

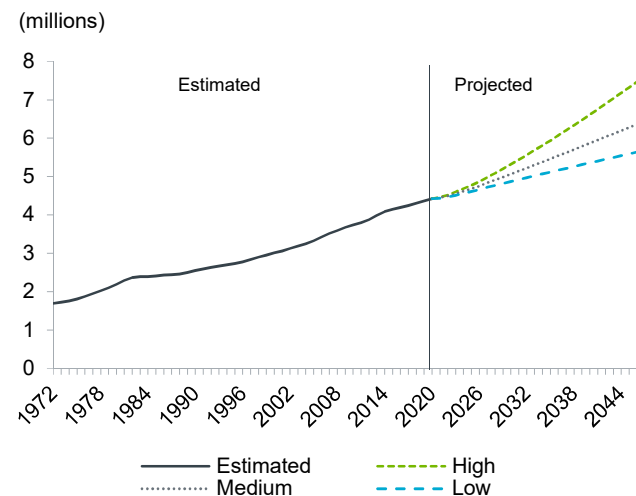
# Population Projections

## Methodology and Assumptions

### Introduction

Population projections for Alberta and each of its 19 census divisions are available for the period of 2021 to 2046 by age and sex. Three growth scenarios have been prepared (Figure 1). The medium growth scenario represents the most likely case, and is the reference scenario over the projection period. The high growth scenario anticipates higher levels of fertility and migration, as well as lower mortality rates, leading to higher population growth. The low scenario uses the mortality from the reference scenario, but considers lower fertility and migration, resulting in lower population growth over the projection period. Refer to Appendix 2 for a glossary of demographic terms.

**FIGURE 1: POPULATION OF ALBERTA, 1972-2046**



Source: Statistics Canada and Alberta Treasury Board and Finance

These projections represent a plausible progression of the population based on the current population base and assumptions regarding future demographic developments. The first decade of the projections are consistent with the economic outlook for the province. As long term projections are not strongly influenced by short term trends, the latter part of the projection follows a standard demographic approach, in which the assumptions reflect historical trends of fertility, mortality and migration. This methodological approach provides

planners and researchers with a more relevant set of projections, since Alberta's population growth can display considerable volatility due to economic cycles.

### Methodology and Assumptions

#### Component Cohort Survival Method

The cohort component method is used to project the expected growth, size and age/sex characteristics of the population. This method is essentially a demographic accounting system. It starts with a base-year population distributed by single years of age and sex. Everyone is aged year-by-year, then fertility, mortality and migration assumptions are applied to the base population to project the number of births, deaths, and migrants in subsequent years. Fertility and mortality rates are applied to the population after half of the projected number of migrants for the year have been included in the population. This gives some (but not all, or none) migrants a risk of dying or giving birth. Finally, the three components (births, deaths and migration) are either added to or subtracted from the base population to obtain the projected population. The population is broken down by sex and single years of age up to the open-ended age group of 90 years and over.

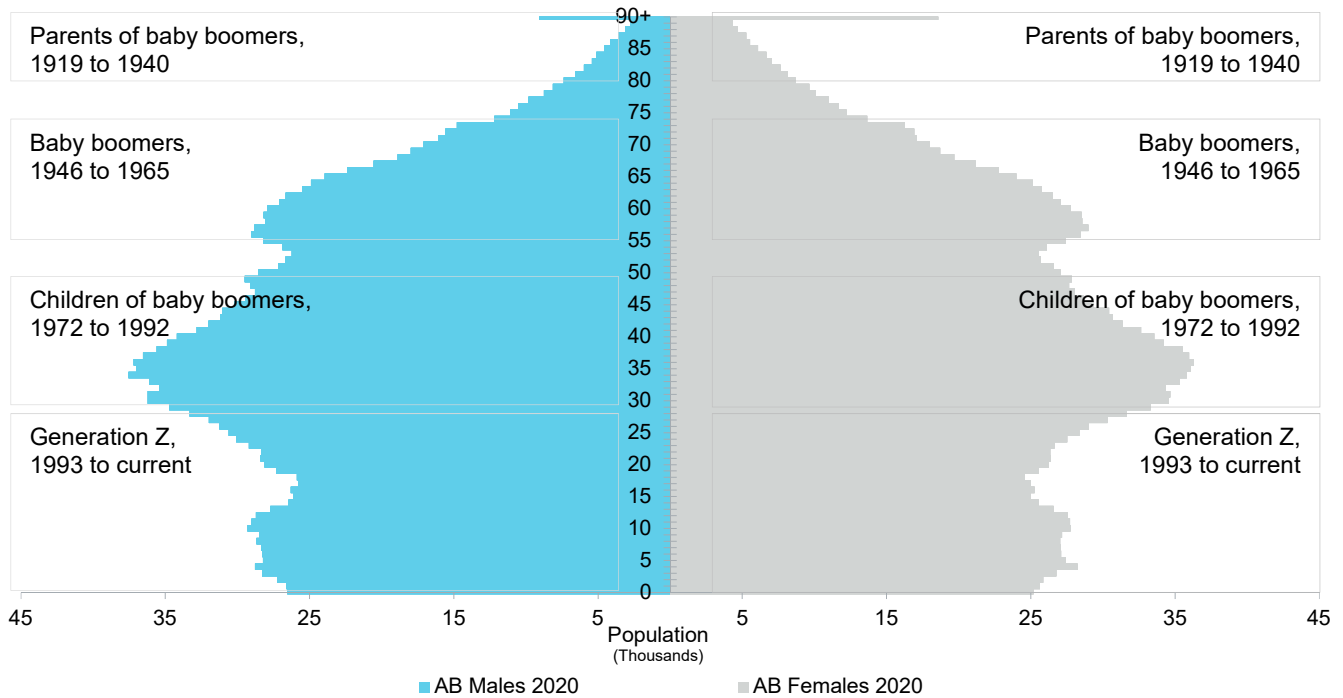
The population of Alberta is projected separately from its sub-provincial regions. The component methodology is applied to each of the 19 census divisions (CDs) in Alberta to ensure consistency and comparability. In order to account for regional differences, a unique set of fertility, mortality and migration assumptions is applied to each CD. The sum of the CD projections by age and sex cannot exceed the Alberta total; in this way the Alberta level projections function as a control total for the regional CDs. Two-way raking is used to ensure that the population and components of growth by CDs always add up to the Alberta total by age and sex.

