

Population Projections

Alberta and Census Divisions, 2020 – 2046

In 2046, Alberta’s population is expected to:

- Reach over 6.3 million people, an increase of roughly 2.0 million people from 2019.
- Become older, with an average age of 41.5 years, up from 38.3 years in 2019.
- Become increasingly diverse, as arrivals from other countries account for about 54% of the expected growth over the projection period.
- Become more concentrated in urban centres, especially along the Edmonton-Calgary Corridor; 80% of Albertans are expected to live in this region by 2046.

Population projections from 2020 to 2046 for Alberta and its 19 census divisions are now available. Three sets of assumptions (i.e., low, medium and high population growth scenarios) were prepared. This document highlights the main characteristics of Alberta’s projected population, focusing mainly on the medium (reference) scenario, unless otherwise indicated.

Alberta Population Projections

Alberta to expect steady long-term population growth

By 2046, Alberta is expected to be home to about 6.3 million people, representing an average annual growth rate of about 1.4%, or an increase of roughly 2.0 million people from 2019 (Figure 1). In contrast, the projected growth will be lower than the 1.9% experienced over the previous 25-year period (1994 to 2019). Alberta’s population is projected to surpass 5.0 million by 2030 and reach the 6.0 million mark by 2042. Under the low and high scenarios, Alberta’s total population in 2046 is projected to be around 5.6 million and 7.5 million; gains of 1.2 million and 3.1 million, respectively.

Migration to the province is heavily dependent on the economic situation in Alberta. As Alberta was slowly recovering from the 2015-2016 recession, the economic shutdown due to the COVID-19 pandemic and subsequent collapse in oil prices sent Alberta’s economy back into another recession. The COVID-19 pandemic mainly impacted net international migration. Travel restrictions and delays in issuing work and permanent residency permits slowed migration from abroad to Alberta between April and June 2020, causing net international migration levels in 2020 to fall below levels of the past few years. COVID-19 could continue to suppress international arrivals for the next few years. However, levels should remain high enough to offset accelerating net outflows of interprovincial migrants and ensure positive overall net migration to Alberta in 2021 and 2022.

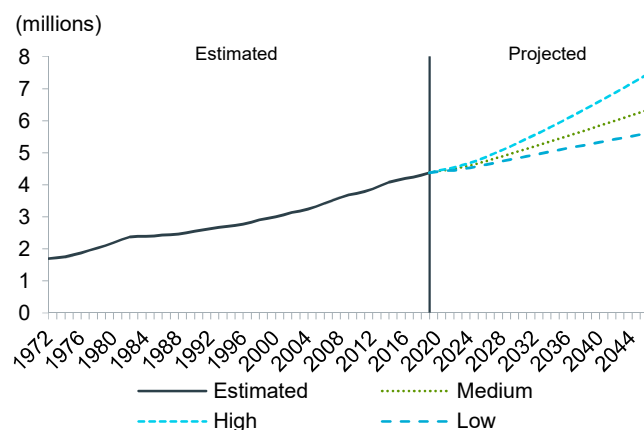
In 2019, Alberta had a small net inflow of interprovincial migrants, and the same trend is forecasted for 2020. However, a net loss of interprovincial migrants is expected for the 2021 to 2024 period. Between 2019 and 2022, Alberta’s population is projected to grow at an average annual rate of 0.9%, compared with 1.3% during the 2015 to 2019 period.

Over the medium term (i.e., 2022 to 2027), as economic conditions improve and net interprovincial migration becomes positive, population growth is forecasted to accelerate, averaging 1.4% annually during that time (Figure 2).

Despite increasing migration levels, population growth is expected to slow gradually over the long term, dropping

FIGURE 1: POPULATION OF ALBERTA

1972-2046

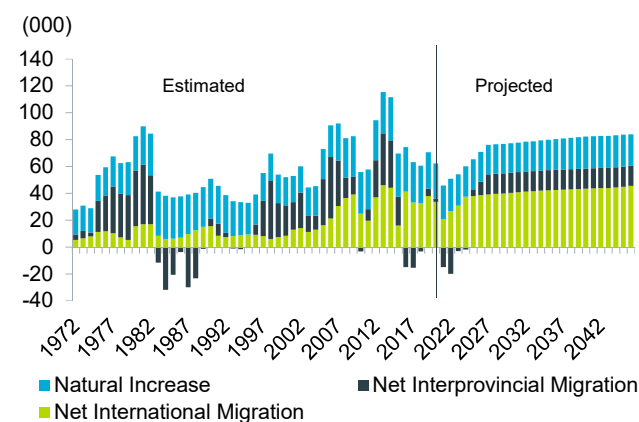


Sources: Statistics Canada and Alberta Treasury Board and Finance

from 1.6% in 2027 to 1.3% in 2046. This trend is due to 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 (around 1.35 million people) is projected to account for 68% of Alberta's population growth under the medium scenario, with natural increase accounting for the remaining 32% (Figure 2). Of the anticipated net migrants, 79% would arrive from other parts of the world. Net interprovincial migration is expected to account for 14% of the province's growth, or almost 278,000 new residents between 2019 and 2046 under the medium growth scenario.

