with a view to optimizing the migration of Aboriginal peoples by assigning a special value to the variables and geography associated with Aboriginal populations.
23. Total fertility rates based on the 2000/2001 Census were 2.7 for Inuit women, 2.5 for North American Indian women and 1.7 for Métis women, compared with 1.5 for the rest of the population.
24. Actually, almost constant. It is assumed that for the overall population of Canada, a total fertility rate (TFR) of 1.7 children per woman is reached in 2009, in accordance with the medium assumption of the *Projections of the Diversity of the Canadian Population, 2006 to 2031*.
25. However, changes in the socioeconomic composition of the projected populations may cause fertility gaps to vary, even if all the parameters are held constant. This also applies to other components, such as mortality.
26. Controlling for all variables (see the section on methods) included in the internal migration models.
27. Data are from: US Census Bureau, American Community Survey, 2006 Data profile: DP-5, accessed using American Fact Finder; Australian Bureau of Statistics, 2006 Census tables, Catalogue no. 2068.0; Statistics New Zealand, Quick Stats about Culture and Identity.
28. For purposes of comparability, the historical analysis presented here does not extend earlier than 1996, the year of the first census for which data on Aboriginal identity was released by Statistics Canada.
29. It should be noted here that another factor, taken into account in all of the scenarios, would have a “rejuvenating” influence on the age structure of the North American Indian population: intergenerational ethnic mobility, which is generally favourable to this group. Since there are more children with a North American Indian identity who are born of a mother with another identity than children with another identity who are born of a North American Indian mother, this phenomenon results in a net gain for North American Indians, contributing to the youthfulness of this population group. This phenomenon has a similar effect for the Métis.
30. The results for the Brantford area should be interpreted with great caution, since in 2006 a sizable portion of the population of that area was estimated using a model and then imputed into the file that constituted the basis for these projections (see Section 1). This is because the population of Six Nations (Part) 40, an Indian reserve located in the Brantford CMA, was not enumerated in 2006. More information on incompletely enumerated reserves is available on the Statistics Canada website: [http://www12.statcan.gc.ca/census-recensement/2006/ref/rp-guides/rp/coverage-couverture/cov-couv\\_p12-eng.cfm#a12\\_2\\_3](http://www12.statcan.gc.ca/census-recensement/2006/ref/rp-guides/rp/coverage-couverture/cov-couv_p12-eng.cfm#a12_2_3).
31. This section reports results for the population living in the provinces only.
32. The proportions of North American Indians living on reserve that are presented in this report must be interpreted with caution, in particular because of the nature of the adjustment for net undercoverage, which was done in order to constitute the base population (see Section 1). These projections assume that net undercoverage of North American Indians living off reserve is identical by age, sex and place of residence with that of the overall population, while a specific adjustment is made for Indian reserves. If the net undercoverage of North American Indians living off reserve should prove to be greater than that of the rest of the population, the proportions presented might be slightly overestimated.
33. The differences observed between provinces regarding population growth on-reserve can be partially explained by uneven internal migrations flows. As specified earlier in this document, on-reserve migration is allowed only for regions where the on-reserve population is large enough to model in and out-migrations flows. In other regions, the on-reserve population is simply considered as a “closed population”, that is, a population where internal migration is not allowed. As the proportion of the population living in these “closed” reserves varies from one province to the next, the growth related to internal migration also varies from one province to the next.
34. For this reason—lack of gains from intragenerational ethnic mobility—only the two projection scenarios that assume no ethnic mobility (scenarios 1 and 2) are dealt with in this section.