#### The Base Population

The base population of the projection model is Statistics Canada's postcensal estimates of the population in Alberta and its 19 CDs as of July 1, 2020 (Figure 2). These estimates are based on the 2016 Census, adjusted for net census undercoverage and incompletely enumerated Indian Reserves.

**FIGURE 2: AGE/SEX POPULATION (THOUSANDS)**

Alberta as of July 1, 2020



Sources: Statistics Canada and Alberta Treasury Board and Finance

Note: Information boxes indicate generations in 2020.

Note that Statistics Canada’s population estimates only include the resident population, as defined by the census. A person must usually be living in a specific area to be considered a resident of that area. The definition of ‘usual residents’ includes non-permanent residents (NPRs)<sup>1</sup>, but does not include “mobile” or “shadow” populations, since these people retain a usual residence elsewhere (either outside of Alberta or in a different census division).

Statistics Canada revises the components of population growth annually to provide the best possible estimates. Since the assumptions for the components of growth tend to be based on historical trends, revisions can alter the trajectory of future growth by introducing changes to the historical patterns of those components. These revisions tend to impact some CDs more than others. Coupled with changes to the projection assumptions, revisions can result in higher or lower projected populations in 2046.

<sup>1</sup> NPRs are those temporarily residing in Canada with a study, work or minister’s permit, or as a refugee claimant, and family members living with them.

Revised estimates also provide a new starting point for the population by age and sex (i.e., the base year) and this can have a significant impact on the projected growth and age structure. Refer to Appendix 1 for July 1, 2020 population estimates for each CD.

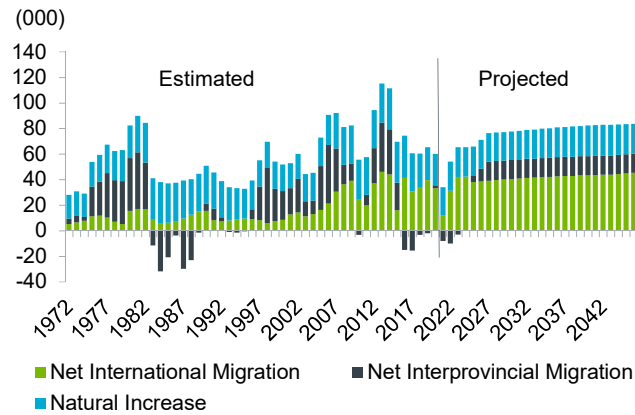
Every five years, revisions tend to be more substantial as the population estimates are rebased, or aligned, to the results of a new Federal census. For instance, rebasing the estimates to the 2016 Census lowered Alberta’s total midyear population by just over 40,000 people (i.e., as of July 1st, 2016). The effects on the age structure varied; the population aged 5 to 18 years was revised upwards by over 16,500 persons, while the number of adults aged 19 to 80 years was revised downwards by over 56,000 persons. The largest downward revisions were concentrated in the 20 to 39 year age group.

## Component Assumptions

In general, fertility and mortality assumptions are derived from detailed analyses of historical trends. Migration assumptions are also based on historical trends, as well as assumptions regarding the economic drivers of migration, such as job creation and industry development. This section presents a more detailed discussion of the historical trends and assumptions for each of the components of growth (Figure 3)<sup>2</sup>.

**FIGURE 3: COMPONENTS OF GROWTH**

Alberta, 1972-2046 (medium scenario)



Sources: Statistics Canada and Alberta Treasury Board and Finance

## Fertility Assumptions

The projected number of births for a given year are generated by applying age-specific fertility rates to the population of women in the reproductive ages of 15 to 49 years.

### Alberta

Alberta's total fertility rate (TFR) dropped below the population replacement level of 2.1 children per woman of childbearing age by the mid-1970s (Figure 4). Fertility ranged from a baby boom high of 4.4 children in 1959 and 1960 to a low of 1.6 children between 2018 and 2020. However, since the late 1970s, it has remained relatively stable when viewed in the larger historical context. Alberta's TFR was 1.6 children in 2020.

