Population Projections

Alberta and Census Divisions, 2019–2046

In 2046, Alberta's population is expected to:

- Reach almost 6.6 million people, an increase of roughly 2.3 million people from 2018.
- Become older, with an average age of 41.2 years, up from 38.0 years in 2018.
- Become increasingly diverse, as arrivals from other countries account for about 47% of the expected growth over the projection period.
- Become more concentrated in urban centres, especially along the Edmonton-Calgary Corridor; by 2046, 80% of Albertans are expected to live in this region.

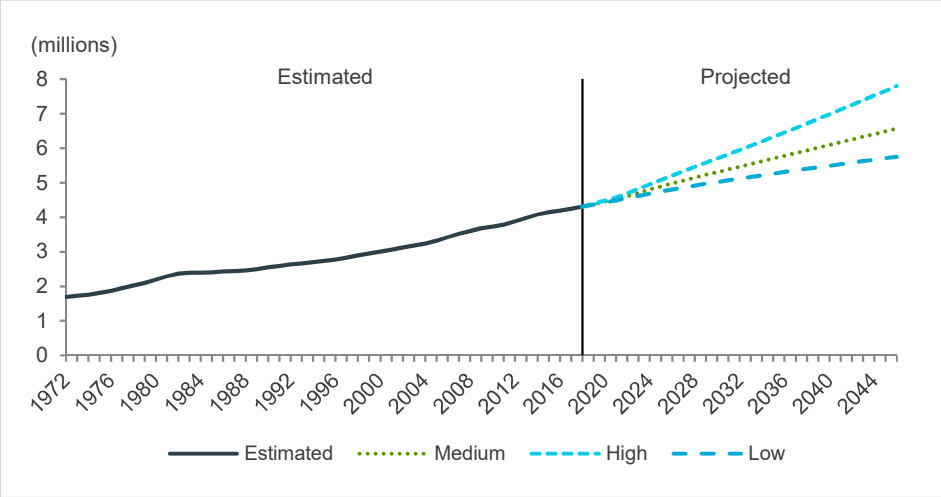
Population projections are now available for the period of 2019 to 2046 for Alberta and its 19 census divisions. Three different sets of assumptions (low, medium and high population growth scenarios) were prepared. This document highlights some characteristics of Alberta's projected population, focusing mainly on the results of the medium (reference) scenario, unless otherwise indicated.

Alberta Population Projections

Alberta to expect steady population growth

By 2046, Alberta is expected to be home to about 6.6 million people, representing an average annual growth rate of about 1.5% or an increase of roughly 2.3 million people from 2018 (Figure 1). In contrast, the projected growth will be lower than the 1.9% experienced over the previous 25 year period (1993 to 2018). Alberta's population is projected to surpass the 5.0 million mark by 2027 and reach the 6.0 million mark by 2039. Under the low and high scenarios, Alberta's total population in 2046 is projected to be around 5.8 million and 7.8 million; gains of 1.4 million and 3.5 million, respectively.

Figure 1: Population of Alberta, 1972-2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

Migration to the province is heavily dependent on the economic situation in Alberta compared to other regions in Canada. After two years of lower net inflows, migration to Alberta is forecasted to gain momentum alongside the improving economy. The net outflows of interprovincial migrants between 2016 and 2017 slowed population growth, however, Alberta had net inflows of interprovincial migrants in 2018. These modest net inflows are expected to continue over the next couple of years and will help lift population growth. Between 2018 and 2022, average annual growth is expected to be 1.7%, compared to 1.3% in the 2014-2018 period.

Over the medium term (2022 to 2026) as economic conditions continue to improve, population growth is forecasted to accelerate, averaging 1.9% during this time (Figure 2).

In the latter part of the projection period (2026 to 2046), population growth is expected to slow gradually to an average annual rate of 1.4% due to moderating net migration, lower natural increase and population aging.

In all three scenarios, future population growth is mainly driven by migration, particularly international migration. Total net migration from all sources (1.5 million people) is projected to account for 66% of

Alberta's population growth under the medium scenario, with natural increase accounting for the remaining 34% (Figure 2). Of the anticipated net migrants, 74% would come from other parts of the world. After hitting a low point in 2017, total net migration is expected to continue to pick up as the economy improves.

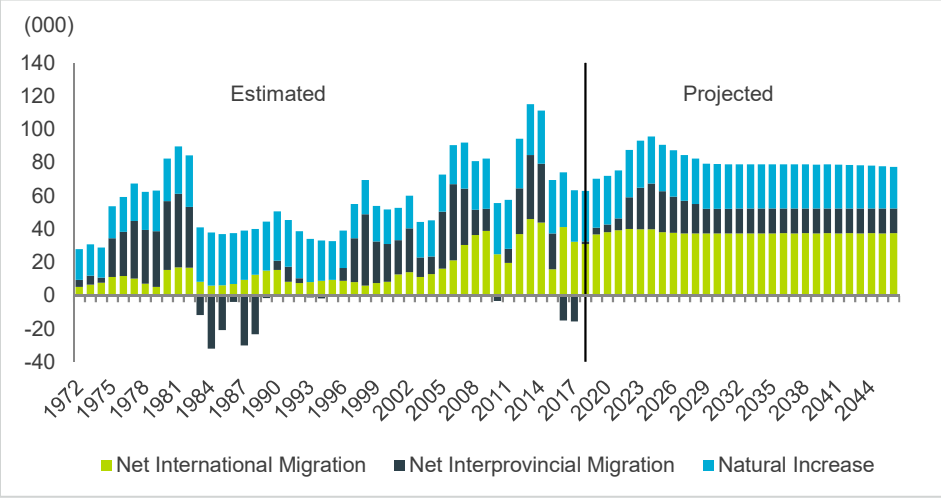
Alberta remains attractive to interprovincial migrants

A consequence of the economic recession in 2015 and 2016, net outflows of interprovincial migrants occurred in 2016 and 2017 as interprovincial migration reacted with a lag of about a year to economic conditions. This trend has since reversed, and the modest inflows seen in 2018 are expected to increase as the economy improves over time (Figure 2). As a result, interprovincial migration is expected to accelerate, boosting population growth between 2022-2026. Net interprovincial migration is expected to account for 20% of the province's growth, or almost 442,000 new residents between 2018 and 2046 under the medium scenario.

Natural increase remains a significant, but diminishing source of growth

Natural increase (births minus deaths) is expected to continue to have a positive impact on the province's growth, adding about 758,000 people by 2046 (Figure 2). The magnitude that natural increase contributes to population growth will be partly influenced by migration patterns. The majority of the more than 1.5 million net migrants projected to arrive over the next 28 years will be young adults aged 18 to 34. The influx of people in child-bearing ages may result in an increased number of births over the projection period. Despite this, the impact of natural increase on growth will diminish over time, as deaths are expected to increase rapidly with the advanced aging of the baby boom cohort. For instance, on an average day in 2018, 154 new Albertans were born, while about 71 people died. By 2046, the average number of daily deaths is expected to nearly double (139), while births will likely increase (207). The narrowing gap between births and deaths in the future means that the average daily population gain due to natural increase will also decrease from 84 in 2018 to about 69 by 2046.