FIGURE 2: COMPONENTS OF POPULATION GROWTH

Alberta, 1972-2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

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 623,000 people by 2046 (Figure 2). The degree to which natural increase contributes to population growth is partly influenced by migration patterns. The majority of the more than 1.3 million net migrants projected to arrive over the next 27 years will be young adults aged 18 to 34. An influx of people in the child-bearing ages is projected to boost the number of births over the period. Despite this, the impact of natural increase on growth will diminish over time, as deaths are also expected to increase rapidly with the advanced aging of the baby boom cohort. For instance, on an average day in 2019, 148 new Albertans were born, while about 74 people died. By 2046, the average number of daily deaths is expected to nearly double to around 138 per day, while births will likely increase to 202 per day. 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 74 in 2019 to about 64 by 2046.

Albertans are expected to live longer

On average, a girl born in Alberta in 2019 could expect to live to 83.6 years of age, while a boy could reach 79.0 years. Under the medium growth scenario, life expectancy at birth for females is projected to rise to 87.0 years by 2046, while for males it is expected to reach 83.7 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 4.6 years in 2019 to 3.3 years by 2046.

Life expectancy at age 65 is also expected to increase. A man reaching age 65 in 2019 could expect to live, on average, another 19.2 years, compared to 22.2 years for women. Life expectancy at age 65 is projected to increase to 21.7 years for men and 24.3 years for women by 2046.

Alberta's population getting older

In 2019, Alberta was the youngest province, but its population continued to age due to below replacement fertility and a 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 2019, the average age¹ of the provincial population was 38.2 years, a figure that is projected to climb to 41.5 years by 2046.

Baby boomers accelerate aging

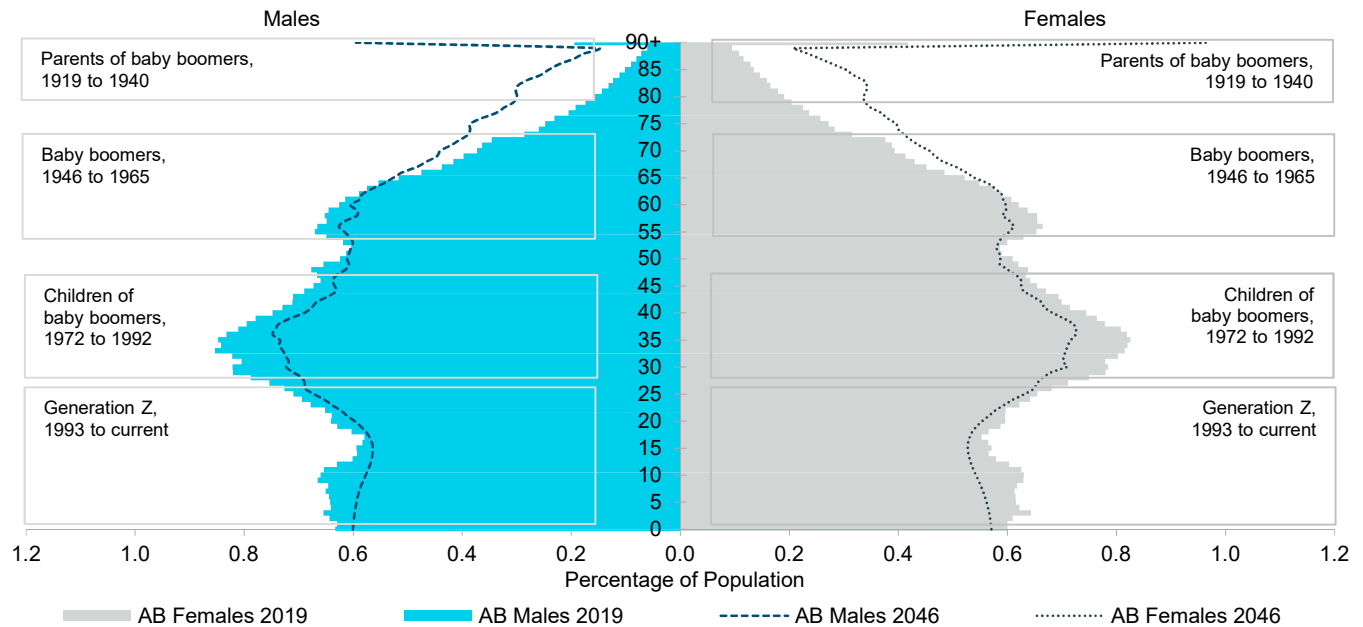
The large baby boom cohort (people born between 1946 and 1965) will have a significant impact on the rate of population aging over the next few decades. In 2019, baby boomers were aged 54 to 73 years and accounted for about 21% of the population (Figure 3). As baby boomers get older, aging is expected to accelerate until 2030, when the last of that large cohort reaches 65 years of age.

In 2019, people aged 65 and older represented about 13% of the population. Under the medium growth scenario one in five, or 20%, is expected to be 65 years or older by 2046. By 2029, seniors will make up a larger share of the population than children aged 0 to 14 years. This trend has already occurred at the national level.

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

2019 vs. 2046



Sources: Statistics Canada and Alberta Treasury Board and Finance
 Note: Information boxes indicate generations in 2019.

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.

