Population Projections

Alberta and Census Divisions, 2023–2051

In 2051, Alberta's population is expected to:

- Reach almost 7.1 million people, an increase of roughly 2.6 million people from 2022.
- Become older, with an average age of 41.6 years, up from 39.0 years in 2022.
- Become increasingly diverse, as arrivals from other countries account for about 55% of the expected growth over the projection period.
- Become more concentrated in urban centres, especially along the Edmonton-Calgary Corridor; 81% of Albertans are expected to live in this region by 2051.

Population projections from 2023 to 2051 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.

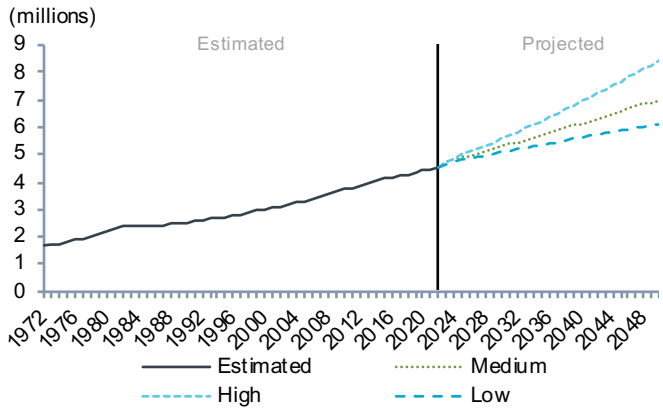
Alberta Population Projections

Alberta to see a short-term surge in population growth

By 2051, Alberta is expected to be home to almost 7.1 million people, representing an average annual growth rate of about 1.5%, or an increase of roughly 2.6 million people from 2022 (Figure 1). The projected growth will be lower than the 1.9% experienced over the previous 25-year period (1997 to 2022), due to population aging and slower gains in migration. Alberta's population is projected to surpass 5.0 million by 2027 and reach the 6.0 million mark by 2039. Under the low and high scenarios, Alberta's total population in 2051 is projected to be around 6.2 million and 8.6 million; gains of 1.6 million and 4.0 million, respectively.

FIGURE 1: POPULATION OF ALBERTA

1972-2051



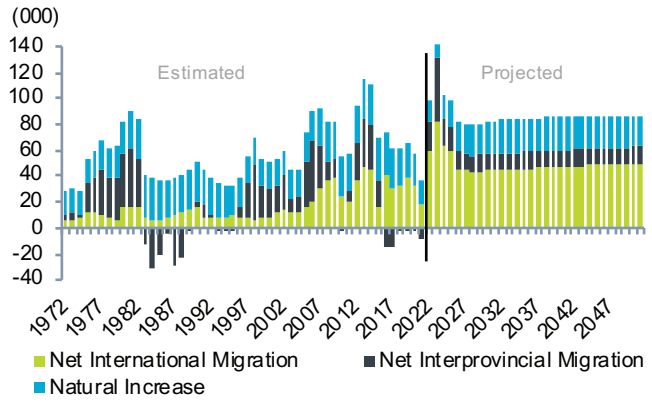
Sources: Statistics Canada and Alberta Treasury Board and Finance

Migration to the province is dependent on several factors, including Alberta's economic conditions relative to other provinces. Post pandemic, Alberta has registered a large increase in migration. Robust economic growth as well as lower housing and living costs have helped to attract migrants from across Canada and around the world. Furthermore, a strong rebound in oil prices after the pandemic and labour shortages were other contributing factors. While the large provinces of Ontario and Quebec have been seeing net losses of residents to other provinces, Alberta has seen large net interprovincial gains. After a large uptick in 2022, an even greater surge in interprovincial migration is expected in 2023. It is forecast to drop in 2024 before moderating into its long term trend.