Figure 2: Components of Population Growth, 1972-2046
Alberta



Sources: Statistics Canada and Alberta Treasury Board and Finance

Albertans are expected to live longer

On average, a girl born in Alberta in 2018 could expect to live to 83.7 years of age, while a boy could live 79.2 years. Under the medium scenario, life expectancy at birth for females is projected to rise to 87.1 years by 2046, while life expectancy for males is expected to reach 83.6 years. Consistent with historical trends, males are expected to see faster gains in life expectancy, and consequently the gap between females and males is also expected to narrow from 4.5 years in 2018 to 3.5 years in 2046.

Life expectancy at age 65 is also expected to increase. A man reaching age 65 in 2018 could expect to live, on average, another 19.3 years, compared to 22.3 for women. Life expectancy at age 65 is projected to increase to 21.7 years for men and 24.4 for women by 2046.

Alberta's population getting older

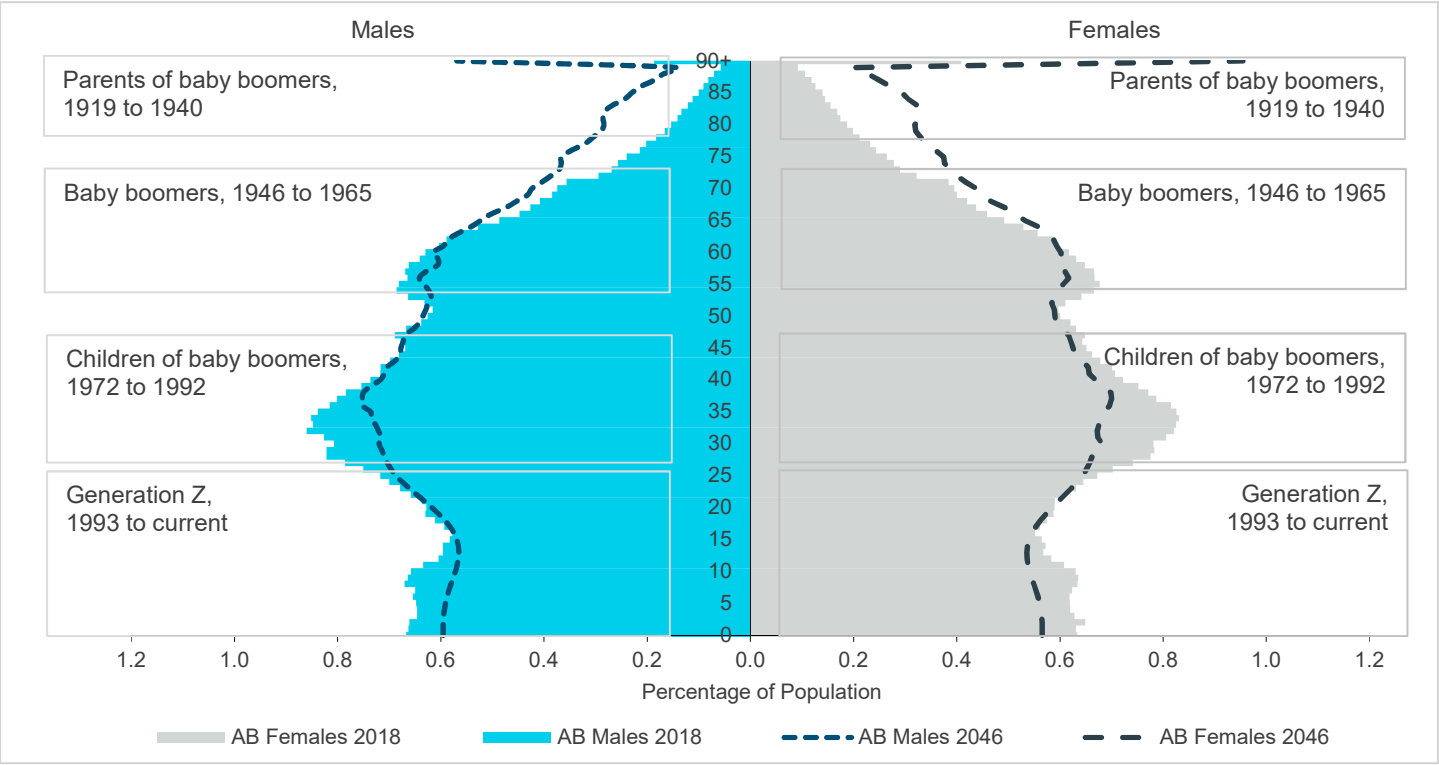
Alberta was the youngest province in 2018, but its population continues to age due to below replacement fertility and rising life expectancy. Despite the anticipated addition of a substantial number of young people through migration, population aging is expected to continue over the projection period (Figure 3). In 2018, the average age[1] of the province was 38.0 years, a figure which is projected to climb to 41.2 by 2046.

Baby boomers accelerate aging

The large baby boom cohort (people born between 1946 and 1965) will have a significant impact on the rate of population aging over the next few decades. In 2018, baby boomers were aged 53 to 72 years and accounted for about 22% of

[1] Average age has replaced median age in these projections as it adjusts better for changes in the age structure as the baby boomers become increasingly older.

Figure 3: Alberta's Population Pyramids, 2018 vs. 2046

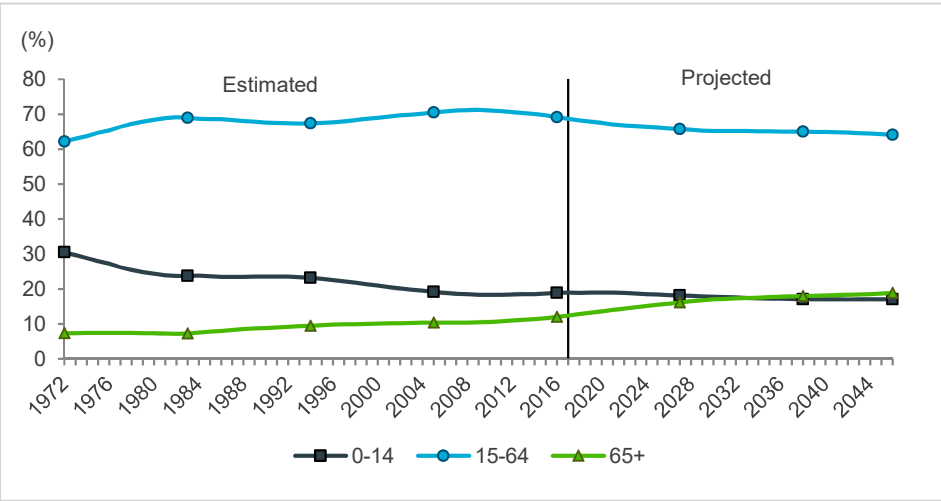


Sources: Statistics Canada and Alberta Treasury Board and Finance
Note: Information boxes indicate generations in 2018.

the population (Figure 3). As the baby boomers get older, aging is expected to accelerate until 2030, when the last of that large group reaches the age of 65.