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## Bibliography

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- Boucher, Alexandre, Norbert Robitaille and Éric Guimond. 2009. "La mobilité ethnique intergénérationnelle des enfants de moins de 5 ans chez les populations autochtones, Canada, 1996 et 2001", in *Cahiers québécois de démographie*, volume 38, no. 2.
- Charbonneau, Hubert. 1984. "Trois siècles de dépopulation amérindienne", in Normandeau, Louise and Victor Piché (dir.), *Les populations amérindiennes et inuit du Canada. Aperçu démographique*, Presses de l'Université de Montréal.
- Cooke, Martin and Danielle Bélanger. 2006. "Migration Theories and First Nations Mobility: Towards a System Perspective", in *Canadian review of Sociology and Anthropology*, 43(2).
- Desplanques, Guy. 1993. "Mesurer les disparités de fécondité à l'aide du seul recensement", *Population*, volume 48, no. 6.
- Dion, Patrice and Simon Coulombe. 2008. "Study: Portrait of the mobility of Canadians in 2006: Trajectories and characteristics of migrants", in *Report on the Demographic Situation in Canada, 2005-2006*, Statistics Canada Catalogue no. 91-209.
- Grabill, Wilson R. and Lee Jay Cho. 1965. "Methodology for the Measurement of Current Fertility from Population Data on Young Children", *Demography*, volume 2, no. 1.
- Guimond, Éric. 1999. "Ethnic mobility and the demographic growth of Canada's aboriginal populations from 1986 to 1996", in *Report on the Demographic Situation in Canada, 1998-1999*, Statistics Canada Catalogue no. 91-209.
- Guimond, Éric. 2003. "Fuzzy Definitions and Population Explosion: Changing Identities of Aboriginal Groups in Canada", in Newhouse, D. and Peters, E. J., editors, *Not strangers in these parts: Urban Aboriginal peoples*, Policy Research Initiative, Government of Canada.
- Guimond, Éric and Norbert Robitaille. 2009. "*Mères à l'adolescence : analyse de la fécondité des indiennes inscrites âgées de 15 à 19 ans, 1986 à 2004*", in *Cahiers québécois de démographie*, volume 38 (2).
- Guimond, Éric, Norbert Robitaille and Sacha Sénécal. 2009. "Les Autochtones du Canada : une population aux multiples définitions", in *Cahiers québécois de démographie*, volume 38 (2).
- Lebel, André, Éric Caron Malenfant and Éric Guimond. 2011. "Mobilité ethnique des Autochtones dans le modèle de projection Demosim", Power Point presented at the symposium of the Association des démographes du Québec within the context of the 2011 congress of l'ACFAS (Sherbrooke).
- Li, Nan and Ronald Lee. 2005. "Coherent Mortality Forecast for a Group of Populations: An Extension of the Lee-Carter Method", in *Demography*, volume 42, no. 3.
- Norris, Mary Jane and Stewart Clatworthy. 2003. "Aboriginal mobility and migration within urban Canada: Outcomes and implications", in Newhouse, D. and Peters, E. J., editors, *Not strangers in these parts: Urban Aboriginal peoples*, Policy Research Initiative, Government of Canada.
- Ram, Bali. 2004. "New Estimates of Aboriginal Fertility, 1966-1971 to 1996-2001", in *Canadian Studies in Population*, volume 31 (2).
- Romaniuc, Anatole. 2003. "Aboriginal Population of Canada: Growth Dynamics under Conditions of Encounter of Civilizations", in *Canadian Studies in Population*, volume 30 (1).
- Statistics Canada. 2010. *Projections of the Diversity of the Canadian Population, 2006-2031*, Statistics Canada Catalogue no. 91-551.
- Statistics Canada. 2008-1. "2006 Census: Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census", *2006 analysis series*, Statistics Canada Catalogue no. 97-558.

- Statistics Canada. 2008-2. "Canada's Ethnocultural Mosaic, 2006 Census: Findings", *2006 analysis series*, Statistics Canada Catalogue no. 97-562.
- Statistics Canada. 2007. *2006 Census Dictionary*, Statistics Canada Catalogue no. 92-566.
- Statistics Canada. 2005. *Projections of the Aboriginal Populations, Canada, provinces et territoires, 2001-2017*, Statistics Canada Catalogue no. 91-547.
- Statistics Canada. 2003. "Aboriginal peoples of Canada: A demographic profile", *Analysis series, 2001 Census*, Statistics Canada Catalogue no. 96F0030.
- Van Imhoff, Evert and Wendy Post. 1997. "Méthodes de microsimulation pour des projections de population", in *Population* (52), no. 4.
- Verma, Ravi, Margaret Michalowski and Pierre R. Gauvin. 2004. "Abridged life tables for Registered Indians in Canada, 1976-1980 to 1996-2000", in *Canadian Studies in Population*, volume 31, 2.
- Verma, Ravi. 2005. "Evaluation of Projections of Populations for the Aboriginal Identity Groups in Canada, 1996 to 2001", in *Canadian Studies in Population*, volume 32, no. 2.
- Tjepkema, Michael and Russell Wilkins. 2011. "Remaining life expectancy at age 25 and probability of survival to age 75, by socio-economic status and Aboriginal ancestry", in *Health Reports*, volume 22, no. 4.
- Wilkins, Russell, Michael Tjepkema, Cameron Mustard and Robert Choinière. 2008. "The Canadian census mortality follow-up study 1991 through 2001", in *Health Reports*, volume 19, no. 3.
- Wilkins, Russell, Sharanjit Uppal, Philippe Finès, Sacha Sénécal, Éric Guimond and René Dion. 2008. "Life expectancy in the Inuit-inhabited areas of Canada, 1989 to 2003", in *Health Reports*, volume 19, no. 1.