Net international migration in 2023 will also be significantly higher than average. The lifting of travel restrictions due to COVID-19 has meant more immigrants and non-permanent residents arriving in Canada and an increasing share arriving in Alberta. Furthermore, the federal government has been continually boosting its immigration targets. The target for the calendar year of 2023 is 465,000,

increasing incrementally to 500,000 in 2025. Alberta is expected to receive an average of 12% for each year. Non-permanent residents (NPRs) are also expected to surge in the short-term. This is due to increased demand for temporary foreign workers to fill post pandemic labour shortages, migrants fleeing Ukraine and international students. NPRs are expected to turn negative once Ukrainians start returning home after 2026 and stabilizing thereafter.

FIGURE 2: COMPONENTS OF POPULATION GROWTH
Alberta, 1972-2051



Sources: Statistics Canada and Alberta Treasury Board and Finance

Over the medium term (i.e., 2026 to 2030), as economic conditions improve and net interprovincial migration becomes positive, population growth is expected to accelerate, averaging 1.5% annually during that time.

Despite increasing migration levels, population growth is expected to slow gradually over the projection period, dropping from 1.6% in 2027 to 1.2% in 2051. 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 1.4 million people) is projected to account for 72% of Alberta's population growth under the medium scenario, with natural increase accounting for the remaining 28% (Figure 2). Of the anticipated net migrants, 77% would arrive from other parts of the world. Net interprovincial migration is expected to account for over 17% of the province's growth, or 428,409 new residents between 2022 and 2051 under the medium growth 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 over 700,000 people by 2051 (Figure 2). The degree to which natural increase contributes to population growth is partly influenced by migration patterns. The majority of the more than 1.8 million net migrants projected to arrive over the next 29 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 2022, 137 new Albertans were born, while about 88 people died. By 2051, the average number of daily deaths is expected to climb to around 150 per day, while births will likely show a smaller increase to 214 per day.

Albertans are expected to live longer

On average, a girl born in Alberta in 2022 could expect to live to 82.7 years of age, while a boy could reach 78.0 years. Under the medium growth scenario, life expectancy at birth for females is projected to rise to 87.4 years by 2051, while for males it is expected to reach 84.2 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 4.7 years in 2022 to 3.2 years by 2051.

Life expectancy at age 65 is also expected to increase. A man reaching age 65 in 2022 could expect to live, on average, another 18.9 years, compared to 21.4 years for women. Life expectancy at age 65 is projected to increase to 22.0 years for men and 24.6 years for women by 2051.

Alberta's population getting older

In 2022, 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 2022, the average age[1] of the provincial population was 39.0 years, a figure that is projected to climb to 41.6 years by 2051.