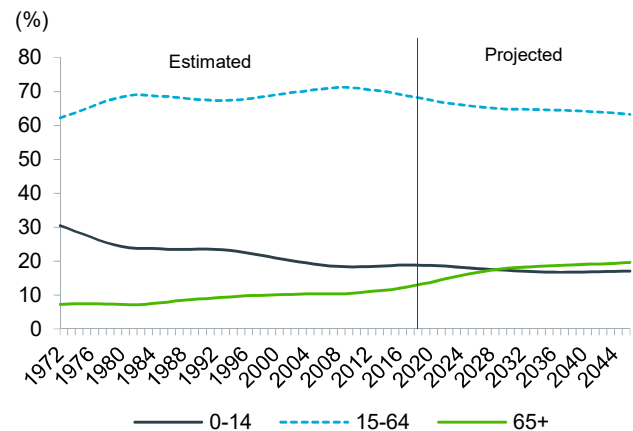
Over the projection period, the sex ratio is expected to remain stable at 101 males per 100 females. This is unusual, because the sex ratio tends to decrease in aging populations. In most provinces, the aging of the large baby boom cohort into the senior ages and higher female life expectancies tend to pull the sex ratio in favour of females. However, Alberta does not follow this pattern. Net migration inflows over the projection period may continue to tip the province's overall sex ratio in favour of males, which in turn, helps prop up the sex ratio. These two opposing forces will keep the sex ratio fairly stable over the projection period.

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 almost 3.0 million in 2019 to 4.0 million by 2046. However, as a share of the total population, this age group is anticipated to shrink, falling from around 68% in 2019 to about 63% by 2046 (Figure 4).

FIGURE 4: PROPORTION OF TOTAL POPULATION BY AGE GROUP

Alberta, 1972-2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

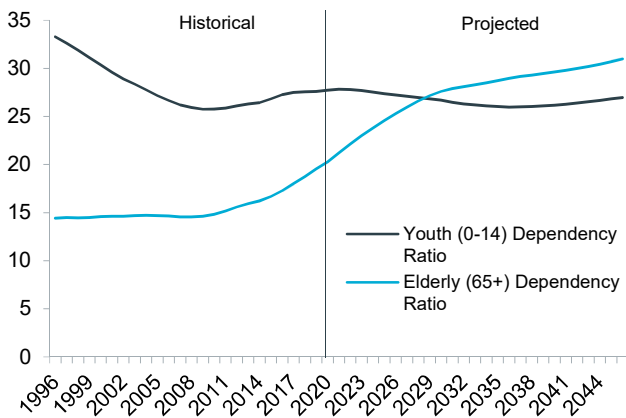
Due to the increasing share of seniors and the declining share of the working-age population, the total dependency ratio² is expected to increase significantly over the projection period (Figure 5). In 2019, there were around 47 dependents for every 100 Alberta

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).

residents aged 15 to 64 years. By 2046, it is expected that the total dependency ratio will climb to around 58 dependents. The higher ratio will mainly be driven by the rapid increase in the senior (or 65 years of age and older) portion of the population.

FIGURE 5: DEPENDENCY RATIOS (PER 100 WORKING AGE INDIVIDUALS)

Alberta, 1996-2046



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 2019. The baby boomers will be swelling the ranks of the province's oldest residents, while their children, who are the oldest cohort of the 'echo' generation, will have just entered their senior years (Figure 6). The next section outlines the projected size of specific age groupings.

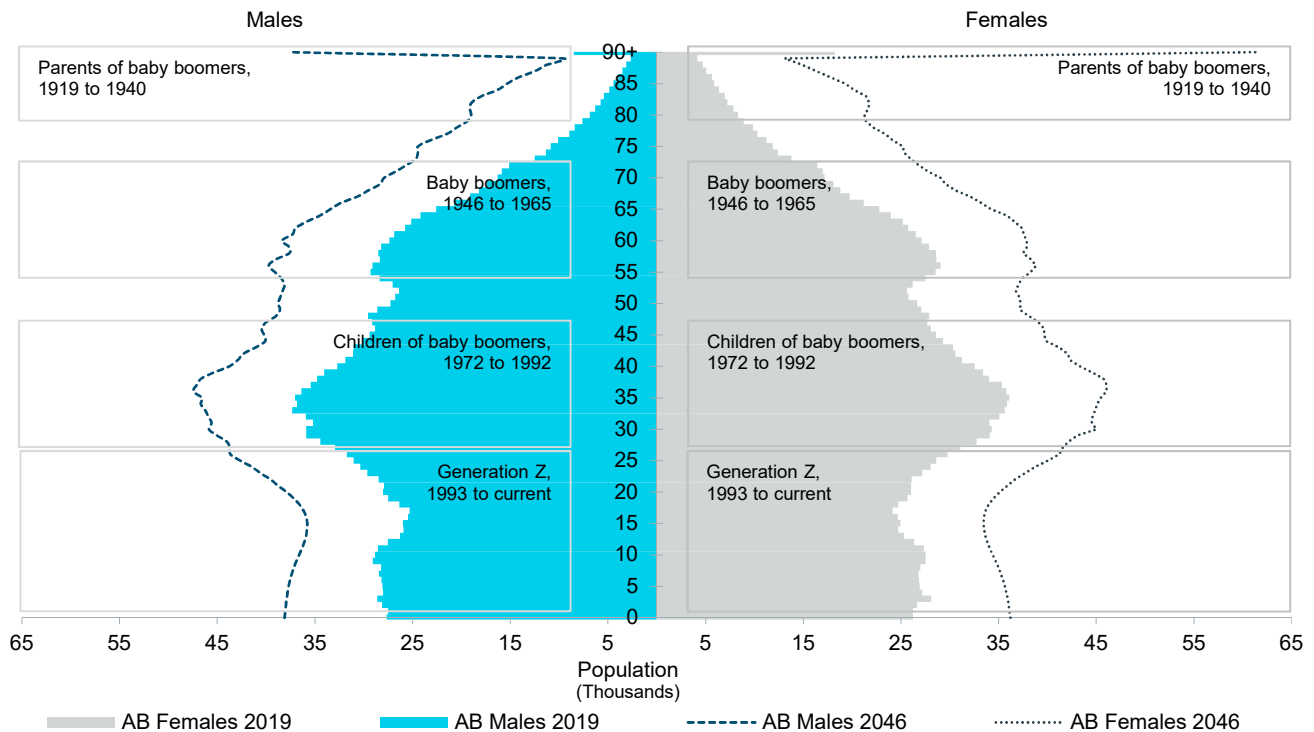
Stable numbers of young children and growing in school ages