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**Appendix**  
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**Table A1**

**Population and average annual growth rate by Aboriginal identity, Canada, 2006 and 2031, four projection scenarios**

Aboriginal identity	2006		2031 (projected)							
	(observed)		Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	Population	Population	Annual growth	Population	Annual growth	Population	Annual growth	Population	Annual growth	
	thousands	thousands	%	thousands	%	thousands	%	thousands	%	
Aboriginal identity population <sup>1</sup>	1,279	1,734	1.2	1,682	1.1	2,220	2.2	2,168	2.1	
North American Indian	785	1,115	1.4	1,071	1.2	1,248	1.9	1,205	1.7	
Métis	404	510	0.9	506	0.9	863	3.1	858	3.1	
Inuit	53	77	1.5	73	1.3	77	1.5	73	1.3	
Non-Aboriginal identity population	31,243	40,409	1.0	40,403	1.0	39,924	1.0	39,918	1.0	

1. Including other Aboriginal people.

Source: Statistics Canada, Demography Division.

**Table A2**

**Age structure indicators of the population by Aboriginal identity, Canada, 2006 and 2031, four projection scenarios**

Aboriginal identity	Indicators	2006 (observed)	2031 (projected)			
			Scenario 1	Scenario 2	Scenario 3	Scenario 4
Aboriginal identity population <sup>1</sup>	0 to 14 years (%)	28.9	22.5	20.6	21.2	19.7
	65 years and over (%)	4.7	14.5	15.0	15.1	15.4
	Median age	26.6	35.0	36.1	35.9	36.7
North American Indian	0 to 14 years (%)	31.0	24.2	21.7	23.5	21.3
	65 years and over (%)	4.5	12.8	13.4	13.1	13.5
	Median age	25.3	32.8	34.3	33.4	34.6
Métis	0 to 14 years (%)	24.6	19.4	18.8	18.0	17.6
	65 years and over (%)	5.1	18.2	18.3	18.0	18.1
	Median age	29.4	39.0	39.3	39.3	39.5
Inuit	0 to 14 years (%)	34.1	26.2	23.0	26.2	23.0
	65 years and over (%)	3.7	8.5	8.9	8.5	8.9
	Median age	22.0	30.6	32.3	30.6	32.3
Non-Aboriginal identity population	0 to 14 years (%)	16.9	16.5	16.5	16.5	16.5
	65 years and over (%)	13.6	23.3	23.3	23.4	23.4
	Median age	39.4	43.1	43.1	43.1	43.1

1. Including other Aboriginal people.

Source: Statistics Canada, Demography Division.

Table A3.1

 Population by Aboriginal identity, place of residence and projection scenario, Canada, 2006 and 2031  
 (2006 - Base population)

Place of residence	Aboriginal identity population						Non-Aboriginal population
	Total	Total - Aboriginal identity population	North American Indian	Métis	Inuit	Other Aboriginal people <sup>1</sup>	
thousands							
Total	32,522	1,279	785	404	53	36	31,243
St. John's	183	2	1	1	0	0	181
Rest of Newfoundland and Labrador	327	22	7	6	5	4	305
Prince Edward Island	138	2	1	0	0	0	136
Halifax	384	6	3	2	0	0	379
Rest of Nova Scotia	554	20	13	6	0	1	534
Moncton	130	1	1	0	0	0	128
Saint John	125	1	1	0	0	0	124
Rest of New Brunswick	491	16	11	4	0	1	476
Saguenay	153	3	1	1	0	0	150
Québec <sup>2</sup>	723	5	3	1	0	0	718
Sherbrooke	188	1	1	0	0	0	187
Trois-Rivières	142	1	1	0	0	0	141
Montréal <sup>2</sup>	3,680	29	21	6	1	1	3,651
Ottawa-Gatineau (Québec part)	287	8	4	3	0	1	279
Rest of Québec <sup>2</sup>	2,450	80	52	15	11	2	2,370
Ottawa-Gatineau (Ontario part)	880	14	7	5	1	1	867
Kingston	158	4	2	1	0	0	155
Peterborough	121	4	2	1	0	0	117
Oshawa	343	5	3	2	0	0	338
Toronto	5,320	28	18	8	0	1	5,292
Hamilton	719	9	7	2	0	0	709
St. Catharines-Niagara	404	7	5	2	0	0	397
Kitchener-Cambridge-Waterloo	470	5	3	1	0	0	465
Brantford <sup>2</sup>	135	10	9	1	0	0	125
Guelph	132	1	1	0	0	0	131
London	476	6	5	1	0	0	469
Windsor	336	6	3	2	0	0	330
Barrie	184	4	2	2	0	0	181
Greater Sudbury	164	10	4	6	0	0	154
Thunder Bay	127	11	8	3	0	0	117
Rest of Ontario <sup>2</sup>	2,671	145	100	40	0	4	2,526
Winnipeg	711	71	27	42	0	1	641
Rest of Manitoba	471	118	84	32	0	1	354
Regina	198	18	10	7	0	0	181
Saskatoon	238	22	12	10	0	0	216
Rest of Saskatchewan <sup>2</sup>	555	113	79	32	0	2	441
Calgary <sup>2</sup>	1,118	29	12	15	0	1	1,090
Edmonton	1,069	55	24	29	1	1	1,014
Rest of Alberta <sup>2</sup>	1,222	123	75	45	1	2	1,099
Kelowna	167	6	3	3	0	0	160
Vancouver	2,181	42	25	16	0	2	2,139
Victoria <sup>2</sup>	339	12	7	4	0	0	328
Abbotsford-Mission	164	6	3	3	0	0	158
Rest of British Columbia	1,384	143	102	37	0	4	1,241
Yukon	32	8	7	1	0	0	24
Northwest Territories	43	23	14	4	4	0	21
Nunavut	31	26	0	0	26	0	5