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

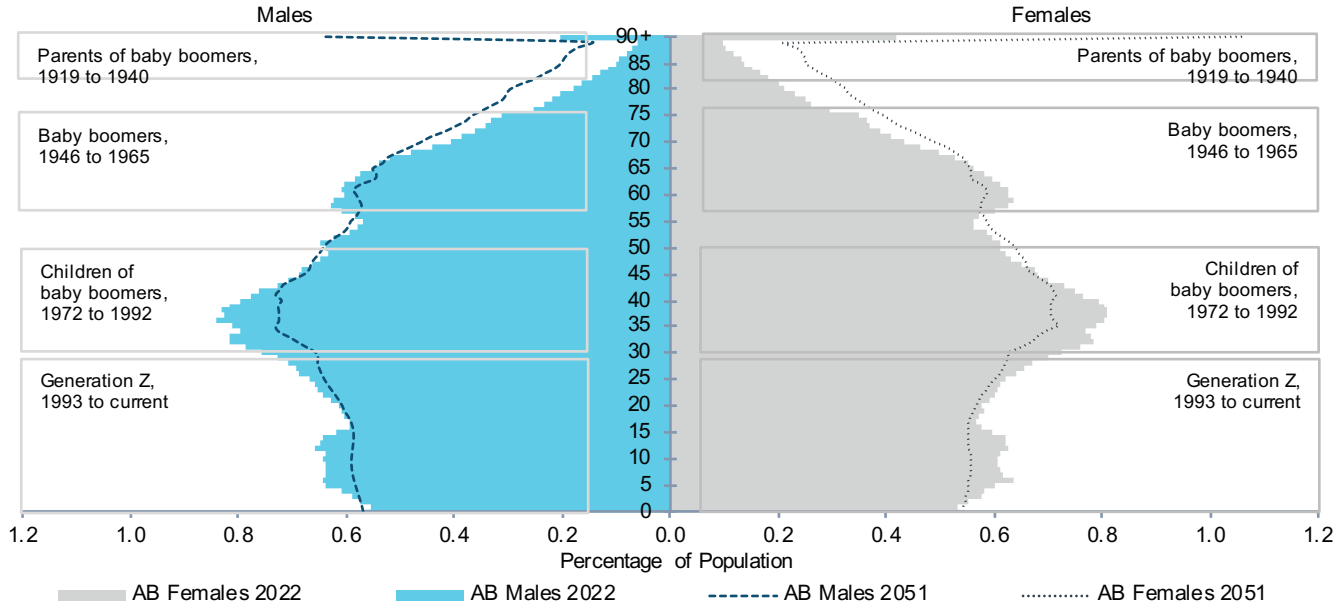
Baby boomers accelerate aging

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 2022, baby boomers were aged 57 to 76 years and accounted for about 20% 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 2022, people aged 65 and older represented about 15% of the population. Under the medium growth scenario one in five, or 20%, is expected to be 65 years or older by 2051. By 2031, 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.

FIGURE 3: ALBERTA'S POPULATION PYRAMIDS

2022 vs. 2051



Sources: Statistics Canada and Alberta Treasury Board and Finance
Note: Information boxes indicate generations in 2022.

More people depend on the working-age population

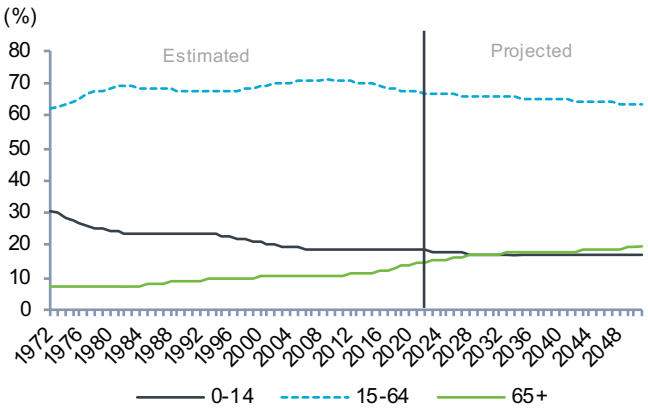
The number of working-age Albertans (aged 15 to 64 years) is expected to grow under all scenarios. Under the medium scenario, the working-age population will increase from over 3.0 million in 2022 to 4.5 million by 2051. However, as a share of the total population, this age group is anticipated to shrink, falling from 67% in 2022 to about 63% by 2051 (Figure 4).

Due to the increasing share of seniors and the declining share of the working-age population, the total dependency ratio[2] is expected to increase significantly over the projection period. In 2022, there were around 49 dependents for every 100 Alberta residents aged 15 to 64 years. By 2051, it is expected that the total

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

FIGURE 4: PROPORTION OF TOTAL POPULATION BY AGE GROUP

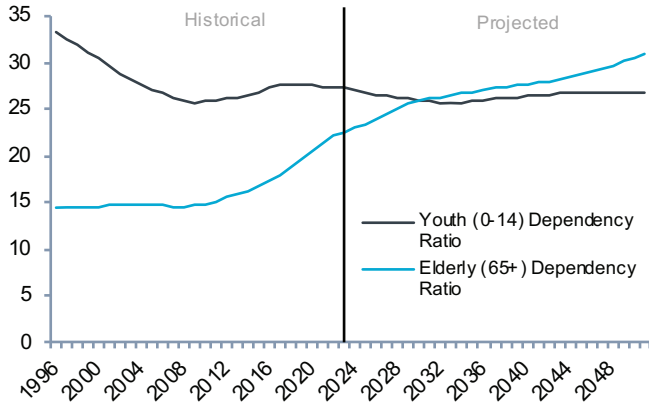
Alberta, 1972-2051



Sources: Statistics Canada and Alberta Treasury Board and Finance

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) population (Figure 5).