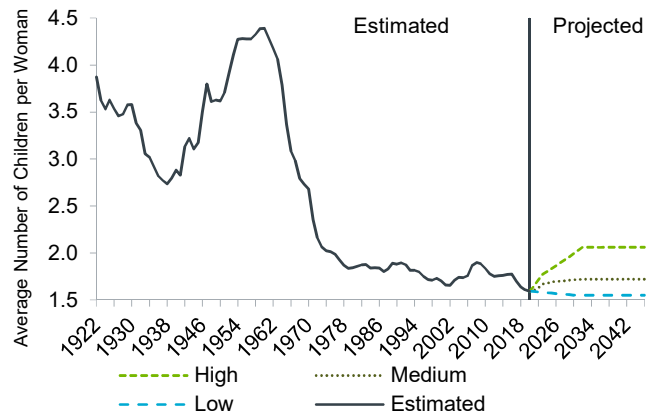
Under the medium scenario, the TFR is assumed to stabilize at 1.7 children. In the low scenario, the total fertility rate is projected to drop and stabilize at about 1.6. The new low fertility is based on Statistics Canada's (2018 to 2043) projected TFR's for Canada's medium scenario and Alberta's low growth scenario<sup>3</sup>.

<sup>2</sup> All references to specific years refer to a census year period (midyear to midyear), unless otherwise noted.

<sup>3</sup> Population Projections for Canada (2018 to 2068), Provinces and Territories (218 to 2043): Technical Report on Methodology and Assumptions. Statistics Canada catalogue no. 91-620-X.

**FIGURE 4: TOTAL FERTILITY RATE**

Alberta, 1922-2046



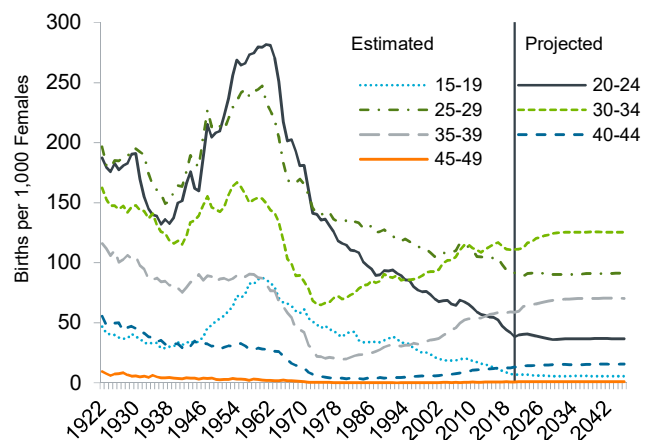
Sources: Statistics Canada and Alberta Treasury Board and Finance

Under the high scenario, the total fertility rate is assumed to rise gradually and stabilize at replacement level (i.e., 2.1 children).

Analysis of age specific fertility trends over time shows a long-term shift in the ages of childbearing among women in Alberta (Figure 5). A higher proportion of women are delaying childbearing and having their first child in their late 20s or early 30s, resulting in a drop in the fertility rates of young women and an increase in fertility among older women. This trend is projected to continue over the next decade, and then stabilize for the remainder of the projection period.

**FIGURE 5: AGE-SPECIFIC FERTILITY RATES**

Alberta, 1922-2046 (medium scenario)



Sources: Statistics Canada, Alberta Vital Statistics and Alberta Treasury Board and Finance

## Regional

There is considerable variation in the fertility rates among census divisions within the province. The TFR in 2020 ranged from highs of 3.5 children in CD 17 (Slave Lake) and 2.8 in CD 18 (Grande Cache) to a low of 1.2 in CD 15 (Banff). Fertility was at or above replacement in nine census divisions in 2020. Lower fertility areas where the TFR fell below the provincial rate of 1.6 included CD 11 (Edmonton), CD 6 (Calgary) and CD 15 (Banff) (Table 1).

**TABLE 1: ALBERTA AND CENSUS DIVISIONS**

TFR and Median Age of Births, 2020

	Major Community in Census Division	Total Fertility Rate	Median Age of Births
CD1	Medicine Hat	1.76	30.1
CD2	Lethbridge	1.82	29.8
CD3	Pincher Creek	2.67	28.7
CD4	Hanna	2.32	31.1
CD5	Drumheller	2.06	30.2
CD6	Calgary	1.41	32.5
CD7	Stettler	2.09	29.8
CD8	Red Deer	1.66	30.4
CD9	Rocky Mountain House	2.27	29.9
CD10	Camrose	1.98	30.1
CD11	Edmonton	1.51	31.6
CD12	Cold Lake	2.13	28.8
CD13	Whitecourt	2.17	29.7
CD14	Edson	1.90	31.0
CD15	Banff	1.16	32.8
CD16	Wood Buffalo	2.02	31.1
CD17	Slave Lake	3.46	27.5
CD18	Grande Cache	2.79	28.8
CD19	Grande Prairie	1.89	29.9
	<b>Alberta</b>	<b>1.59</b>	<b>31.5</b>

Sources: Statistics Canada, Alberta Vital Statistics and Alberta Treasury Board and Finance

Multiple factors likely contribute to the variability in regional fertility, including income levels, educational attainment, employment opportunities, and the proportion of Indigenous people in the population. For instance, since major urban centres such as Calgary and Edmonton tend to have more educational and career opportunities than other areas of Alberta, women living in and moving to these areas tend to reproduce later in life and have fewer children when compared with women in rural areas of the province.