In 2018, people aged 65 and older represented about 13% of the population. Under the medium scenario, almost one in five, or 19% are expected to be 65 or older by 2046. By 2034, there will be a larger share of seniors than children. This trend has already occurred at the national level.

Figure 4: Proportion of Total Population by Age Group, 1972-2046
Alberta



Sources: Statistics Canada and Alberta Treasury Board and Finance

Males likely to continue to outnumber females

Alberta has consistently been home to more males than females, mainly due to the large proportion of working-age males migrating to the province. This trend in the sex ratio (ratio of males to females) is expected to continue.

Over the projection period, the sex ratio is expected to increase from 101 males per 100 females in 2018 to 102 males per 100 females by 2025, before remaining stable across the rest of the projection. This is unusual, because the sex ratio tends to decrease in aging populations. The aging of the large baby boom cohort into senior ages, and higher female life expectancies, can pull the sex ratio in favour of females. However, Alberta does not follow this pattern. Net migration inflows over the projection may continue to tip the province's overall sex ratio in favour of males, which helps prop up the

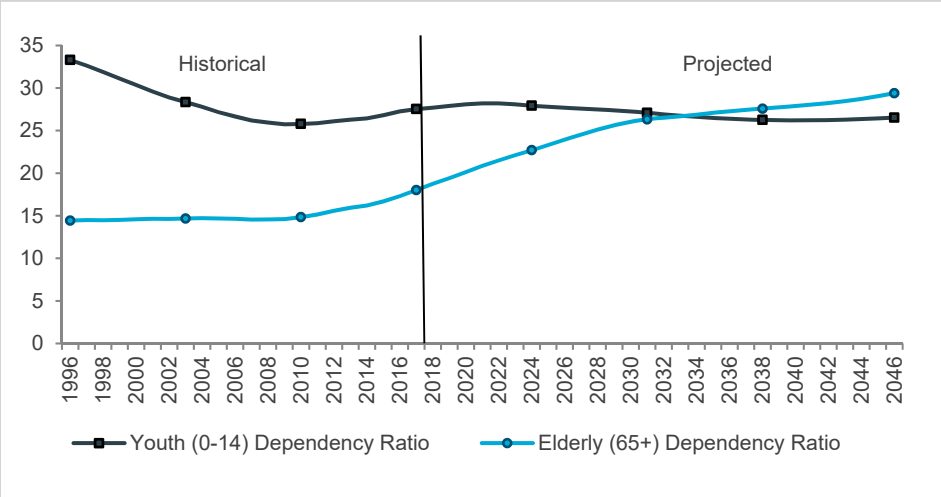
sex ratio. These two opposing forces will keep the sex ratio fairly stable over the projection.

More people depend on the working-age population

The number of working-age Albertans (aged 15 to 64 years) is expected to grow under all scenarios. Under the medium scenario, the working-age population will increase from 2.9 million in 2018 to over 4.2 million by 2046. However, as a share of the total population, this age group is anticipated to shrink, falling from around 68% in 2018 to about 64% by 2046 (Figure 4).

Due to the increasing share of seniors and the declining share of working-age population, the total dependency ratio[2] is expected to increase significantly over the projection period. In 2018, there were around 46 dependents for every 100 Alberta resident aged 15 to 64 years. By 2046, it is expected that the total dependency ratio will climb to about 56. The higher ratio will mainly be driven by the rapid increase in the senior (65+) portion of the population (Figure 5).

Figure 5: Dependency Ratios (per 100 working age individuals), 1996-2046
Alberta



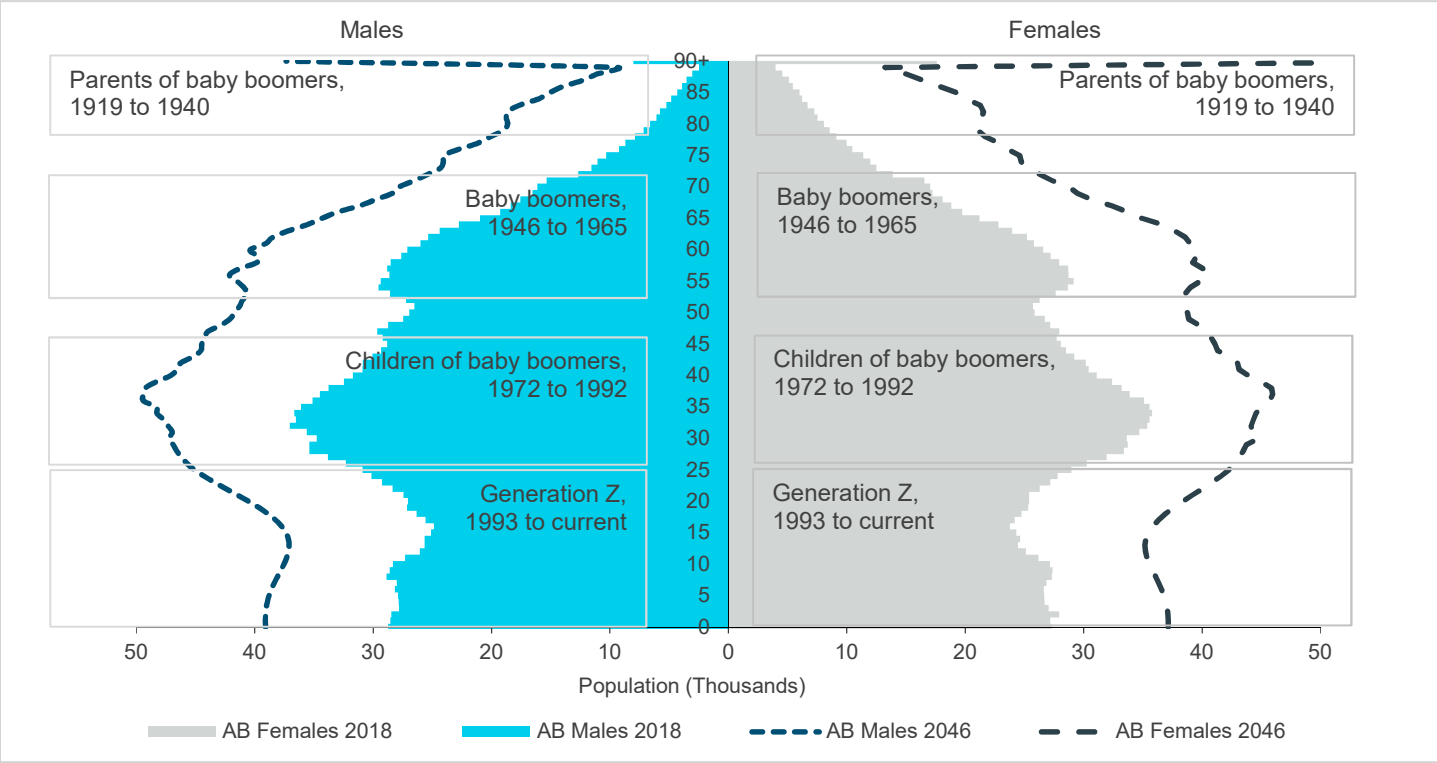
Sources: Statistics Canada and Alberta Treasury Board and Finance

Age Structure of Alberta

By 2046, there will be more people of every age compared with 2018. The baby boomers will be swelling the ranks of the province's oldest residents, while their children,

[2] The dependency ratio refers to the population not typically in the labour force (children and the elderly) to the population that typically is (those aged 15 to 64).