1. This category includes people who reported multiple Aboriginal responses as well as persons who, without reporting themselves as North American Indians, Métis or Inuit at question 18 of the 2006 Census, reported being Registered Indians or Treaty Indians at question 21, or members of an Indian band at question 20.

2. Region including partially enumerated reserves in 2006. Interpret with caution.

Source: Statistics Canada, Demography Division.

Table A3.2

Population by Aboriginal identity, place of residence and projection scenario, Canada, 2006 and 2031 (2031 - Scenario 1 - No ethnic mobility and constant fertility)

Place of residence	Aboriginal identity population						Non-Aboriginal population
	Total	Total - Aboriginal identity population	North American Indian	Métis	Inuit	Other Aboriginal people <sup>1</sup>	
	thousands						
Total	42,143	1,734	1,115	510	77	32	40,409
St. John's	172	2	1	1	0	1	170
Rest of Newfoundland and Labrador	255	18	6	5	5	2	237
Prince Edward Island	135	2	1	1	0	0	133
Halifax	428	8	4	3	0	0	419
Rest of Nova Scotia	500	23	17	6	0	0	477
Moncton	135	1	1	0	0	0	134
Saint John	117	1	1	0	0	0	116
Rest of New Brunswick	448	17	13	3	0	0	432
Saguenay	135	2	1	1	0	0	133
Québec <sup>2</sup>	698	6	4	2	0	0	692
Sherbrooke	203	2	1	1	0	0	201
Trois-Rivières	147	1	1	0	0	0	146
Montréal <sup>2</sup>	4,965	44	30	12	1	1	4,921
Ottawa-Gatineau (Québec part)	344	12	6	5	0	0	332
Rest of Québec <sup>2</sup>	2,362	111	72	22	16	2	2,251
Ottawa-Gatineau (Ontario part)	1,245	16	9	6	1	1	1,229
Kingston	175	5	4	2	0	0	170
Peterborough	128	5	4	1	0	0	122
Oshawa	456	7	4	2	0	0	449
Toronto	8,941	35	20	13	1	1	8,906
Hamilton	913	13	9	4	0	0	900
St. Catharines-Niagara	431	9	7	2	0	0	422
Kitchener-Cambridge-Waterloo	598	7	5	2	0	0	591
Brantford <sup>2</sup>	161	13	12	1	0	0	148
Guelph	164	1	1	0	0	0	163
London	549	10	6	2	0	0	539
Windsor	479	6	3	2	0	0	473
Barrie	248	6	3	2	0	0	242
Greater Sudbury	169	15	7	7	0	0	154
Thunder Bay	127	18	13	5	0	1	109
Rest of Ontario <sup>2</sup>	2,882	182	131	48	1	3	2,700
Winnipeg	880	103	52	49	0	1	777
Rest of Manitoba	489	154	116	36	0	1	335
Regina	211	25	15	9	0	0	186
Saskatoon	258	32	19	12	0	1	226
Rest of Saskatchewan <sup>2</sup>	542	171	130	39	0	2	372
Calgary <sup>2</sup>	1,911	45	21	23	1	1	1,866
Edmonton	1,550	83	41	40	1	2	1,467
Rest of Alberta <sup>2</sup>	1,499	170	113	54	1	2	1,329
Kelowna	210	8	4	4	0	0	202
Vancouver	3,469	56	33	21	1	1	3,413
Victoria <sup>2</sup>	406	15	9	6	0	0	391
Abbotsford-Mission	216	7	3	3	0	0	209
Rest of British Columbia	1,662	195	143	47	1	4	1,467
Yukon	36	8	6	1	0	0	28
Northwest Territories	48	25	15	3	6	0	23
Nunavut	45	39	0	0	38	0	6