FIGURE 5: DEPENDENCY RATIOS (PER 100 WORKING AGE INDIVIDUALS)
Alberta, 1996-2051



Sources: Statistics Canada and Alberta Treasury Board and Finance

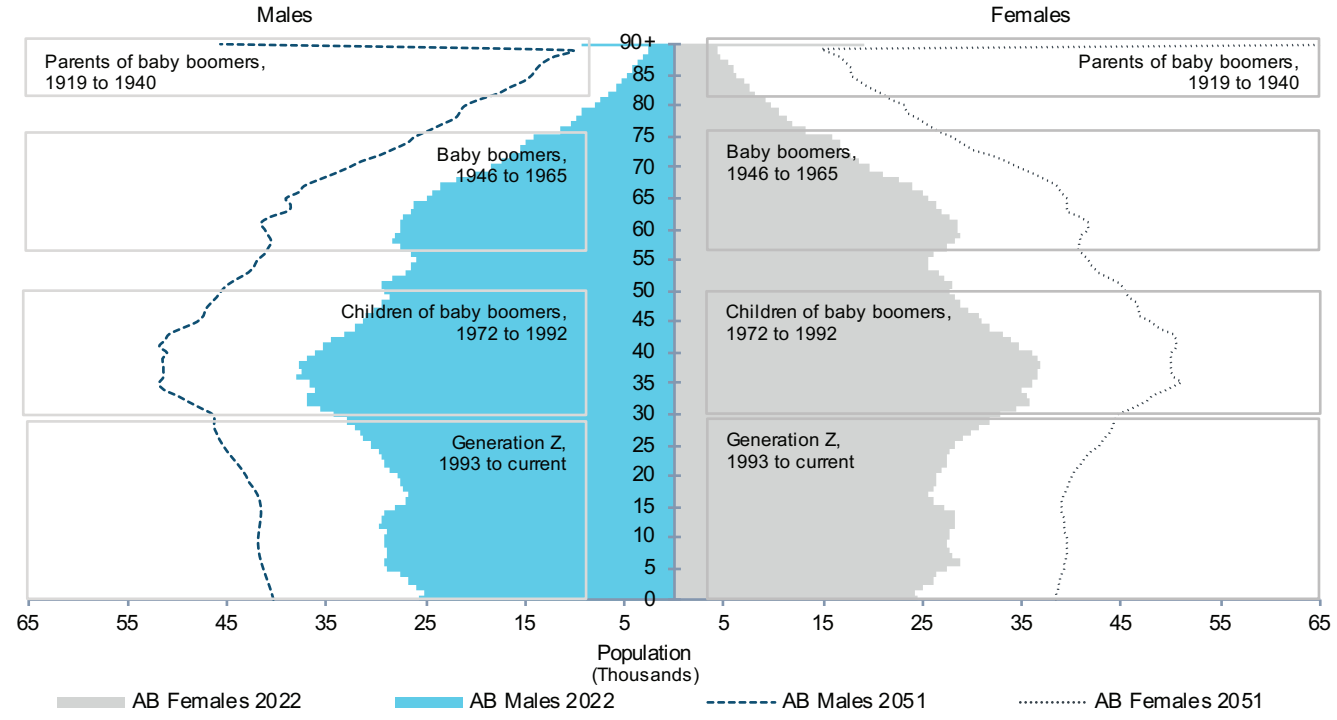
Gender balance expected in long-term

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 gender ratio (ratio of males to females) is expected to move towards a balance. In 2022, there were 101 males for every 100 females. Over the projection period, the gender ratio is expected to balance at 100 males per 100 females. As populations age, higher female life expectancies tend to pull the gender ratio in favour of females.