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 2019, there were about 274,000 0 to 4 year olds in the province, and the size of this group is expected to remain relatively stable through to 2029. Thereafter, growth will accelerate, leading to about 370,000 young 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 relatively high fertility and migration rates. Between 2019 and 2025, this age

FIGURE 6: ALBERTA'S POPULATION BY AGE AND SEX (THOUSANDS)

2019 vs. 2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

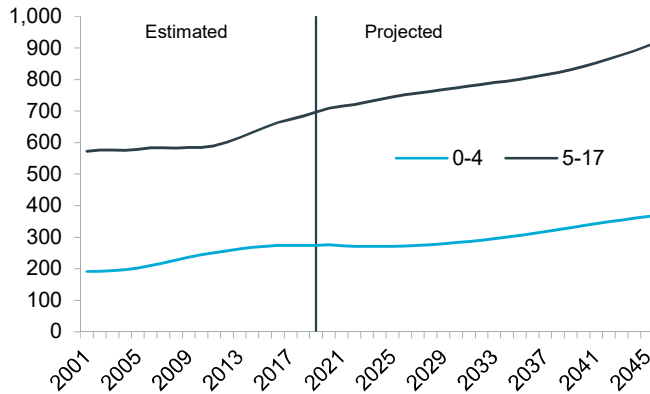
Note: Information boxes indicate generations in 2019.

group is expected to increase at an average annual rate of 1.1% (Figure 7), adding almost 50,000 new school-aged children during that period. By 2046, this age cohort is expected to number about 921,000, up from about 696,000 in 2019.

FIGURE 7: POPULATION AGED 0 TO 17 YEARS

Alberta, 2001-2046

(thousands)



Sources: Statistics Canada and Alberta Treasury Board and Finance

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 2019, the share of the population for this cohort was about 9% and is expected to be relatively stable throughout the projection period. In the next few years, this age group is expected to shrink as the province experiences net interprovincial outflows. Between 2025 to 2030, however, growth of young adults is expected to accelerate due to a larger cohort of children aging into this group, along with increasing migration to the province. By 2046, the number of young adults is expected to reach almost 525,000.

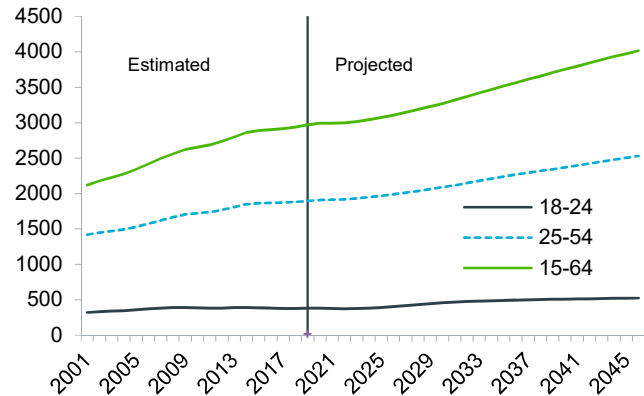
The core labour force age group (25 to 54 years) will also increase in size over the projection period, with the expansion expected to be higher over the medium term. In 2019, the youngest baby boomers were 54 years of age, comprising only about 3% of the core working-age group. By 2020, all of the baby boomers will have aged out of the core labour force, but their numbers will continue to rise due to migration (Figure 8). Despite the growth in those numbers, as a share of the total population, the core labour force cohort will decline from about 43% in 2019 to about 40% by 2046.

The overall working-age population (15 to 64 years) will also grow, expanding by around 35% over the projection period. However, since the overall population

FIGURE 8: POPULATION AGED 15 TO 64 YEARS

Alberta, 2001-2046

(thousands)



Sources: Statistics Canada and Alberta Treasury Board and Finance

will also expand by about 45%, that age group will make up a declining share of the total population, decreasing from about 68% in 2019 to 63% by 2046 as the baby boomers leave the workforce.

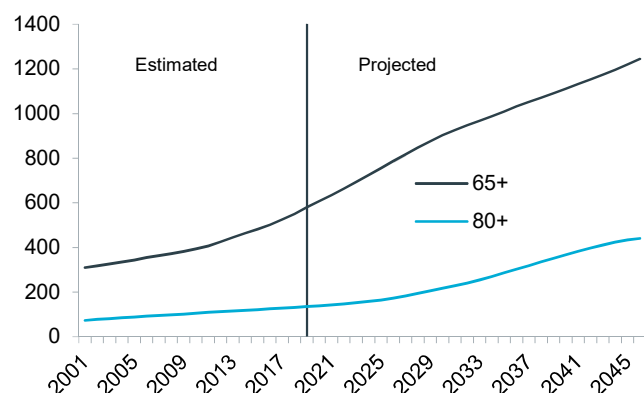
Aging boomers accelerate growth of senior population

The population aged 65 years and older is expected to increase both in number and population share throughout the projection period. In 2019, over 580,000 Albertans were aged 65 years and older, accounting for about 13% of the population. The number of seniors is expected to top one million by 2035 and exceed 1.2 million by 2046 (Figure 9). Under the medium scenario, about one in five Albertans would be 65 years or older by 2046. In 2019, there were about 390,000 more children (aged 0 to 17 years) than seniors. By 2046, this difference is expected to shrink to less than 50,000.