1. This category includes people who reported multiple Aboriginal responses as well as persons who, without reporting themselves as North American Indians, Métis or Inuit at question 18 of the 2006 Census, reported being Registered Indians or Treaty Indians at question 21, or members of an Indian band at question 20.

2. Region including partially enumerated reserves in 2006. Interpret with caution.

Source: Statistics Canada, Demography Division.

Table A3.3

Population by Aboriginal identity, place of residence and projection scenario, Canada, 2006 and 2031 (2031 - Scenario 2 - No ethnic mobility and converging fertility)

Place of residence	Aboriginal identity population						Non-Aboriginal population
	Total	Total - Aboriginal identity population	North American Indian	Métis	Inuit	Other Aboriginal people <sup>1</sup>	
thousands							
Total	42,085	1,682	1,071	506	73	32	40,403
St. John's	172	2	1	1	0	1	170
Rest of Newfoundland and Labrador	255	18	6	5	5	2	237
Prince Edward Island	136	2	1	1	0	0	133
Halifax	427	8	4	3	0	0	419
Rest of Nova Scotia	499	22	16	6	0	0	477
Moncton	135	1	1	0	0	0	134
Saint John	117	1	1	0	0	0	116
Rest of New Brunswick	448	16	12	3	0	0	432
Saguenay	135	2	1	1	0	0	133
Québec <sup>2</sup>	698	6	4	2	0	0	692
Sherbrooke	203	2	1	1	0	0	201
Trois-Rivières	148	2	1	0	0	0	146
Montréal <sup>2</sup>	4,964	43	29	12	1	1	4,921
Ottawa-Gatineau (Québec part)	344	11	6	5	0	0	332
Rest of Québec <sup>2</sup>	2,359	108	70	21	15	2	2,251
Ottawa-Gatineau (Ontario part)	1,245	16	9	6	1	1	1,228
Kingston	175	5	4	1	0	0	170
Peterborough	127	5	4	1	0	0	122
Oshawa	456	7	4	2	0	0	449
Toronto	8,940	34	20	13	1	1	8,906
Hamilton	913	13	8	4	0	0	900
St. Catharines-Niagara	431	9	7	2	0	0	422
Kitchener-Cambridge-Waterloo	598	7	5	2	0	0	590
Brantford <sup>2</sup>	160	13	12	1	0	0	148
Guelph	164	1	1	0	0	0	163
London	549	9	6	2	0	0	539
Windsor	479	6	3	2	0	0	473
Barrie	248	6	3	2	0	0	242
Greater Sudbury	169	15	7	7	0	0	154
Thunder Bay	126	17	12	5	0	1	109
Rest of Ontario <sup>2</sup>	2,878	178	127	48	1	3	2,700
Winnipeg	876	99	49	48	0	1	776
Rest of Manitoba	483	148	110	36	0	1	335
Regina	210	23	14	9	0	0	186
Saskatoon	257	31	18	12	0	1	226
Rest of Saskatchewan <sup>2</sup>	531	160	120	38	0	2	371
Calgary <sup>2</sup>	1,910	44	20	22	1	1	1,865
Edmonton	1,547	81	39	39	1	2	1,466
Rest of Alberta <sup>2</sup>	1,494	166	108	54	1	2	1,328
Kelowna	210	8	3	4	0	0	202
Vancouver	3,468	55	32	21	1	1	3,413
Victoria <sup>2</sup>	405	15	8	6	0	0	391
Abbotsford-Mission	216	6	3	3	0	0	209
Rest of British Columbia	1,656	190	138	47	1	4	1,467
Yukon	36	8	6	1	0	0	28
Northwest Territories	47	24	15	4	6	0	23
Nunavut	43	37	0	0	36	0	6

1. This category includes people who reported multiple Aboriginal responses as well as persons who, without reporting themselves as North American Indians, Métis or Inuit at question 18 of the 2006 Census, reported being Registered Indians or Treaty Indians at question 21, or members of an Indian band at question 20.