Age Structure of Alberta Population

By 2051, there will be more people of every age compared with 2022 (Figure 6). 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 mostly have entered their senior years. The next section outlines the projected size of specific age groupings.

FIGURE 6: ALBERTA'S POPULATION BY AGE AND SEX (THOUSANDS)
2022 vs. 2051

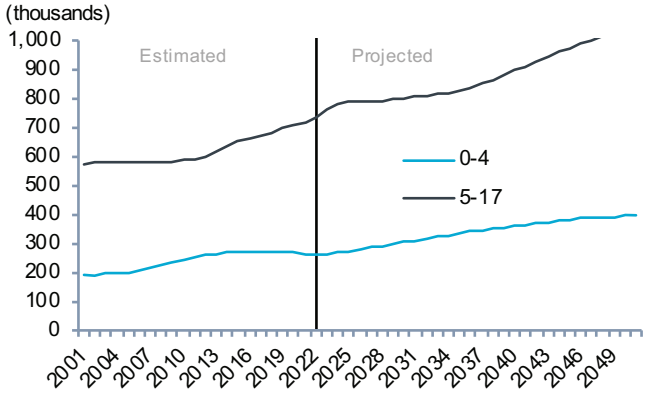


Sources: Statistics Canada and Alberta Treasury Board and Finance
Note: Information boxes indicate generations in 2022.

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 2022, there were about 258,000 0 to 4 year old's in the province, and the size of this group is expected to pick up in the short to medium term, before stabilizing in the long term, resulting in about 397,000 young children by 2051 (Figure 7).

FIGURE 7: POPULATION AGED 0 TO 17 YEARS
Alberta, 2001-2051



Sources: Statistics Canada and Alberta Treasury Board and Finance

The population aged 5 to 17 years also represents a significant portion of current 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 2022 and 2027, this age group is expected to increase at an average annual rate of 1.5% (Figure 7), adding almost 60,000 new school-aged children during that period. By 2051, this age cohort is expected to number 1,052,510, up from 732,367 in 2022.

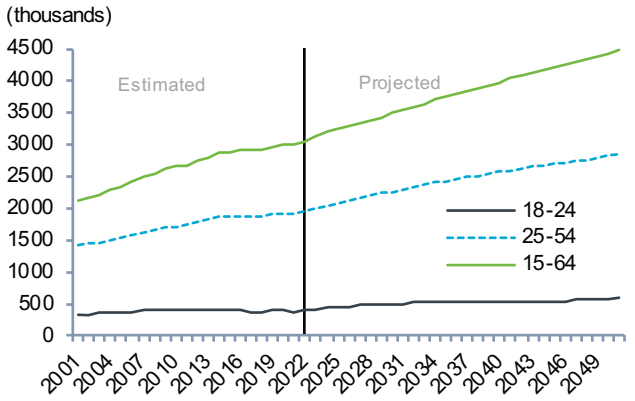
Steady share of young adults, declining share of core working-ages

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 2022, the share of the population for this cohort was about 9% and is expected to be relatively stable throughout the projection period. The young adult cohort is expected to pick up strongly between 2022 and 2023 due to high migration levels. Between 2024 to 2031, this group will continue to grow, albeit at a slowing rate. By 2051, the number of young adults is expected to reach over 589,000 (Figure 8).

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 greater between 2023 and 2026. By 2020, all of the baby boomers had aged out of the core labour force, but the core labour force will continue to increase 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 2022 to about 40% by 2051.