FIGURE 9: POPULATION AGED 65 AND OLDER

Alberta, 2001-2046

(thousands)



Sources: Statistics Canada and Alberta Treasury Board and Finance

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 the population 80 years of age and older. This age group is expected to more than double as a share of the population, increasing from just over 3% in 2019 to almost 7% by 2046. This trend represents an absolute increase of about 305,000 people who will be 80 years and older, a percentage increase of around 225% (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 the main 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 relatively 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 a region's migration patterns and vice versa.

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 2019 were CD 4 (Hanna) and CD 13 (Whitecourt) with average ages of 42.3 and 41.9 years, respectively. These two CDs are projected to have some of 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. For many years, some regions have 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 of interprovincial migrants. Likewise, some CDs make considerable gains 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 people to other parts of the province at the same time, leading to lower growth from migration than might be expected.

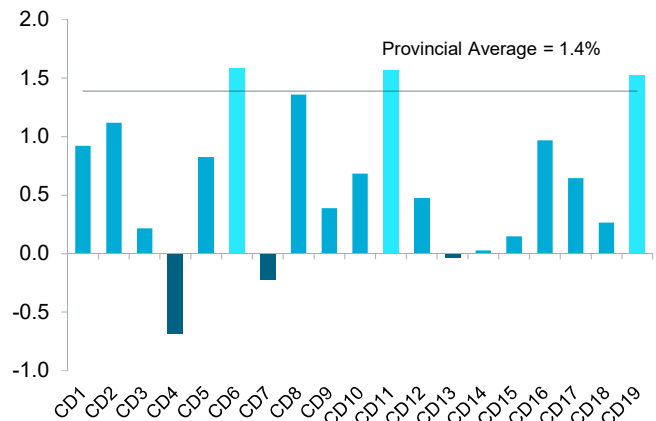
In general, the largest centres capture most of the migration to the province from international sources, while also gaining from migratory movements both within Alberta and from other regions of Canada (Appendix Map 2).

Most regions expected to see population growth

With the exception of CD 4 (Hanna), CD 7 (Stettler) and CD 13 (Whitecourt), all regions in Alberta are expected to see positive growth over the projection period. Although the population of CD 14 (Edson) is expected to grow, the increase is marginal (average annual growth of 0.03%) and the population is relatively stable (Figure 10). 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. By comparison, the Edmonton-Calgary Corridor (CDs 6, 8 and 11) and CD 19 (Grande Prairie) are projected to have the strongest growth (Appendix Map 3).

FIGURE 10: AVERAGE ANNUAL POPULATION GROWTH BY CENSUS DIVISION

Census Divisions, 2019-2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

Regional Age Structure

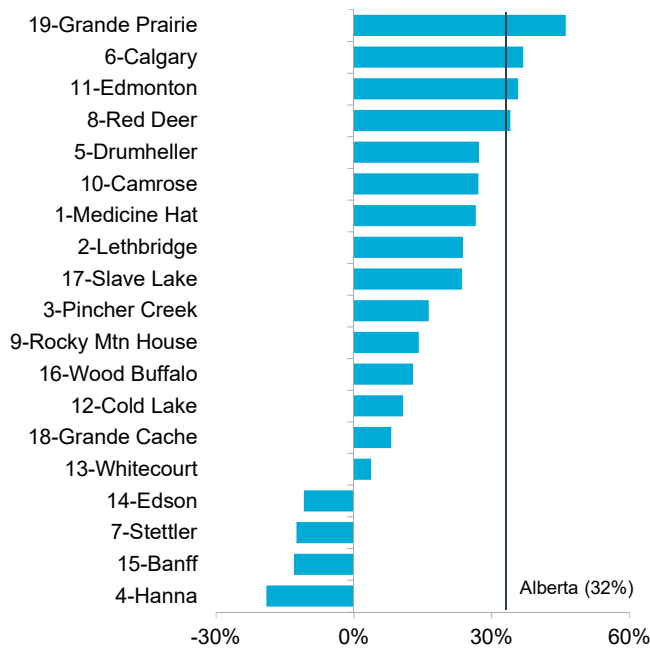
Overall increase in children, but shrinking share

There is considerable regional variation in the proportion of 0 to 14 year olds. At the top end, 28% of CD 17's (Slave Lake) population was under the age of 15, while at the bottom end of the spectrum, the proportion of children in CD 15 (Banff) was close to 14% in 2019. The share of children is projected to drop or remain fairly stable in almost all CDs. CD 15 and CD 16 (Wood Buffalo) are expected to show the greatest drop in the share of 0 to 14 year olds (2.4 and 2.8 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 current and projected 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), make up the four regions with the largest percent growth of children over the projection period.