Figure 6: Alberta Population by Age and Sex (Thousands), 2018 and 2046



Sources: Statistics Canada and Alberta Treasury Board and Finance
Note: Information boxes indicate generations in 2018.

who are the oldest of the 'echo' generation, will have just entered their senior years (Figure 6). The next section outlines the projected size of specific age groupings.

Stable numbers of young children and growing in school ages

The size of the youngest age group (0 to 4 years) is mainly impacted by the number of births and is a good indicator of possible demand for elementary education. In the near future, this group is expected to grow steadily, from about 278,000 children in 2018 to 308,000 around 2029, before growth accelerates, to almost 381,000 children by 2046.

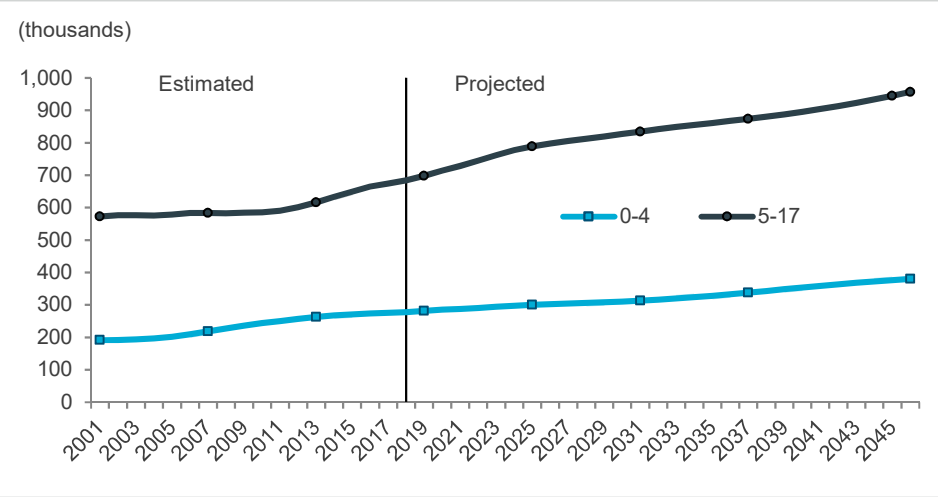
The population aged 5 to 17 years also represents potential school demand. The number of school-aged children will likely continue to rise throughout the projection period due to Alberta's fertility and migration rates, and this growth will be particularly strong up to 2025. Between 2018 and 2025, this age group is expected to increase at an average annual rate of 2.0% (Figure 7), adding about 104,000 new school-aged children during this period. By 2046, this age cohort will likely number almost 957,000, up from about 685,000 in 2018.

Steady share of young adults, declining share of core working-ages

The young adult cohort (aged 18 to 24 years) is usually associated with attending post-secondary institutions or participating in the youth labour force. In 2018, the share of the population for this cohort was about 9% and is expected to be relatively stable throughout the projection period. The stability will be supported by strong migration. In the next few years, growth of this age group is expected to pick up slowly. Between 2022 to 2030 however, growth of young-adults are expected to accelerate due to a larger cohort of children aging into this group, and increasing migration to the province. By 2046, the number of young adults is expected to reach about 565,000.

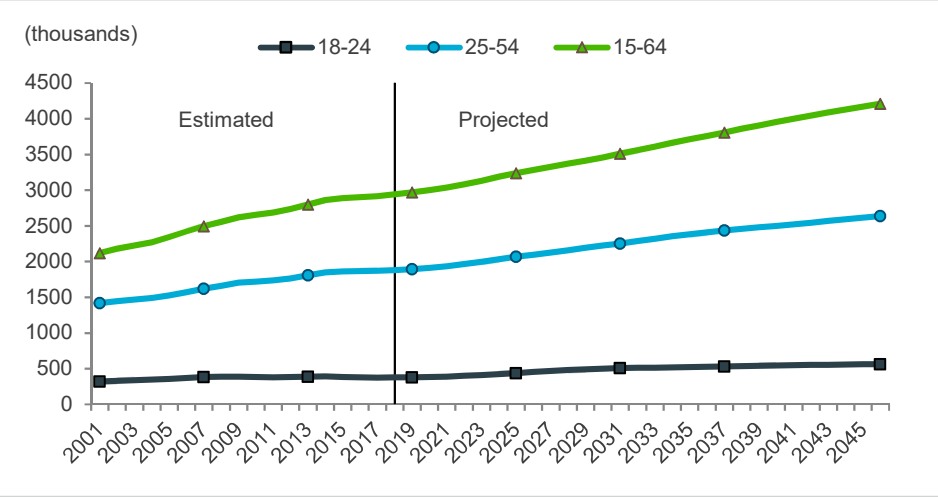
The core labour force age group (25 to 54 years) will also increase in size over the projection period, with the expansion expected to be higher over the medium term. In 2018, the youngest baby boomers were 53 years of age, with baby boomers comprising 6% of the core working-age group. By 2020, all of the baby boomers will have aged out of the core labour force, but numbers will continue to rise due to migration (Figure 8). Despite the growth in numbers, as a share of the total population, this cohort will decline from about 44% in 2018 to about 40% by 2046.

Figure 7: Population Aged 0 to 17 years, 2001-2046
Alberta



Sources: Statistics Canada and Alberta Treasury Board and Finance

Figure 8: Population Aged 15 to 64 years, 2001-2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

The overall working-age population (15 to 64 years) will also grow, expanding by around 43% over the projection period. However, since the overall population will also expand by about 52%, this age group will make up a declining share of the total population, decreasing from about 68% in 2018 to 64% by 2046 as the baby boomers leave the workforce.

Aging boomers accelerate growth of senior population

The population aged 65+ is expected to increase both in number and population share throughout the projection period. In 2018, over 551,000 Albertans were aged 65 and older, accounting for about 13% of the population. The number of seniors is expected to top a million by 2035 and exceed 1.1 million by 2040 (Figure 9). Under the medium scenario, almost one in five Albertans in 2046 would be 65 or older. In 2018, there were about 411,000 more children (aged 0 to 17 years) than seniors. By 2046, this difference will likely shrink to under 100,000.