The overall working-age population (15 to 64 years) will also grow, expanding by around 48% over the projection period. However, since the overall population will also expand by about 56%, that age group will make up a declining share of the total population, decreasing from about 67% in 2022 to 63% by 2051 as the baby boomers leave the working ages.

FIGURE 8: POPULATION AGED 15 TO 64 YEARS
Alberta, 2001-2051



Sources: Statistics Canada and Alberta Treasury Board and Finance

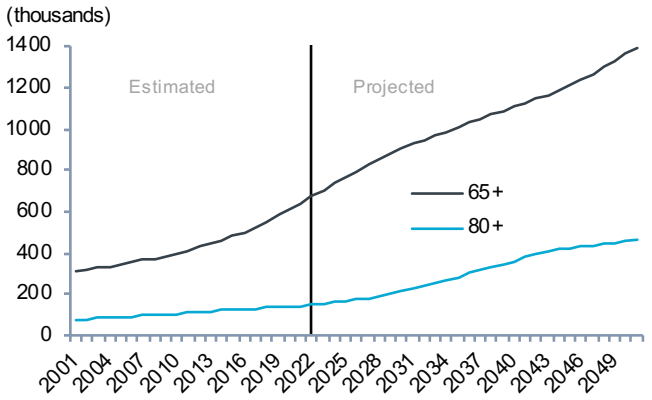
Aging boomers accelerate growth of senior population

The population aged 65 years and older is expected to increase both in number and population share throughout the projection period. In 2022, almost 673,000 Albertans were aged 65 years and older, accounting for about 15% of the population. The number of seniors is expected to top one million by 2035 and exceed 1.2 million by 2045 (Figure 9). Under the medium scenario, about one in five Albertans would be 65 years or older by 2051. In 2022, there were over 317,000 more children (aged 0 to 17 years) than seniors. By 2051, this difference is expected to shrink to about 58,000.

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 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 over 3% in 2022 to about 7% by 2051. This trend represents an absolute increase of about 315,000 people who will be 80 years and older and a percentage increase of around 212% (Figure 9).

FIGURE 9: POPULATION AGED 65 AND OLDER
Alberta, 2001-2051



Sources: Statistics Canada and Alberta Treasury Board and Finance

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 2022 were CD 4 (Hanna) and CD 13 (Whitecourt) with average ages of 43.0 and 42.6 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. In recent years, some regions have seen their young people move to other regions of the province (intraprovincial migration), for example, CD 17 (Slave Lake), CD 16 (Wood Buffalo), CD 14 (Edson) and CD 7 (Stettler).

Other regions have a long-standing and significant attraction for 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 expected.

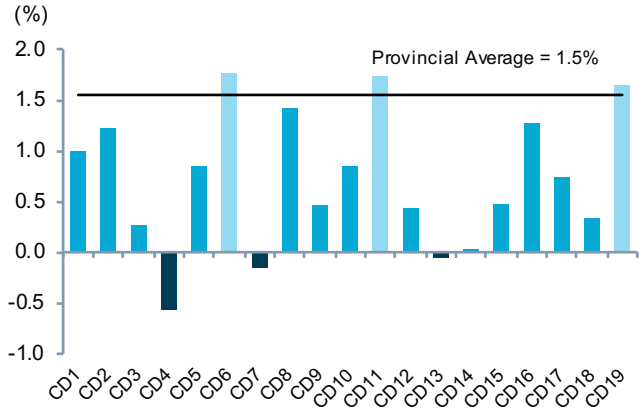
In general, the largest centres capture most of the migration to the province from international sources, while also gaining from migratory movements both within Alberta and from other provinces of Canada (Appendix Map 2).