FIGURE 11: PERCENT CHANGE OF 0 TO 14 YEAR OLDS
Census Divisions, 2019-2046

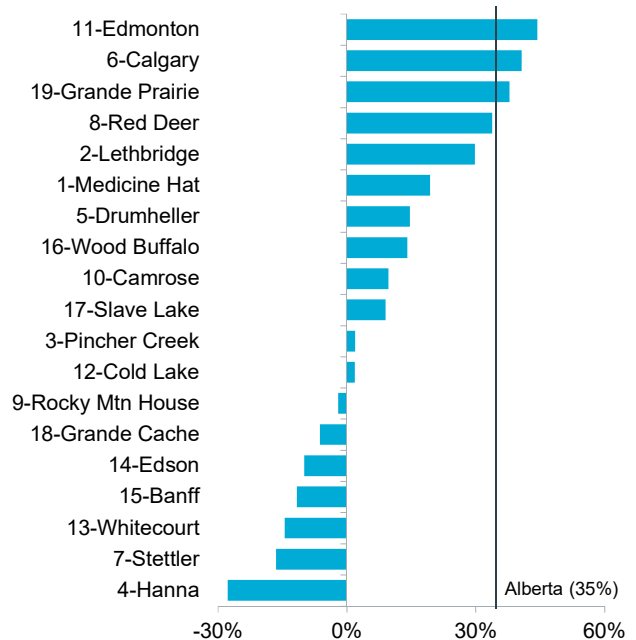


Sources: Statistics Canada and Alberta Treasury Board and Finance

Proportion of working-age population to shrink in every region

All but seven census divisions are projected to have increased populations in the working-ages (15 to 64 years) between 2019 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 11 (Edmonton) takes the top spot, followed by CD 6 (Calgary), CD 19 (Grande Prairie) and CD 8 (Red Deer). Not surprisingly, given the projected decline of its overall population, CD 4 (Hanna) is also expected to see the largest drop in its working-age population.

FIGURE 12: PERCENT CHANGE OF 15 TO 64 YEAR OLDS
Census Divisions, 2019-2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

In 2019, the regions with the highest share of the working-age population were CD 16 (Wood Buffalo), CD 15 (Banff), CD 6 (Calgary), CD 11 (Edmonton) and CD 19 (Grande Prairie); all had shares over the Alberta average of about 68%. In contrast, 58% 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 2019 and 2046. However, CD 16, CD 11 and CD 6 will continue to have the highest shares, above the provincial average of 63%.

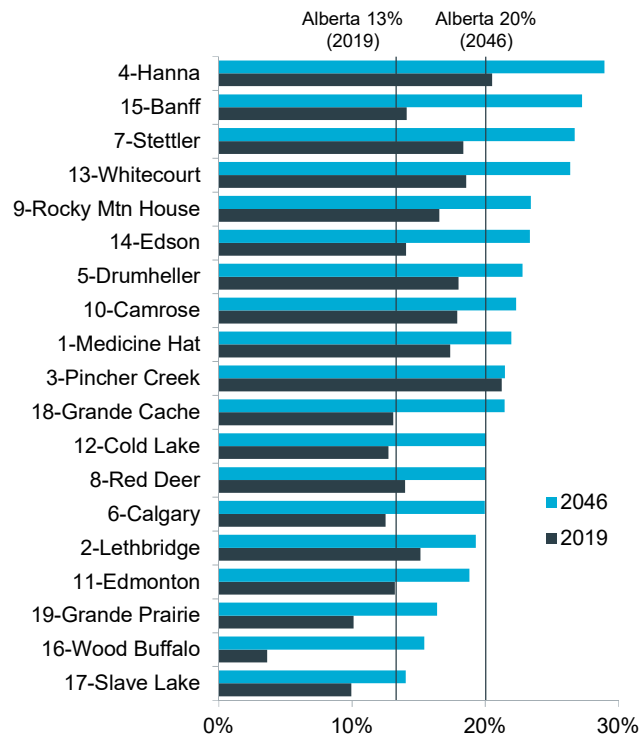
Regional differences in population aging

In 2019, 13% of Albertans were 65 years of age and older, and this number is expected to increase to 20% 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 2019, CD 3 (Pincher Creek) and CD 4 (Hanna) had the highest proportion of seniors among the CDs at 21%, while Wood Buffalo (CD 16) had the lowest share (4%). In 2046, it is expected that CD 4 (Hanna) will have the highest percentage of seniors at 29%, whereas CD 17 (Slave Lake) will have the smallest share with about 14% of the population aged 65 years and over.



FIGURE 13: POPULATION AGED 65 AND OVER AS A PERCENT OF TOTAL POPULATION

Census Divisions, 2019 and 2046



Sources: Statistics Canada and Alberta Treasury Board and Finance

Focus on selected regions

Recession in Alberta: around the province

With Alberta in a recession this year and restrictions on travel because of COVID-19, population growth is expected to slow significantly over the short term. While all regions of the province are expected to be impacted, particular effects are expected in CD 6 (Calgary), CD 11 (Edmonton), CD 8 (Red Deer), CD 16 (Wood Buffalo), CD 19 (Grande Prairie) and CD 12 (Cold Lake).

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 province³. Projected growth in this region 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

³ 2016 Census of Canada, Statistics Canada

within the province. As the most populous region, this area tends to attract most of the migrants arriving from outside of the province. In the past decade, 86% of immigrants and 73% of the migrants from other parts of Canada settled in this region. In addition, these CDs tend to gain residents through migration from other parts of the province.