Rapid growth of the oldest-old

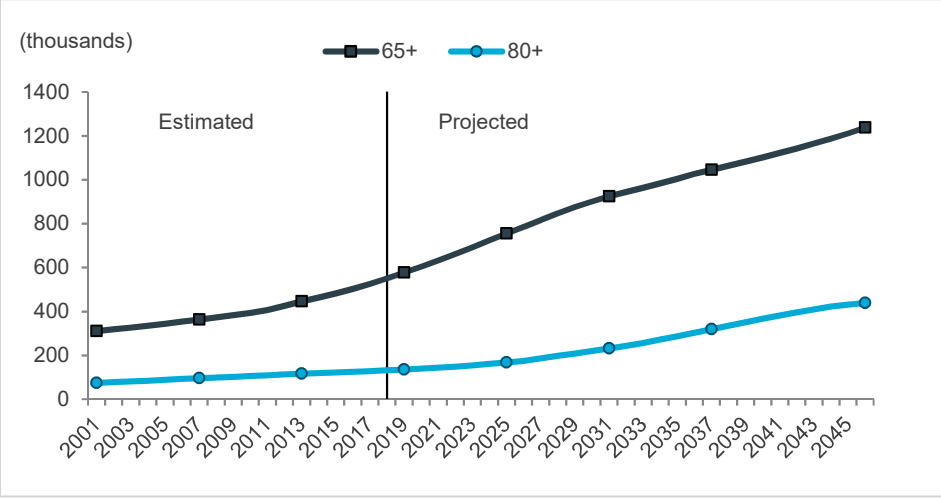
In assessing demand for services such as health care, assisted living and seniors housing, it is especially important to look at those 80 years and older. This age group is expected to more than double as a share of the population, increasing from just over 3% in 2018 to almost 7% in 2046, which represents an absolute increase of 306,000 people who are 80 years and older. In general, this represents a percentage increase of 231% (Figure 9).

Regional Population Projections

Regional population growth is determined by the current age structure, natural increase and net gains or losses through migration. The next section highlights some characteristics of the 19 census divisions (CDs) in Alberta.

The current age structure is a major determinant of the number of births and deaths. A region with a greater proportion of older people will likely experience more deaths, whereas a region with a large proportion of young adults will likely have more births. In addition, since migration is an activity undertaken primarily by young adults, the age structure will impact the region's migration patterns and vice versa.

Figure 9: Population Aged 65 and older, 2001-2046
Alberta



Sources: Statistics Canada and Alberta Treasury Board and Finance

Older regions, with a greater share of seniors in the population, are more likely to experience very low or negative natural increase leading to downward pressure on population growth (Appendix Map 1). The oldest regions of the province in 2018 were CD 4 (Hanna) and CD 13 (Whitecourt) with average ages of 42.1 and 41.5 years, respectively. These two regions are projected to see the least growth from natural increase over the projection period.

Migration is a key determinant of population growth for most regions. It is common for regional patterns of migratory movements to be relatively consistent over time. Some regions have, for many years, seen their young people move to other regions of the province (intraprovincial migration); for example, CD 17 (Slave Lake), CD 19 (Grande Prairie) and CD 2 (Lethbridge). Other regions have a long-standing and significant attraction to interprovincial migrants. Some regions gain from the settlement choices of immigrants, while others receive almost none. Some regions, such as CD 16 (Wood Buffalo) tend to draw a significant number of interprovincial migrants, yet tend to lose population to other parts of the province at the same time, leading to lower growth from migration than might be expected.

In general, the largest centres in Alberta capture most of the growth from international migration sources, while also gaining from migratory movements both within Alberta and between provinces (Appendix Map 2).

Most regions expected to see population growth

With the exception of two census divisions, CD 4 (Hanna) and CD 7 (Stettler), all regions in Alberta are expected to see positive growth over the projection period. Although CD 13 (Whitecourt) is expected to grow, the increase is marginal (average annual growth of 0.01%) and the population is relatively stable (Figure 10). CD 14 (Edson), CD 3 (Pincher Creek) and CD 15 (Banff) are also likely to have relatively stable populations due to minimal expected growth over the projection period. The strongest growth is projected to occur in the Edmonton-Calgary Corridor (CDs 6, 8 and 11), CD 19 (Grande Prairie) and in CD 16 (Wood Buffalo) (Appendix Map 3).

Regional Age Structure

Overall increase in children, but shrinking share

There is considerable regional variation in the proportion of 0 to 14 year olds. At the top end, just under 28% of CD 17's (Slave Lake) population was under the age of 15, and at the other end of the spectrum, the proportion of children in CD 15 (Banff) was close to 15% in 2018. The share of children is projected to drop or remain fairly stable in all census divisions. CD 15 and CD 16 (Wood Buffalo) are expected to show the greatest drop in share of 0 to 14 year olds (2.8 and 3.5 percentage points, respectively), which is primarily due to population aging and the shrinking proportions of their child-bearing cohorts. CD 15 also has the lowest fertility of all regions. CDs 17 and 15 will continue to have the highest and lowest population shares of children, respectively, in 2046.

While regional population shares of children are expected to drop, the absolute number of children will increase in most census divisions (Figure 11). Due to their large populations, the largest absolute increases in the number of children are expected in CD 8 (Red Deer), CD 6 (Calgary), and CD 11 (Edmonton). These three census divisions, together with CD 19 (Grande Prairie) and CD 1 (Medicine Hat), make up the five regions with the largest percent growth of children over the projection period.

Proportion of working-age to shrink in every region

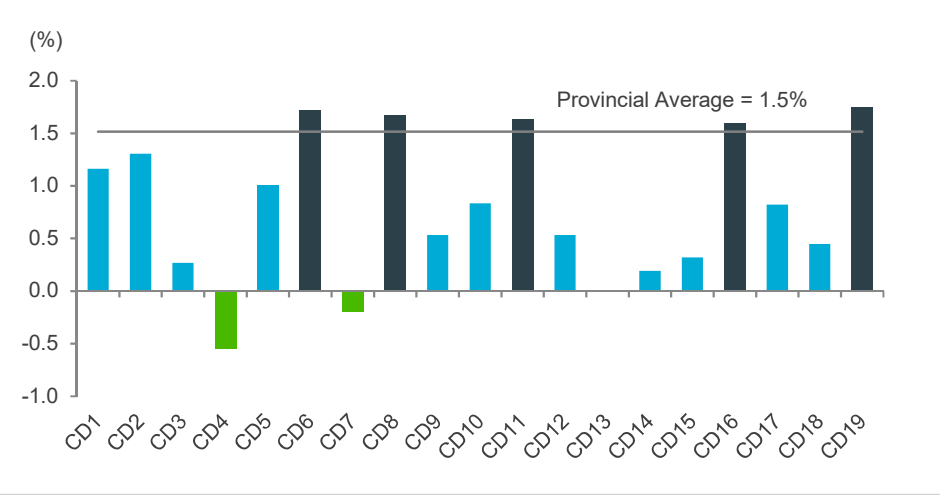
All but six census divisions are projected to have increased populations in the working-ages (15 to 64 years) between 2018 and 2046 (Figure 12). Since migrants are predominantly young adults, regions receiving the most net migrants are expected to see the largest gains in their working-aged populations. CD 19 (Grande Prairie) takes the top spot, followed by the three census divisions that make up the Edmonton-Calgary Corridor (CDs 11, 8 and 6), CD 16 (Wood Buffalo) and CD 2 (Lethbridge). Not surprising, given the projected decline of its overall population, CD 4 (Hanna) is also expected to see the largest drop in its working-age population.

In 2018, the regions with the highest share of the working-age population were CD 16 (Wood Buffalo), CD 15 (Banff), CD 6 (Calgary) and CD 11 (Edmonton); all had shares over the Alberta average of about 68%. In contrast, 62% of people in CD 3 (Pincher Creek) were of working-age. The share of population aged 15 to 64 will decline in all census divisions between 2018 and 2046. However, CD 16, CD 11 and CD 6 will continue to have the highest shares above the provincial average of 64%.