Indigenous people tend to have higher fertility rates and larger family sizes than non-Indigenous people, resulting in higher fertility rates in areas where they account for a greater proportion of the overall population, such as

CD 3 (Pincher Creek), CD 12 (Cold Lake), CD 17 (Slave Lake) and CD 18 (Grande Cache).

In addition to the variation in overall fertility, there are also marked regional differences in the age patterns of fertility. The estimated median age of women who had a birth in 2020 ranged from a low of 27.5 years in CD 17 (Slave Lake) to a high of 32.8 years in CD 15 (Banff) (Table 1). As such, assumptions were developed for each region according to their own fertility characteristics, derived from historical trends, in order to maintain those regional differences.

## Mortality Assumptions

The projected number of deaths are a result of the application of age and sex specific mortality rates to the population in each year.

### Alberta

Due to the COVID-19 pandemic, mortality assumptions were adjusted upwards in 2021, affecting people aged 50 and older incrementally. This adjustment is to account for excess deaths due to COVID-19, as well as indirectly related deaths from the subsequent effects of the pandemic and restrictions. For example, there may be more deaths from other causes due to difficulties accessing medical care.

In 2020, male life expectancy at birth was 79.2 years, up from 70.7 in 1976. In contrast, female life expectancy in 2020 was 83.9 years, compared to 77.7 in 1976. Many of the large historical gains in life expectancy resulted from improvements in infant and child mortality. With the low mortality currently observed at these ages, future gains in life expectancy will likely be more concentrated at older ages (Figures 6 and 7). Projected age-specific mortality rates were derived from a method based on the Lee Carter model (1992).<sup>4</sup>

The model essentially breaks down the age-specific mortality rate (ASMR) into three components: an age-specific constant term, a time-varying mortality index, and an age-specific component that measures how fast mortality at each age varies when the mortality index changes. With the projected mortality index, ASMRs can be calculated for future periods.

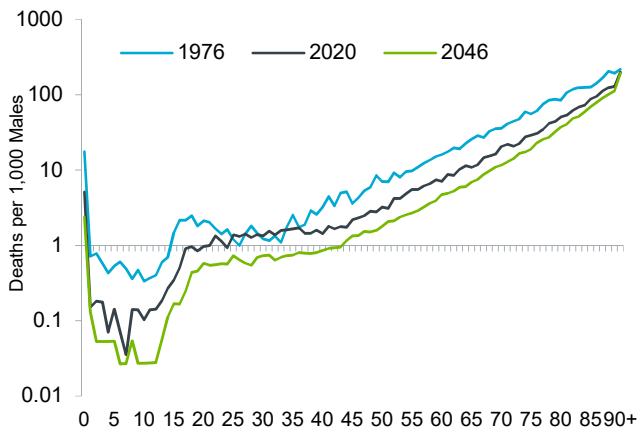
Two sets of mortality assumptions (low/medium and high) were developed. Under both scenarios, life expectancy at birth in Alberta is expected to continue its upward trend in the future.<sup>5</sup> Under the low/ medium scenario, life expectancy at birth for females is expected to gain

<sup>4</sup> Lee, Ronald D. and Lawrence Carter. 1992. "Modeling and forecasting the time series of U.S. mortality." *Journal of the American Statistical Association* 87 (419) (September): 659-671.

<sup>5</sup> Projected mortality assumptions have not taken into account any impact of the opioid crisis.

**FIGURE 6: AGE-SPECIFIC MORTALITY RATES**

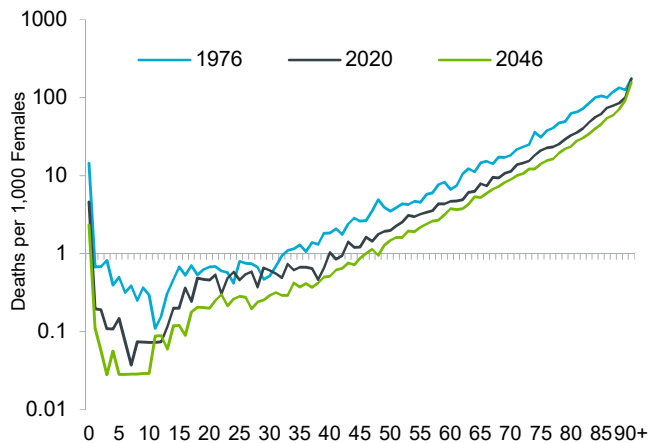
Males, Alberta (medium/low scenario)



Sources: Statistics Canada and Alberta Treasury Board and Finance

**FIGURE 7: AGE-SPECIFIC MORTALITY RATES**

Females, Alberta (medium/low scenario)