2. Region including partially enumerated reserves in 2006. Interpret with caution.

Source: Statistics Canada, Demography Division.

Table A3.4

Population by Aboriginal identity, place of residence and projection scenario, Canada, 2006 and 2031 (2031 - Scenario 3 - Constant ethnic mobility and constant fertility)

Place of residence	Aboriginal identity population						Non-Aboriginal population
	Total	Total - Aboriginal identity population	North American Indian	Métis	Inuit	Other Aboriginal people <sup>1</sup>	
thousands							
Total	42,143	2,220	1,248	863	77	32	39,924
St. John's	172	5	2	2	0	1	168
Rest of Newfoundland and Labrador	255	23	8	9	5	2	232
Prince Edward Island	135	5	2	2	0	0	131
Halifax	428	13	6	6	0	0	414
Rest of Nova Scotia	500	33	20	12	0	0	467
Moncton	135	3	2	1	0	0	132
Saint John	117	3	2	1	0	0	114
Rest of New Brunswick	448	25	16	8	0	0	423
Saguenay	135	3	1	2	0	0	132
Québec <sup>2</sup>	698	10	6	4	0	0	688
Sherbrooke	203	3	1	1	0	0	200
Trois-Rivières	147	2	2	1	0	0	145
Montréal <sup>2</sup>	4,965	64	41	21	1	1	4,901
Ottawa-Gatineau (Québec part)	344	17	9	8	0	0	326
Rest of Québec <sup>2</sup>	2,362	135	86	32	16	2	2,228
Ottawa-Gatineau (Ontario part)	1,245	28	13	14	1	1	1,217
Kingston	175	8	5	3	0	0	167
Peterborough	128	7	4	2	0	0	120
Oshawa	456	13	6	6	0	0	443
Toronto	8,941	66	33	31	1	1	8,875
Hamilton	913	21	12	9	0	0	892
St. Catharines-Niagara	431	15	9	6	0	0	416
Kitchener-Cambridge-Waterloo	597	13	7	5	0	0	585
Brantford <sup>2</sup>	161	15	12	2	0	0	146
Guelph	164	3	1	1	0	0	161
London	549	15	8	6	0	0	533
Windsor	479	11	5	6	0	0	468
Barrie	248	10	4	6	0	0	238
Greater Sudbury	169	23	8	14	0	0	147
Thunder Bay	127	19	12	7	0	1	108
Rest of Ontario <sup>2</sup>	2,883	251	148	99	1	3	2,632
Winnipeg	880	122	49	72	0	1	757
Rest of Manitoba	489	172	122	48	0	1	317
Regina	211	27	14	13	0	0	184
Saskatoon	258	34	17	16	0	1	225
Rest of Saskatchewan <sup>2</sup>	543	180	132	45	0	2	363
Calgary <sup>2</sup>	1,910	68	24	42	1	1	1,842
Edmonton	1,550	105	44	59	1	2	1,444
Rest of Alberta <sup>2</sup>	1,499	204	120	81	1	2	1,294
Kelowna	210	13	5	8	0	0	197
Vancouver	3,469	80	36	42	1	1	3,389
Victoria <sup>2</sup>	406	24	12	12	0	0	382
Abbotsford-Mission	216	10	4	6	0	0	206
Rest of British Columbia	1,663	246	155	86	1	4	1,416
Yukon	36	8	6	1	0	0	27
Northwest Territories	48	25	15	4	6	0	23
Nunavut	45	39	0	0	38	0	6

1. This category includes people who reported multiple Aboriginal responses as well as persons who, without reporting themselves as North American Indians, Métis or Inuit at question 18 of the 2006 Census, reported being Registered Indians or Treaty Indians at question 21, or members of an Indian band at question 20.

2. Region including partially enumerated reserves in 2006. Interpret with caution.

Source: Statistics Canada, Demography Division.

Table A3.5

 Population by Aboriginal identity, place of residence and projection scenario, Canada, 2006 and 2031  
 (2031 - Scenario 4 - Constant ethnic mobility and converging fertility)