Regional differences in population aging

In 2018, 13% of Albertans were 65 years of age and older, and this number is expected to increase to 19% by 2046. The proportion of the population aged 65 and older varies regionally throughout the province due to different age structures and migration flow patterns (Figure 13). In 2018, CD 3 (Pincher Creek) and CD 4 (Hanna) had the highest proportion of seniors among the CDs at almost 21% and 20%, respectively, while Wood Buffalo (CD 16) had the lowest

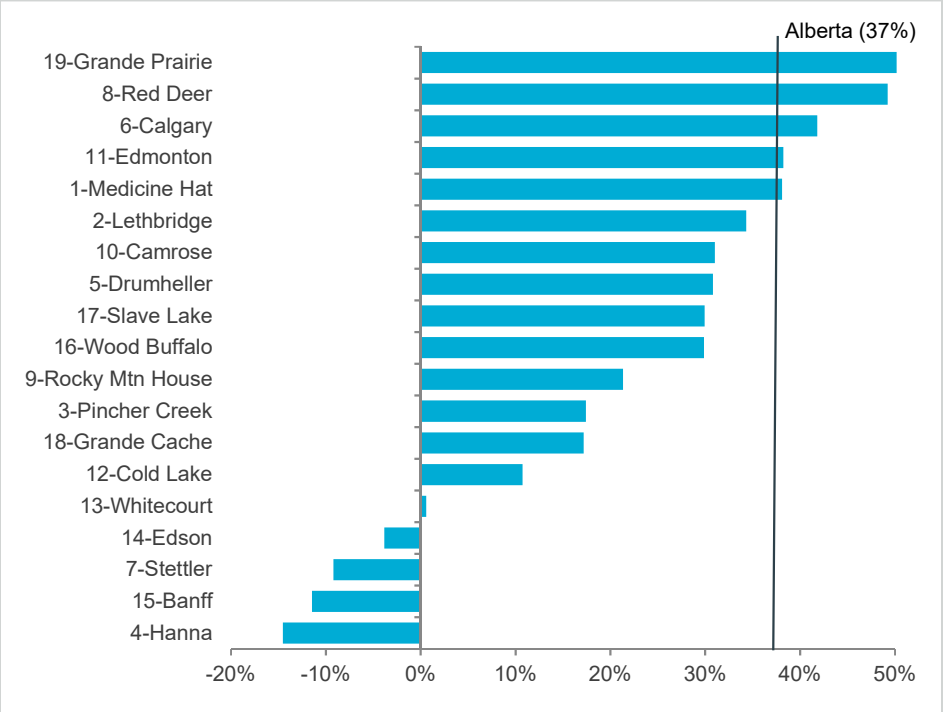
Figure 10: Average Annual Population Growth by Census Division, 2018-2046
Alberta



Sources: Statistics Canada and Alberta Treasury Board and Finance

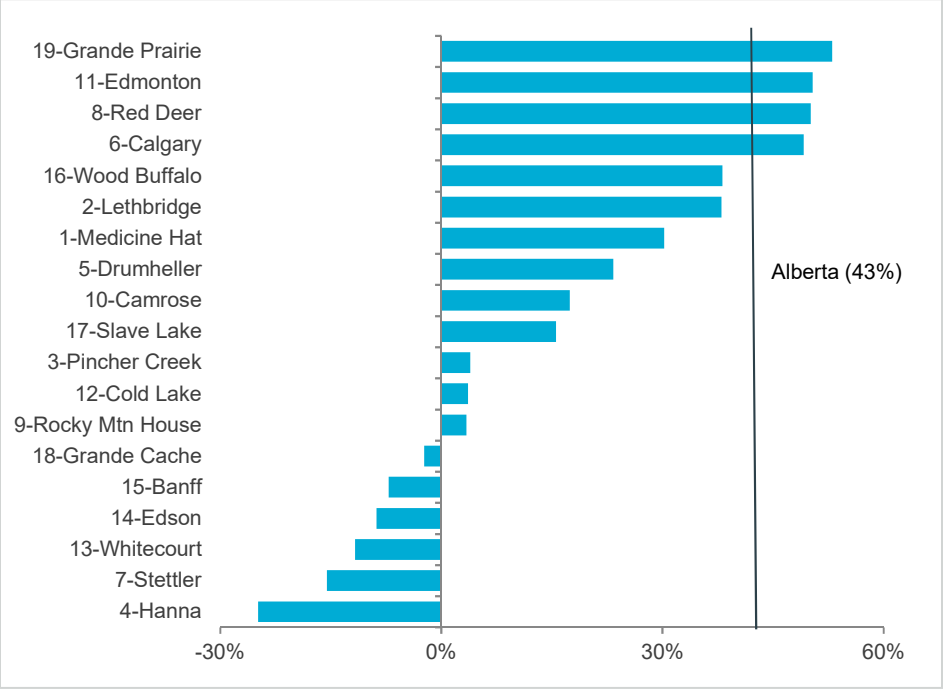
share (3%). In 2046, it is expected that CD 4 (Hanna) will have the highest percentage of seniors at close to 28%, whereas CD 17 (Slave Lake) will have the smallest share with about 14% of the population aged 65 years and over.

Figure 11: Percent change of 0 to 14 year olds, 2018-2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

Figure 12: Percent change of 15 to 64 year olds, 2018-2046



Sources : Statistics Canada and Alberta Treasury Board and Finance

Focus on selected regions

Edmonton-Calgary Corridor: urbanization continues

The Edmonton-Calgary Corridor consists of three CDs (6, 8 and 11) and includes the Census Metropolitan Areas of Edmonton and Calgary, as well as the city of Red Deer. Covering only 6% of the land area, the Corridor is home to 76% of the population and is the most urbanized area of the province[3]. Projected growth in all three of these CDs will outpace the provincial average (Appendix Map 3). By 2046, 80% of Albertans are expected to live in this region. The anticipated growth in the Edmonton-Calgary Corridor is supported by historical migration patterns within the province. As the most populous region of Alberta, this area attracts most of the international migrants to the province, as well as about 74% of the migrants from other parts of Canada over the last ten years. In the past decade, 86% of immigrants originally migrated to this region. In addition, these CDs tend to gain residents through migration from other parts of the province.

Improving Economy: around the province

As economic conditions continue to improve over the medium term, population growth is expected to pick up. Some CDs are expected to benefit more than others. In particular, CD 6 (Calgary) is expected to experience the largest boost from higher economic activity and investment.

All regions of the province are expected to see at least some impact, but particular increases are expected in CD 8 (Red Deer), CD 2 (Lethbridge), CD 16 (Wood Buffalo), CD 19 (Grande Prairie) and CD 11 (Edmonton).