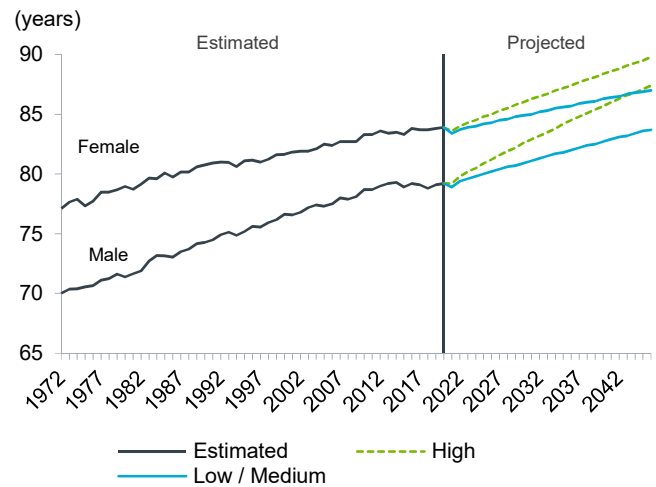
Sources: Statistics Canada and Alberta Treasury Board and Finance

3.1 years from its 2020 level to 87.0 by 2046, while it would increase by 4.5 years to 83.7 for males. The high population growth scenario introduces a lower mortality profile, wherein life expectancy at birth for females would reach 89.8 years in 2046 for a gain of 5.9 years. Compared to 2020, males would add 8.2 more years to their life expectancy for a total of 87.4 years by the end of the projection period under the high scenario (Figure 8).

Under both scenarios, male life expectancy at birth is assumed to increase at a faster pace than the life expectancy of females. This is consistent with recent historical trends, where males have experienced larger gains than females. Therefore, it is expected that the sex differential will continue to shrink over the projection period, falling from 4.7 years in 2020 to 3.3 and 2.4 years in 2046, under the medium/ low and high scenarios, respectively (Figure 8).

**FIGURE 8: LIFE EXPECTANCY AT BIRTH**

Alberta 1972-2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

**Regional**

The Lee Carter method requires a large number of events to ensure reliable results, and as such, could only be used at the Alberta level to produce a “mortality change factor”. The factor, which takes into account year-to-year changes in Alberta’s mortality by age and sex is subsequently applied to historical mortality by age and sex for each CD to produce region-specific projected ASMRs.

For each CD, ASMRs were calculated from the area’s historical data by averaging multiple years of data to stabilize the mortality trend. Final projected ASMRs were obtained by multiplying the Alberta level mortality change rates (from the Lee Carter model) by the CD-specific ASMRs for both females and males.

An adjustment was made to mortality assumptions between 2020 and 2021 in select regions to place more deaths in regions with higher COVID-19 deaths. This adjustment was based on year-to-date COVID-19 deaths at the time of production.

**Migration Assumptions**

Separate projections of international (movement from outside the country), interprovincial (movement between provinces and territories) and intraprovincial (movement between CDs) migration were created to produce the projected number of net migrants for Alberta and each CD. Assumptions about the age and sex distributions of net migrants were developed for each region based on its own historical data, as well as potential age structures of migrants in the future.





Alberta has faced some difficult economic challenges over the past six years. In 2014, a prolonged plunge in oil prices caused a downturn in economic activity. From 2015 to 2016, investment in oil and gas extraction declined in Alberta, causing employment and earnings to fall and the unemployment rate to rise. In 2017, Alberta's economy posted a strong recovery and continued to improve in 2018. Economic growth stagnated in 2019 due to challenges in the energy sector from transportation bottlenecks and slowing global economic growth. With conditions improving at the end of 2019, there was an expectation of a turnaround in activity and investment. However, the dual impact of the drop in oil prices in early 2020 and the COVID-19 pandemic had a negative impact on the economy. The economic outlook has improved since the lows of the recession. With the roll-out of vaccines, the economy is expected to gain momentum in the second half of 2021.

Over the medium term, Alberta's economy is expected to resume growth at a solid pace, supported by improvements in investment and consumer spending, and continued growth in exports.

Economic conditions in the province have a very strong effect on population growth because of the impact on migration patterns. The migration assumptions for this projection include short (2021 to 2023), medium (2024 to 2028), and long-term assumptions (2029 to 2046). Given the potential for economic conditions to change, fluctuations in migration flows may occur.

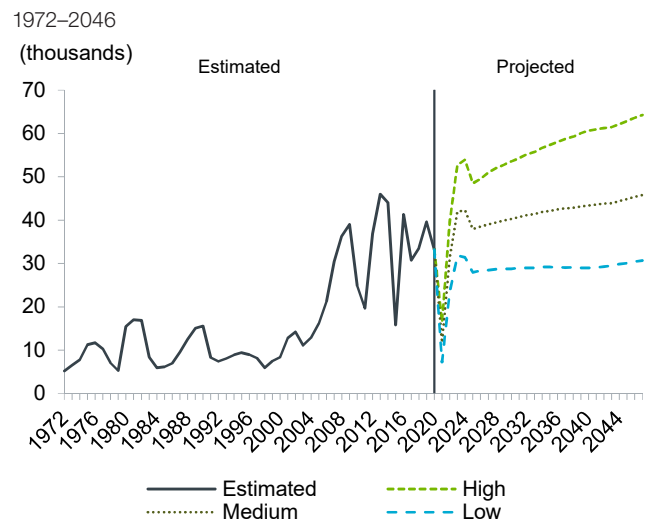
### International Migration

International migration is highly dependent on the Federal Government's immigration policies and increasingly on the Alberta economy. After hitting a low of 6.0% in 1998, Alberta's share of Canada's immigrants increased, due in large part to the province's strong economy and labour market. In 2016, a record 17.9% of immigrants moving to Canada settled in Alberta. In the following two years, this share decreased to 16.2% and 12.8%, respectively. This was mainly a result of the recession in Alberta and stronger economic growth in Ontario and BC. In 2019, immigration picked up again as Alberta's share hit 13.0%. Prior to the impacts of COVID-19, immigration levels had been expected to remain high as Canada's immigration plan increased immigration targets over the next three years.