Place of residence	Aboriginal identity population						Non-Aboriginal population
	Total	Total - Aboriginal identity population	North American Indian	Métis	Inuit	Other Aboriginal people <sup>1</sup>	
thousands							
Total	42,086	2,168	1,205	858	73	32	39,918
St. John's	172	5	2	2	0	1	168
Rest of Newfoundland and Labrador	255	23	8	9	5	2	232
Prince Edward Island	136	5	2	2	0	0	131
Halifax	428	13	6	6	0	0	414
Rest of Nova Scotia	499	32	20	12	0	0	467
Moncton	135	3	1	1	0	0	132
Saint John	117	3	2	1	0	0	114
Rest of New Brunswick	448	25	16	8	0	0	423
Saguenay	135	3	1	2	0	0	132
Québec <sup>2</sup>	698	10	6	4	0	0	688
Sherbrooke	203	3	1	1	0	0	200
Trois-Rivières	147	2	2	1	0	0	145
Montréal <sup>2</sup>	4,964	63	40	21	1	1	4,901
Ottawa-Gatineau (Québec part)	344	17	9	8	0	0	326
Rest of Québec <sup>2</sup>	2,359	132	84	32	15	2	2,228
Ottawa-Gatineau (Ontario part)	1,245	28	13	14	1	1	1,217
Kingston	175	8	5	3	0	0	167
Peterborough	127	7	4	2	0	0	120
Oshawa	456	13	6	6	0	0	443
Toronto	8,940	66	32	31	1	1	8,874
Hamilton	913	20	11	9	0	0	892
St. Catharines-Niagara	431	15	8	6	0	0	416
Kitchener-Cambridge-Waterloo	597	12	7	5	0	0	585
Brantford <sup>2</sup>	160	14	12	2	0	0	146
Guelph	164	3	1	1	0	0	161
London	549	15	8	6	0	0	533
Windsor	479	11	5	6	0	0	468
Barrie	248	10	4	6	0	0	238
Greater Sudbury	169	22	8	14	0	0	146
Thunder Bay	126	19	11	7	0	1	108
Rest of Ontario <sup>2</sup>	2,879	247	145	99	1	3	2,632
Winnipeg	876	119	47	71	0	1	757
Rest of Manitoba	483	166	116	48	0	1	317
Regina	210	26	13	13	0	0	184
Saskatoon	257	33	16	16	0	1	224
Rest of Saskatchewan <sup>2</sup>	531	169	123	44	0	2	362
Calgary <sup>2</sup>	1,909	67	23	42	1	1	1,842
Edmonton	1,547	103	42	59	1	2	1,444
Rest of Alberta <sup>2</sup>	1,494	200	116	81	1	2	1,294
Kelowna	210	13	5	8	0	0	197
Vancouver	3,468	79	35	42	1	1	3,389
Victoria <sup>2</sup>	405	24	11	12	0	0	382
Abbotsford-Mission	216	10	4	6	0	0	206
Rest of British Columbia	1,657	241	150	86	1	4	1,416
Yukon	36	8	6	1	0	0	27
Northwest Territories	47	24	15	4	6	0	23
Nunavut	43	37	0	0	36	0	6

1. This category includes people who reported multiple Aboriginal responses as well as persons who, without reporting themselves as North American Indians, Métis or Inuit at question 18 of the 2006 Census, reported being Registered Indians or Treaty Indians at question 21, or members of an Indian band at question 20.

2. Region including partially enumerated reserves in 2006. Interpret with caution.

Source: Statistics Canada, Demography Division.

## Glossary

### Aboriginal identity

Refers to those persons who reported identifying with at least one Aboriginal group, that is, North American Indian, Métis or Inuit, and/or those who reported being a Treaty Indian or a Registered Indian, as defined by the *Indian Act* of Canada, and/or those who reported in the census that they were members of an Indian band or First Nation.

### Aboriginal peoples

See entry for Aboriginal identity.

### Age pyramid

Bar chart that shows the distribution of a population by age and sex.

### Base population

Population used as the starting point for a population projection.

### Census metropolitan area

A census metropolitan area (CMA) is an area consisting of one or more adjacent municipalities situated around a major urban core. It has a population of at least 100,000 and an urban core with a population of at least 50,000.

### Cohort

Represents a group of persons who have experienced a specific demographic event for a given period that may be one year. For example, the married cohort of 1966 consists of the number of persons who married in 1966. In the case of births, persons born within a specified year are referred to as a generation.

### Cohort component method

Method used for population estimates or projections which uses the components of demographic change and a base population as the input. The phrase “cohort component” is usually restricted to methods projecting the future evolution of cohorts by age and sex, as opposed to other methods such as microsimulation that also use components of population growth but where individuals’ demographic destiny is projected.

### Components of population growth

Each of the classes of events generating population changes.

### Ethnic mobility

Ethnic mobility is “the phenomenon by which individuals and families change their ethnic affiliation” [translation] (Guimond, 2003). Ethnic mobility has two components: intragenerational and intergenerational (Boucher, Robitaille and Guimond, 2009).