[3] 2016 Census of Canada, Statistics Canada

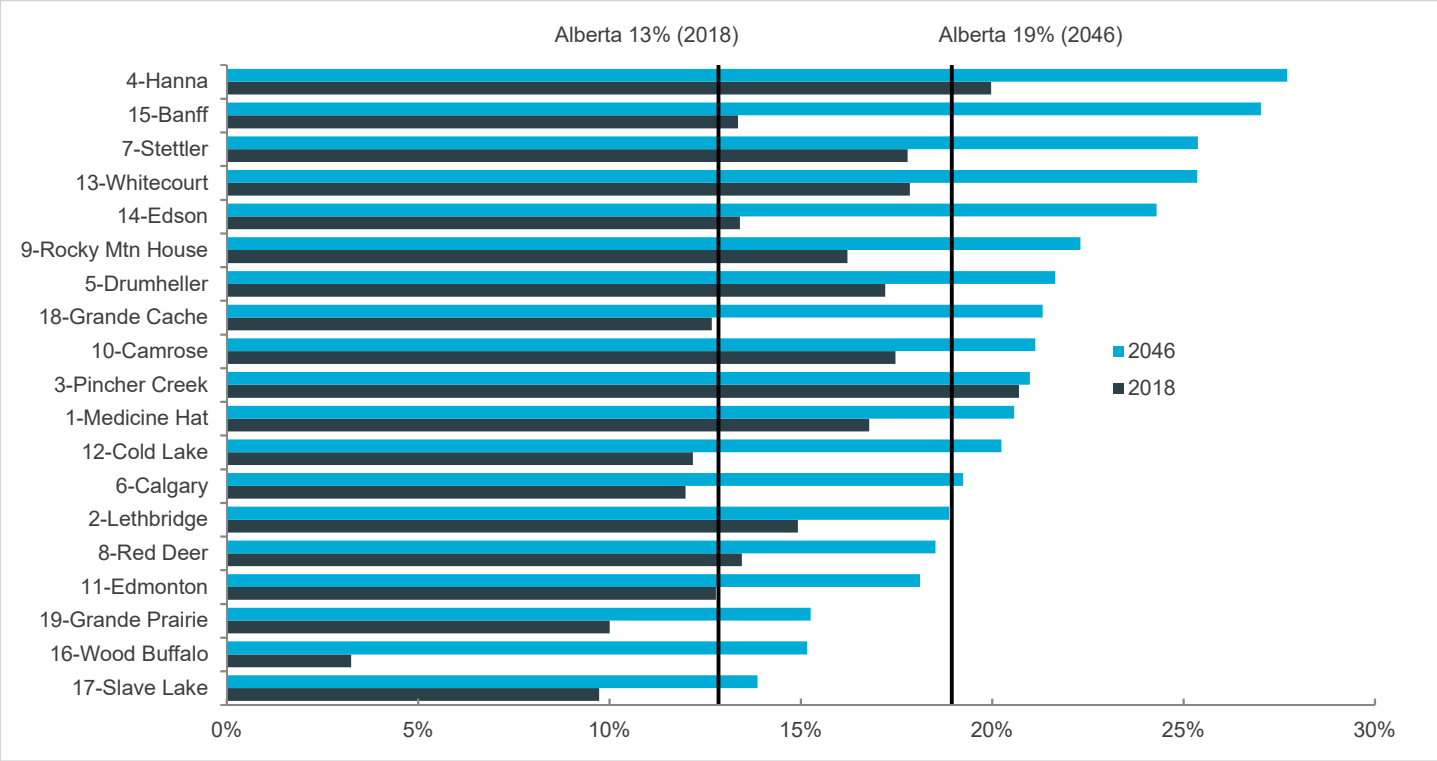
Wood Buffalo: resumes growth

CD 16 (Wood Buffalo) was hit hard by the recent recession. Strong net outflows of interprovincial and intraprovincial migrants caused this region's population to shrink between 2014 and 2017, as the economy adjusted to lower oil prices. However, confidence seems to be returning, as some new projects have been announced and construction activity following the Fort McMurray fire continues. This region's population stabilized in 2018 and is expected to gradually return to a more moderate level of positive net migration. Between 2022 and 2026, this region is forecasted to see a boost in migration from higher oil sands investment. Over the entire projection, natural increase is expected to contribute 35% to CD 16's growth—the second highest contribution in the province, and well above the provincial level (Appendix - Map 1). Due to its young population, there are relatively few deaths and a significant number of births. Overall, average annual growth for CD 16 is projected at 1.6% between 2018 and 2046, up from last year's projection (1.1% between 2017-2046).

Grande Prairie: a service centre for Alberta and British Columbia

CD 19, which includes the city of Grande Prairie, has experienced robust growth over the last decade. At 1.7%, the region's average annual growth (between 2018 and 2046) is expected to remain slightly above the province's (Appendix Map 3). The regional economy has a large natural resources component, including oil and gas, forestry, and agriculture. The city of Grande Prairie is a service area for northwestern Alberta and northeastern British Columbia, regions with abundant reserves of oil and gas. While resource activities may attract more males, the service sector is expected to attract a more balanced mix of people. Compared with CD 16 (Wood Buffalo), for example, CD 19's (Grande Prairie) sex ratio is much less skewed to males, and the region is more attractive to young adults of both sexes. As a result, the population in CD 19 contains momentum for future growth. CD 19 was impacted by low oil prices, and saw net outflows of migrants in 2016 and 2017. However, because of its economic diversity and the up-tick in conventional drilling, CD 19 should see its migration levels recover faster than other oil dependent regions such as CD 12 and CD 16.

Figure 13: Population Aged 65 and over as a Percent of Total Population, Census Divisions, 2018 and 2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

Lethbridge: Growth Potential

Lethbridge (CD 2) is an economically diverse region with industries such as agriculture, government, and manufacturing. Given its diversified economy, CD 2 has become an increasingly attractive destination for migrants and their families and, due to its postsecondary institutions, young adults as well. Given its young age structure and higher-than-average fertility, CD 2 has the potential for continued future growth.

For more information on the Population Projections see:

Data for Alberta Population Projections.

Includes estimated (1996-2018) and projected (2019-2046) population of Alberta and its 19 Census Divisions by single year of age and sex as well as some summary statistics.

Population Projection Methodology and Assumptions.

Details the methodology and assumptions of the long-term population projections.