Wood Buffalo: growth slows

CD 16 (Wood Buffalo) was hit hard by the 2015-2016 recession. Strong net outflows of interprovincial and intraprovincial migrants caused this region's population to shrink between 2015 and 2017, as the economy adjusted to lower oil prices and decreased production. Thereafter, this region experienced modest economic improvements, with projects announced and oil prices on the rise. However, the March 2020 collapse in oil prices led to companies halting projects and investor confidence in the energy sector falling once again. CD 16 is expected to have net outflows of migrants between 2021 and 2024, and the population is forecast to contract for the period of 2021 to 2023. Following a few years of net outflows, CD 16 is expected to reach positive levels of net migration once again. Between 2026 and 2028, higher oil sands investment, due to improving market access for Alberta crude and growing confidence, should result in a boost in migration to this region. Over the entire projection period, natural increase is expected to contribute almost 27% to CD 16's growth. This is the second highest contribution among regions in the province, and well above the provincial level (Appendix Map 1). Due to its youthful population, there are relatively fewer deaths and a significant number of births in CD 16 when compared with other regions. Overall, average annual growth for CD 16 is projected at 0.97% between 2019 and 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 1.52%, the region's average annual growth (between 2019 and 2046) is expected to remain well above the provincial level (Appendix Map 3). This 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 and both areas have abundant reserves of oil and gas. While resource activities may attract more male migrants, the service sector is expected to attract a more balanced mix of people. Compared with CD 16 (Wood Buffalo), for example, the sex ratio of CD 19 (Grande Prairie) is less skewed towards 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 in 2015-2016, and saw net outflows of migrants in 2016 and 2017. This region is forecast to once again have net outflows of migrants between 2021 and 2023. However, because of its economic diversity and the up-tick in conventional drilling, CD 19 should see its migration levels recover more significantly than other oil dependent regions such as CD 12 and CD 16.

Lethbridge: growth potential

CD 2, which includes the city of Lethbridge, is an economically diverse region with industries such as agriculture, government and manufacturing. This puts the region in a better position to cope with an economic recession when compared with some other regions of the province. CD 2 has become an increasingly attractive destination for migrants and their families, as well as for young adults due to its postsecondary institutions. Given its relatively young age structure and higher-than-average fertility, CD 2 has the potential for continued future growth.

Mountain parks: migration supports growth

In the past few months, CD 15 (home to both Banff and Jasper) has experienced a significant slowdown in tourism. This is the result of restricted international travel and fewer interprovincial visitors due to COVID-19 during what is typically their busy summer months. This economic slowdown in tourism could also effect demand for temporary foreign workers (a sub-category of NPRs). As a result, this region is expected to have continued net outflows of migrants over the next few years.

Over the projection period, CD 15 is expected to have negative growth from natural increase (-0.8%), due mainly to low fertility (Appendix Map 1). Although there is a large number of young adults, they tend to leave the region before they start families. However, net migration will support overall population growth of 0.15% annually (Appendix Map 3), offsetting the impacts of negative growth due to natural increase.

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

Data for Alberta Population Projections.

Includes estimated (1996-2019) and projected (2020-2046) population of Alberta and its 19 Census Divisions by single year of age and sex as well as some summary statistics.

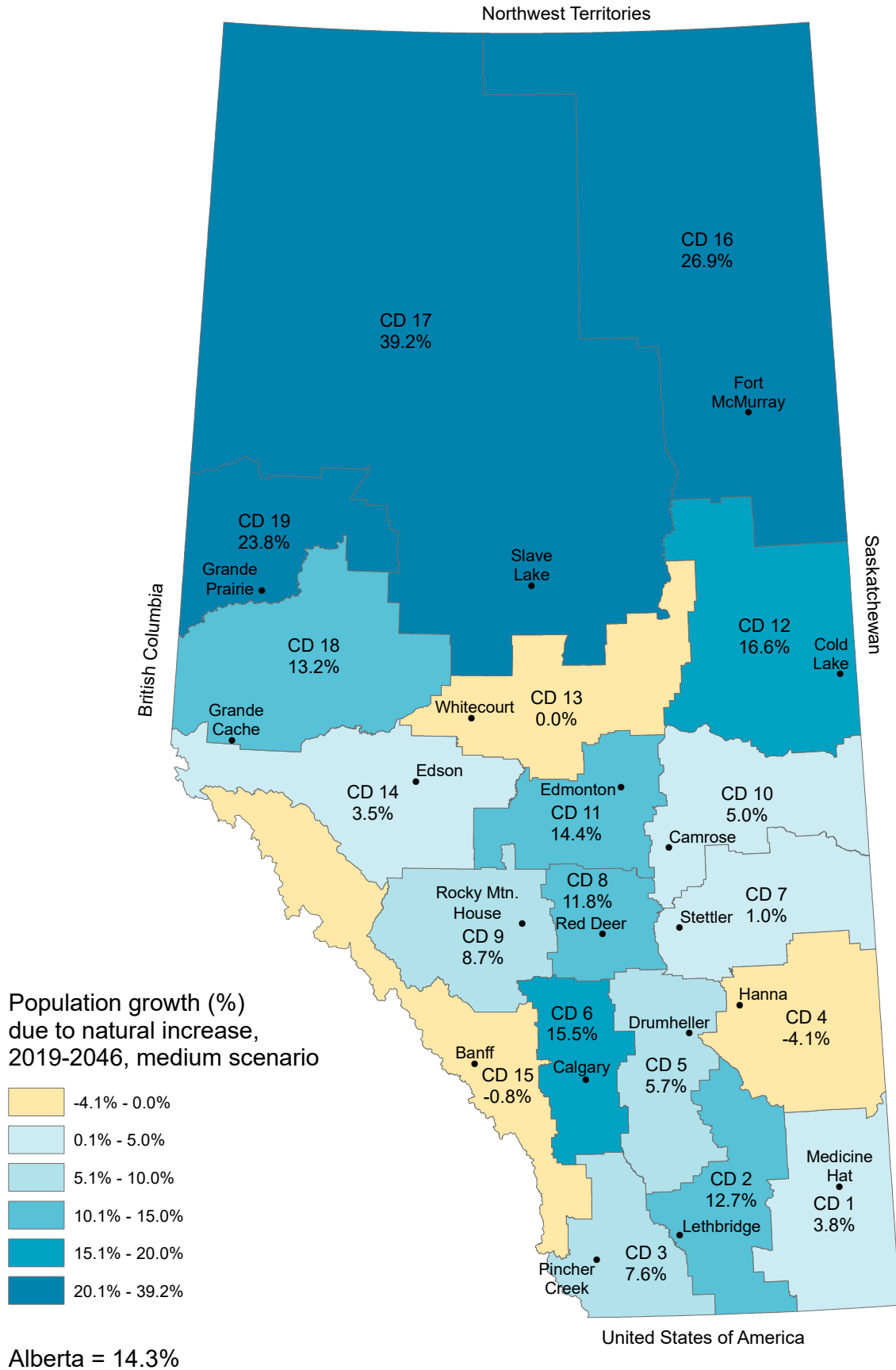
Population Projection Methodology and Assumptions.