The impacts of COVID-19 on international migration have been profound. The closing of international borders, along with limited availability of international flights and slower processing of new permanent resident applications slowed international migration substantially since April 2020. Muted immigration is expected to continue through 2021 due to COVID-19 restrictions.

Canada has further increased immigration targets to compensate for fewer arrivals throughout the pandemic. The new targets aim to welcome over 400,000 immigrants in each year from 2021 to 2023. In comparison, the previous targets were around 350,000 immigrants in each year. Due to the increase in federal targets, immigration to Alberta is forecast to make a rebound once international travel resumes, reaching a high in 2024 before returning to its long-term trend (Figure 9). Net emigration is expected to follow a similar pattern to that of immigration (i.e., reaching a low in 2021 and picking up afterwards).

**FIGURE 9: NET INTERNATIONAL MIGRATION TO ALBERTA**



Sources: Statistics Canada and Alberta Treasury Board and Finance

Non-permanent residents (NPRs) are heavily dependent on Federal government policies, as well as economic conditions. Due to Federal changes in the Temporary Foreign Worker (TFW) program in 2014 and Alberta's recession, the province experienced net outflows of NPRs between 2014 and 2018. A slight recovery to modest inflows was evident in 2019. COVID-19 impacted NPRs in multiple ways. Due to high unemployment caused by the pandemic, a policy was implemented to limit the types of TFWs allowed to work in Alberta. Furthermore, international travel restrictions limited the ability of international students to come to Canada. As a result of these factors, net outflows of NPRs are expected in 2021, before recovering and turning positive in 2023. After 2023, NPRs are forecast to stabilize to their long-term trend of being slightly positive.

Based on historical trends, three immigration scenarios have been developed to capture uncertainty and change within the context of immigration policy. Over the projection period, Alberta is expected to receive 1.23 million immigrants under the medium scenario, whereas under the high and low scenarios, the province

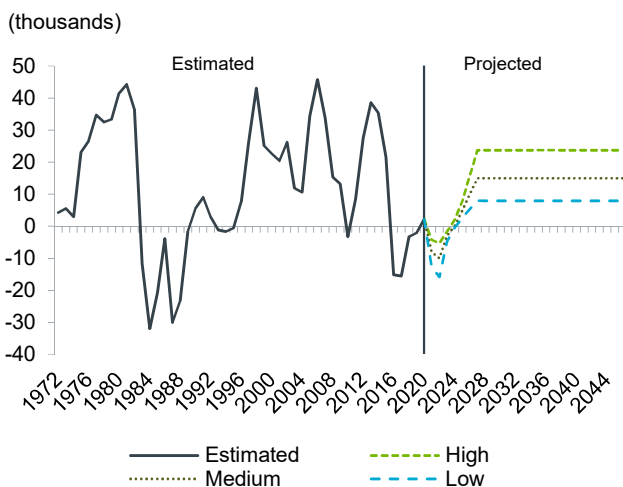
could welcome about 1.58 million and 917,000 people, respectively. Net emigration (i.e., emigrants minus returning emigrants plus net temporary emigrants) is assumed to increase gradually, as the number of international in-migrants increases and the province's population grows. Over the long term, the flow of net NPRs are expected to be slightly positive. In the high scenario, immigration is expected to lift net international migration higher than the historical average, while net international migration in the low scenario will remain below the levels of the last ten years (Figure 9). Between 2020 and 2046, Alberta is expected to receive close to 1.05 million net international migrants under the medium scenario. Under the high and low scenarios, about 1.42 million and 0.73 million net international migrants are projected to move to Alberta, respectively.

### Interprovincial Migration

Net interprovincial migration is strongly driven by Alberta's labour market and its economic performance relative to other provinces. Before the pandemic, Alberta was on a path to economic recovery and net interprovincial migration had just turned positive in 2020. However, the Alberta economy saw an unprecedented contraction in 2020. Since interprovincial migration lags economic conditions by about a year, 2021 and 2022 are expected to see net outflows as mobility picks up and people leave the province for economic opportunities elsewhere in the country. Between 2023 and 2026, net interprovincial migration is expected to increase as economic growth picks up in the province, before reaching its long-term trend by 2027 (Figure 10). The long-term average for the medium projection is about 15,000 net interprovincial migrants annually. The high and low scenarios project about 23,700 and 7,900 yearly interprovincial migrants, respectively (Figure 10).

**FIGURE 10: NET INTERPROVINCIAL MIGRATION**

Alberta, 1972–2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

Over the long term, the regions expected to see the largest net gains are CD 6 (Calgary), CD 8 (Red Deer), CD 11 (Edmonton), CD16 (Wood Buffalo) and CD 19 (Grande Prairie).