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 small (average annual growth of 0.03%) and the population is relatively stable (Figure 10). CD 3 (Pincher Creek), CD 18 (Grande Cache) and CD 15 (Banff) are also likely to experience minimal 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, 2022-2051



Sources: Statistics Canada and Alberta Treasury Board and Finance

Regional Age Structure

Overall increase in children, but regional variation

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 13% in 2022. The share of children is projected to drop or remain fairly stable in most of the CDs. CD 16 (Wood Buffalo) is expected to show the greatest drop in the share of 0 to 14 year olds (3.2 percentage points), which is primarily due to population aging and the shrinking proportions of women of child-bearing age. CD 3 is expected to see the largest increase (2.4 percentage points), due to higher than average fertility in the region. CDs 17 and 15 will continue to have the highest and lowest population shares of children, respectively, in 2051.

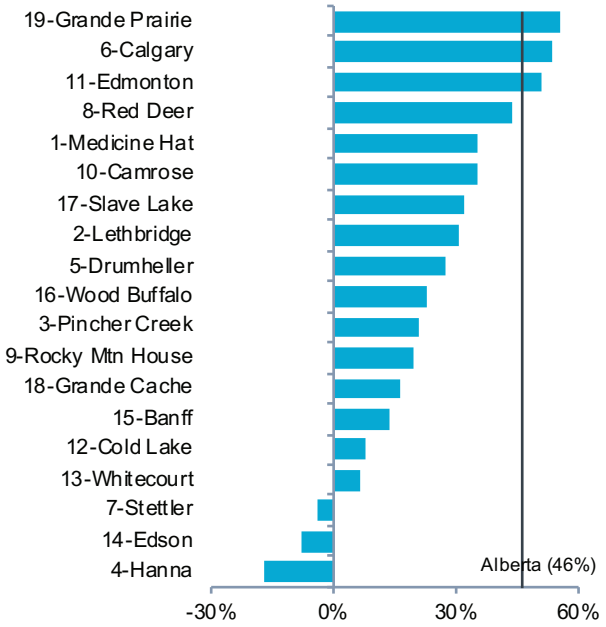
The absolute number of children will increase in most census divisions (Figure 11). Due to their large populations, the largest absolute increases in the number of children are expected in CD 8 (Red Deer), CD 6 (Calgary), and CD 11 (Edmonton). These three census divisions, together with CD 19 (Grande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

Proportion of working-age population to shrink in every region

All but five census divisions are projected to have increased populations in the working-ages (15 to 64 years) between 2022 and 2051 (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 6 (Calgary) takes the top spot, followed by CD 11 (Edmonton), CD 8 (Red Deer). and CD 2 (Lethbridge).