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

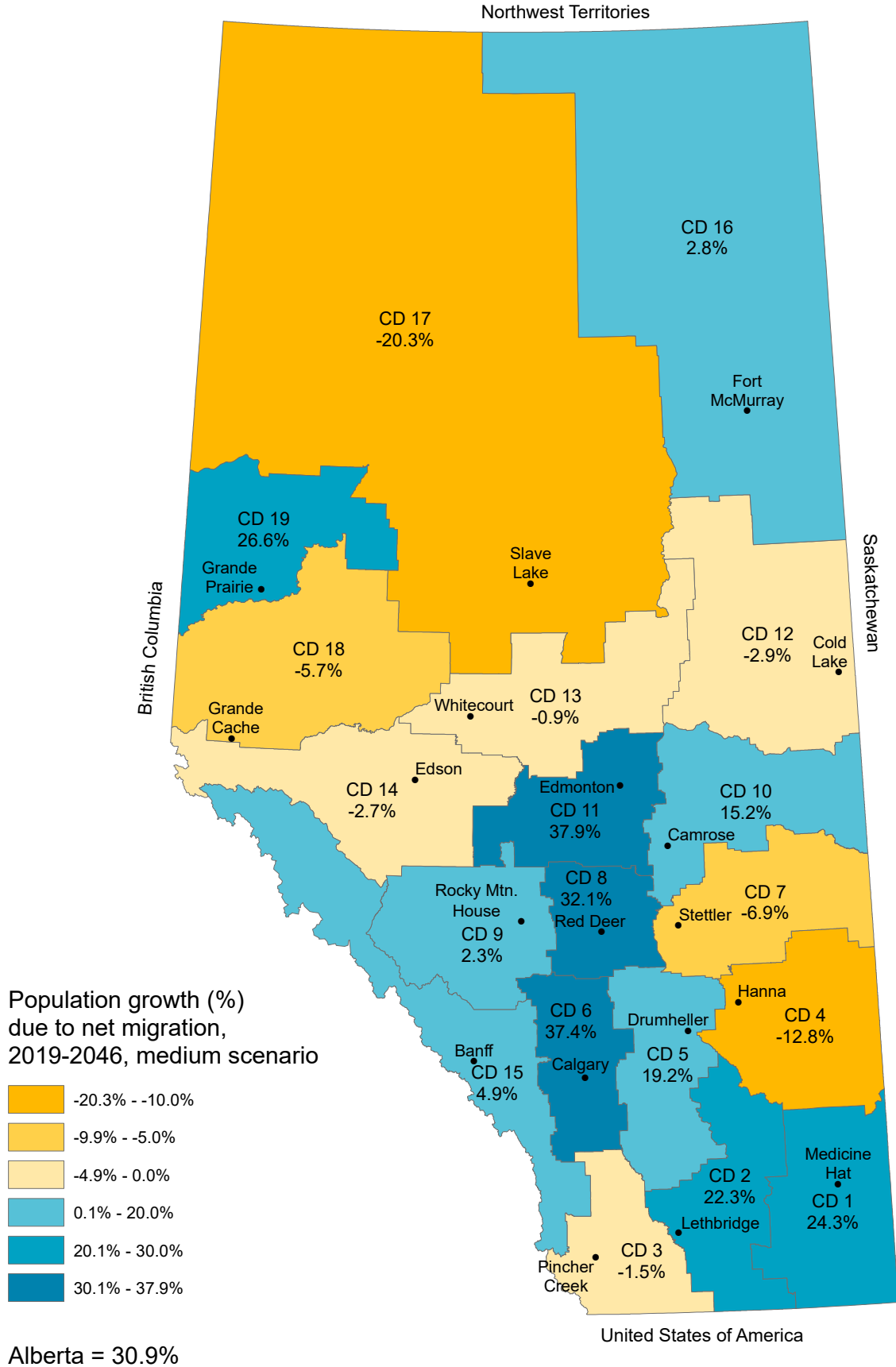
| Contact [Jennifer Hansen](#) at 780.427.8811

Appendix

MAP 1: POPULATION GROWTH DUE TO NATURAL INCREASE, 2019-2046, MEDIUM SCENARIO



MAP 2: POPULATION GROWTH DUE TO NET MIGRATION, 2019-2046, MEDIUM SCENARIO



MAP 3: AVERAGE ANNUAL POPULATION GROWTH (PERCENT), 2019-2046, MEDIUM SCENARIO