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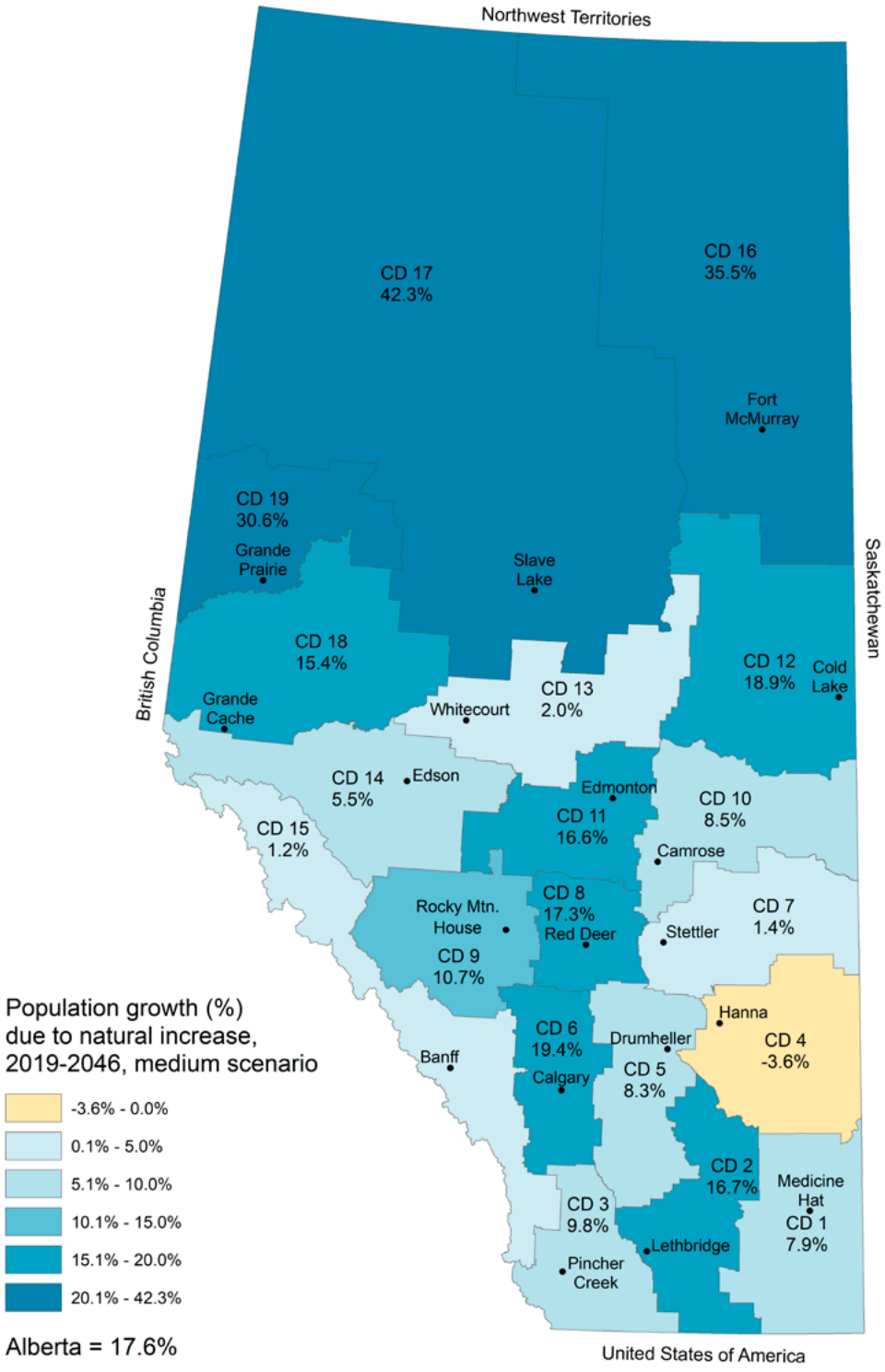
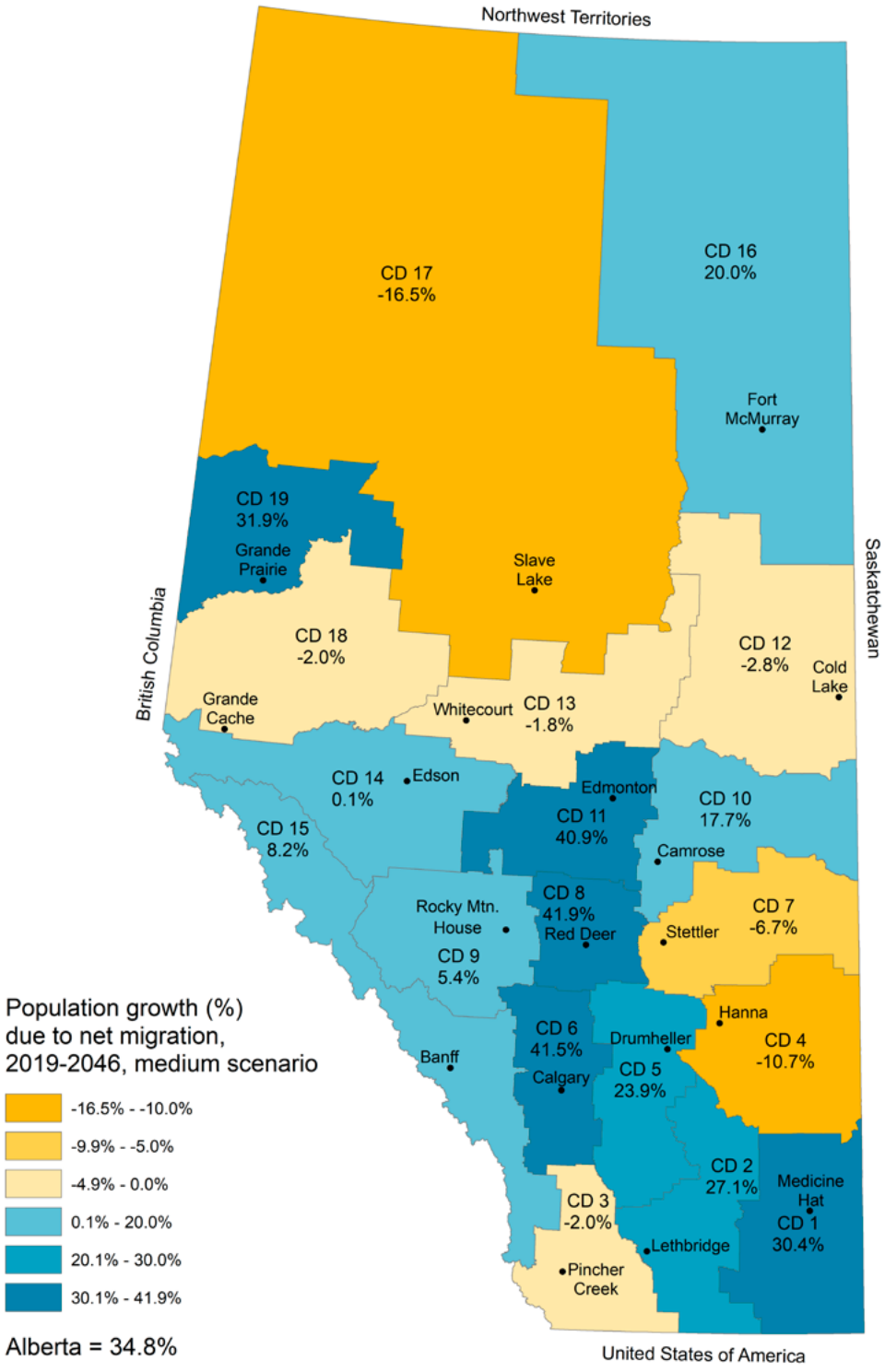
Appendix

Map 1: Population Growth Due to Natural Increase, 2018-2046, Medium Scenario



Map 2: Population Growth Due to Net Migration, 2018-2046, Medium Scenario



Map 3: Average Annual Population Growth (Percent), 2018-2046, Medium Scenario