### Intraprovincial Migration

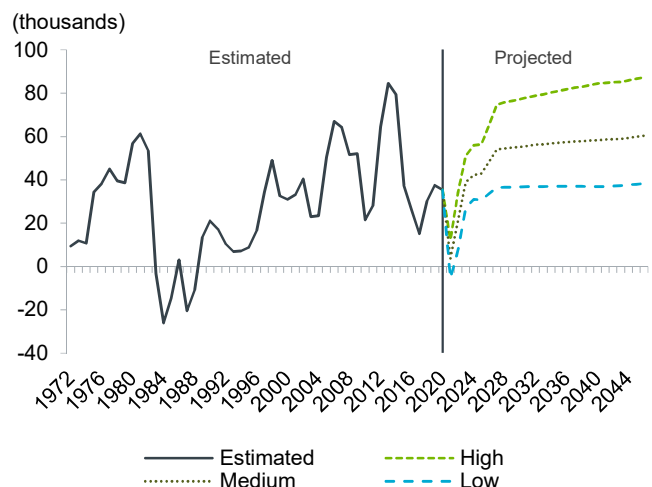
The projected number of people moving between CDs is developed using long-term historical averages. Net intraprovincial migration has no impact on Alberta's overall population growth, so only one scenario was developed for this projection. Historically, CD 6 (Calgary) and CD 11 (Edmonton) have welcomed a large number of intraprovincial migrants, as has CD 8 (Red Deer). CD 5 (Drumheller) has also, on average, gained a positive number of net intraprovincial migrants. All other census divisions tend to have more people move out than into their areas (i.e., net loss). In particular, CD 16 (Wood Buffalo) and CD 17 (Slave Lake) tend to have large numbers of people leave for other regions in the province. Over the next 26 years, almost eight in ten net intraprovincial migrants within Alberta are expected to move to the CDs with the two largest urban centres, Calgary and Edmonton, for employment and educational opportunities.

### Total Net Migration

Combining all migration components, total net migration is expected to be lower over the next couple of years given decreased immigration resulting from COVID-19 travel restrictions and net outflows of interprovincial migrants due to decreased economic activity in the province. Net migration in 2021 is forecast to be 3,700, down from 35,412 in 2020 (Figure 11). Net migration is expected to pick up as international migration increases. A pick-up in economic growth in the province is expected to gradually push net interprovincial migration flows back

**FIGURE 11: TOTAL NET MIGRATION TO ALBERTA**

1972–2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

to positive territory between 2023 and 2027 and increase immigration levels, leading to more typical levels of net migration. Over the long term, total net migration should stabilize, returning to its historical trend.

Regions with more employment and educational opportunities tend to attract more migrants. Based on past trends, of the over 1.3 million net migrants moving to Alberta over the next 26 years, 86.4% are expected to settle in the regions with the province's two largest urban centres (i.e., CD 6 (Calgary) and CD 11 (Edmonton)). During the last recession, areas with substantial oil sands development, such as CD 16 (Wood Buffalo) and CD 12 (Cold Lake), were hit particularly hard, resulting in large net outflows of migrants. CD 16 was impacted once again by the 2020 slump in oil prices and is forecast to once again see significant net outflows between 2020 and 2024 before turning positive thereafter. In the long term, CD 16 is expected to return to a more moderate level of positive net migration.

CD 12, a region that historically has a net loss of migrants, will also see net migration outflows before returning to moderate gains over the long term. In addition, migration to areas that service the oil and gas sector, such as CD 19 (Grande Prairie) and CD 8 (Red Deer) will also be affected in the short term. CD 19 is expected to see a net loss between 2020 and 2022, while CD 8 will likely to see more muted migration gains during this time. However, both regions should see their migration recover thereafter, as these CDs act as service centres to surrounding areas.

Home to a large number of oil companies' Alberta headquarters, CD 6 (Calgary) experienced significant declines in employment with the global oil price shock in 2015-2016, as companies reduced costs. Between 2016 and 2018, CD 6 experienced large net outflows of interprovincial migrants. Despite this, overall net migration remained positive, supported by strong immigration levels. When compared with CD 6, employment in CD 11 (Edmonton) was not hit as hard during the recession and as a result, there was less impact on migration levels to this region. In 2019, net migration levels to CD 6 increased as net interprovincial outflows diminished, while net migration to CD 11 did not pick up as strongly.

These two regions are expected to follow the provincial pattern, showing a few years of slow growth, before returning to their respective long term trends. In addition to COVID-19 impacts, CD 6 is expected to see a slowdown due to the oil price shock once again. While CD 6 tends to suffer more during economic downturns relative to CD 11, it also tends to benefit more during upticks.

CD 6 is expected to grow at a faster pace than CD 11 as the economy recovers, bolstered by economic activity in the private sector. For example, Calgary has been building its reputation as an emerging tech hub and increased growth in this burgeoning sector should attract migrants to this region. Edmonton's tech sector should also see substantial growth, although a smaller share of Alberta tech firms are located there (30%) compared with Calgary (58%)<sup>6</sup>, which means there is relatively less momentum for growth compared with Calgary.