### Fertility

Demographic phenomenon in relation to live births which can be considered from the point of view of women, the couple and occasionally men.

### Generation status

Rank of the respondent’s generation since the settlement of his/her family (meaning direct ascendants) in Canada. Landed immigrants are the first generation; the second refers to non-immigrants born in Canada to at least one foreign-born parent; the following generations (third or more) consist of non-immigrants born in Canada of two parents also born in Canada.

### Highest level of schooling

Most advanced certificate, diploma or degree.

### Immigration

Sum of all entries into Canada of landed immigrants from other countries, involving a change in usual place of residence.



**Immigration rate**

Number of immigrants divided by the size of the population during a given period.

**Indian reserve**

Area consisting of one of the eight types of census subdivisions (CSDs) legally affiliated with First Nations or Indian bands, which includes Indian reserves, Indian settlements, Indian Government Districts, Terres réservées aux Cris, Terres réservées aux Naskapis, the Nisga'a village, the Nisga'a land and the Teslin land, as well as various other types of CSDs that are essentially communities in northern Saskatchewan that include large concentrations of Registered Indians. However, in this report, unlike in the 2006 Census, reserves do not include any CSDs in the territories.

**Intergenerational ethnic mobility**

Intergenerational ethnic mobility results from a change in ethnic affiliation between parents and their children, with the parent(s) not having the same ethnic affiliation as the child(ren).

**Internal migration**

Sum of all movements of persons within Canada's geographical boundaries, involving a change in usual place of residence.

**International migration**

Sum of all movements between Canada and a foreign country which involve a change in the usual place of residence.

**Interregional migration**

Sum of all movements between the 47 main geographic units included in the projection model, namely the census metropolitan areas and the rest of each province.

**Intragenerational ethnic mobility**

Intragenerational ethnic mobility results from a change in an individual's ethnic affiliation over time.

**Intraregional migration**

Sum of all movements from one geographic unit to another within a census metropolitan area (CMA) or non-CMA portion of a province.

**Inuit Nunangat**

Inuit Nunangat, which means "place where the Inuit live" and which was formerly known as Inuit Nunaat, includes four regions in northern Canada: 1) Nunavut, 2) Nunavik, located in northern Quebec, 3) the Inuvialuit region, mainly located in the Northwest Territories, and 4) Nunatsiavut, located in northern Labrador.

**Landed immigrant**

Person who has been granted the right to live in Canada permanently by immigration authorities.

**Life expectancy**

A statistical measure derived from the life table indicating the average number of years of life remaining for a population at a specific age  $x$ , if the people comprising that population would experience the mortality rates observed in a given year during their lives.

**Median age**

An age " $x$ ", such that exactly one half of the population is older than " $x$ " and the other half is younger than " $x$ ".

**Microsimulation**

Unlike population estimates and projections done using the cohort component method, microsimulation simulates the demographic destiny of individuals one by one. The method is based on multiple random drawing at the individual level rather than on aggregated data applied at the population group level.

**Migratory increase**

Change in the size of a population owing to the difference between the number of migrants who settle within a geographic area and the number of migrants who leave that same area during a given period.

**Natural increase**

Change in the size of a population owing to the difference between the number of births and the number of deaths during a given period.

**Net undercoverage**

Difference between the number of persons who were covered by the census but who were not enumerated (undercoverage) and the number of persons who were enumerated whereas they should not have been or who were enumerated more than once (overcoverage).

**Non-permanent residents**

Persons who had a Work or Study Permit or who were refugee claimants, and family members living in Canada with them.

**Person-year**

Total number of years lived in a given status by the individuals who make up the population from January 1 to December 31 of a given year. In this study, *projected* population figures are presented in person-years, while the figures for the *base* population are as of May 16, 2006 (Census Day).

**Population increase or total increase**

Change in the size of a population between two dates.

**Population projection**

Future population size resulting from a set of assumptions regarding the demographic and non-demographic components of growth.

**Projection scenario**

Set of assumptions relating to the components, demographic or otherwise, used to make a population projection.

**Registered or Treaty Indian**

Persons who reported, in the census, they were registered under the *Indian Act* of Canada. Treaty Indians are persons who are registered under the *Indian Act* and can prove descent from a Band that signed a treaty.

**Total emigration**

Number of emigrants minus the number of returning emigrants plus net temporary emigration.

**Total fertility rate**

Sum of age-specific fertility rates during a given year. It indicates the average number of children that a generation of women would have if, over the course of their reproductive life, they experienced the age-specific fertility rates observed during the year considered.

**Visible minority groups**

The *Employment Equity Act* defines visible minorities as “persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.”