CD 11 is home to a large portion of the public sector in the province. Due to mounting public debt, exacerbated by the pandemic, the provincial government is expected to exercise spending restraint in the public sector, which should contribute to slower population growth in CD 11 relative to CD 6. In the short-medium term, both regions will benefit greatly from increased Federal immigration targets, although Calgary may have an edge as more immigrants tend to settle there. Over the entire projection period, growth due to migration is expected to be higher in CD 6 compared to CD 11, partly due to its attractiveness to immigrants.

<sup>6</sup> [www.newswire.ca/news-releases/2021-study-shows-momentum-in-alberta-s-technology-sector-growth-and-job-creation-801295218.html](http://www.newswire.ca/news-releases/2021-study-shows-momentum-in-alberta-s-technology-sector-growth-and-job-creation-801295218.html)

## For more information on the [Population Projections](#) see:

### **Data for Alberta Population Projections.**

Includes estimated (1996-2020) and projected (2021-2046) population of Alberta and its 19 Census Divisions by single year of age and sex as well as some summary statistics.

### **Population Projections, Alberta and Census Divisions, 2021-2046.**

Includes estimated (1996-2020) and projected (2021-2046) population of Alberta and its 19 Census Divisions by single year of age and sex as well as selected summary statistics.

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# Appendix 1

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## CENSUS DIVISIONS AND THEIR RESPECTIVE POPULATIONS AS OF JULY 1, 2020

Census Division	Major Community	Population
<b>Alberta</b>		<b>4,421,876</b>
CD1	Medicine Hat	85,621
CD2	Lethbridge	182,855
CD3	Pincher Creek	39,957
CD4	Hanna	9,435
CD5	Drumheller	57,739
CD6	Calgary	1,654,503
CD7	Stettler	41,502
CD8	Red Deer	222,327
CD9	Rocky Mountain House	20,994
CD10	Camrose	99,404
CD11	Edmonton	1,512,524
CD12	Cold Lake	71,562
CD13	Whitecourt	70,306
CD14	Edson	29,841
CD15	Banff	40,106
CD16	Wood Buffalo	76,715
CD17	Slave Lake	63,639
CD18	Grande Cache	14,779
CD19	Grande Prairie	128,067

Sources: Statistics Canada

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## Appendix 2

### GLOSSARY OF DEMOGRAPHIC TERMS

Age Specific Fertility Rate	Number of births per 1,000 women of a specific age within the childbearing age range, normally age 15 to 49 years.
Baby Boomer Period	Period following World War II, 1946–1965, marked by an important increase in fertility rates and in the absolute number of births.
Components of Population Growth	Births, deaths and migration are components that alter the size of the total population and its composition by age and sex.
Emigrant	Canadian citizen or immigrant who left Canada to settle permanently in another country.
Immigrant	Person who has been permitted by immigration authorities to live in Canada permanently.
International Migration	Movement of persons between Canada and other countries.
Interprovincial Migration	Movement from one province/territory to another resulting in a permanent change in residence. A person who takes up residence in another province is an out-migrant with reference to the province of origin and an in-migrant with reference to the province of destination.
Intraprovincial Migration	Movement within the province from one Census Division to another resulting in a permanent change in resident.
Median Age	Age “x”, such that exactly one half of the population is older than “x” and the other half is younger than “x”.
Migration	Permanent change of residence from one geographical unit to another.
Mortality Rate	It is usually measured as the number of deaths per 1,000 individuals of that population for a particular time period.
Natural Increase	Net contribution of births and deaths to population change.
Net International Migration	Equal to: immigrants – emigrants + returning emigrants – temporary emigrants + net non-permanent residents
Net Interprovincial Migration	Difference between in-migrants and out-migrants for a given province or territory.
Net Migration	Difference between in-migration and out-migration for a given area and period of time.
Net Non-permanent Residents	Variation in the number of non-permanent residents between two dates.
Net Temporary Emigrants	Variation in the number of temporary emigrants between two dates.
Net Undercoverage	Difference between the number of persons who were covered by the census but who were not enumerated (i.e. undercoverage) and the number of persons who were enumerated whereas they should not have been or who were enumerated more than once (i.e. overcoverage).
Non-Permanent Residents	Persons from another country who had an employment authorization, a student authorization, or a Minister’s permit, or who were refugees claimant, and family members living with them.
Permanent Resident	A person who is legally in Canada on a permanent basis as an immigrant or refugee, but not yet a Canadian citizen.
Population Growth	Total change in population of a given geographic unit in a given period, resulting from births, deaths and migration.
Population Projection	An estimate of a future population derived from calculations made on certain assumptions that determine the future course of population change.
Population Pyramid	A chart shows the distribution of a population by age and sex.
Replacement Level (Fertility)	Mean number of births per woman necessary to assure the long-term replacement of a population for a given mortality level. Currently, the replacement level in Canada and most other developed countries is about 2.1 children per woman.
Returning Emigrants	Canadian citizens or landed immigrants who have emigrated from the country and subsequently returned to Canada to re-establish a permanent residence
Shadow Population	It refers to those individuals who reside in one region on a temporary basis, while their primary residence is located somewhere else. They are enumerated by the census as residents of the jurisdictions where their primary residence is located.
Temporary emigrant	Canadian citizen or immigrant who left Canada to settle temporarily in a foreign country.
Total Fertility Rate	The 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 had fertility rates identical to those of the year considered.