FIGURE 11: PERCENT CHANGE OF 0 TO 14 YEAR OLDS

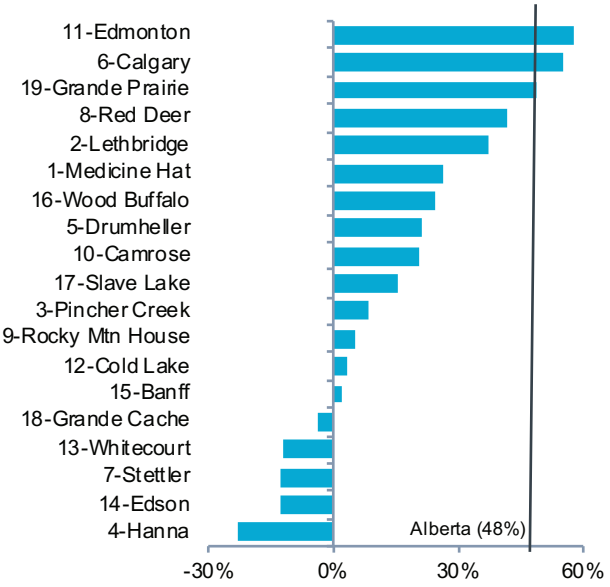
Census Divisions, 2022-2051



Sources: Statistics Canada and Alberta Treasury Board and Finance

FIGURE 12: PERCENT CHANGE OF 15 TO 64 YEAR OLDS

Census Divisions, 2022-2051



Sources: Statistics Canada and Alberta Treasury Board and Finance

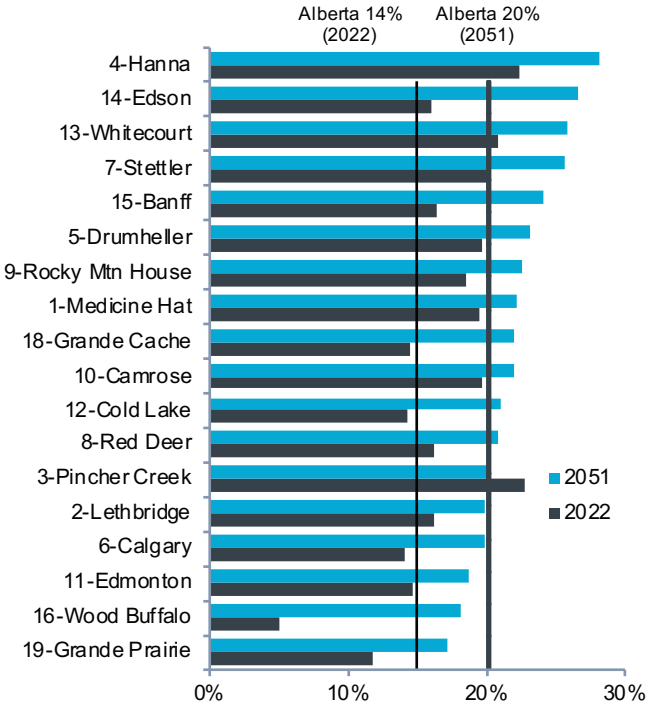
In 2022, the regions with the highest share of the working-age population were CD 16 (Wood Buffalo), CD 15 (Banff), CD 6 (Calgary), CD 11 (Edmonton) and CD 19 (Grande Prairie); all had shares over the Alberta average of 67%. In contrast, 57% of people in CD 3 (Pincher Creek) were of working age. The share of population aged 15 to 64 will decline in all census divisions between 2022 and 2051. However, only CD 11 and CD 6 will continue to have the highest shares, above the provincial average of about 63% (Figure 12).

Regional differences in population aging

In 2022, almost 15% of Albertans were 65 years of age and older, and this number is expected to increase to 20% by 2051. The proportion of the population aged 65 and older varies by region due to different age structures and migration flow patterns (Figure 13). In 2022, CD 3 (Pincher Creek) and CD 4 (Hanna) had the highest proportion of seniors among the CDs at 23% and 22%, respectively, while Wood Buffalo (CD 16) had the lowest share (5%). In 2051, it is expected that CD 4 (Hanna) will continue to have the highest percentage of seniors at 28%, whereas CD 17 (Slave Lake) will have the smallest share with about 13% of the population aged 65 years and over.

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

Census Divisions, 2022 and 2051



Sources: Statistics Canada and Alberta Treasury Board and Finance

Focus on selected regions

Strong growth returns

It is clear that Alberta has adjusted well post COVID-19 with huge gains in interprovincial and international migration. While growth is expected in all regions of Alberta, CD 6 (Calgary), CD 11 (Edmonton), CD 8 (Red Deer), CD 19 (Grande Prairie) and CD 5 (Drumheller), are favoured to grow more, capitalizing on more newcomers arriving in the province.

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, Calgary and Red Deer. Covering only 6% of the land area, the Corridor is home to almost 78% of the population and is the most urbanized area of the province. Projected growth in this region will outpace the provincial average (Appendix Map 3). By 2051, 81% 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, this area tends to attract most of the migrants arriving from outside of the province. In the past decade, 87% of immigrants and 86% of the net 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) traditionally attracts a sizable number of immigrants but loses them quickly through intraprovincial migration. CD16 has witnessed net losses of NPRs and net interprovincial migrants from 2016 to 2021. With the recession and pandemic out of the way, the province looks forward to better days. Stability in oil prices means continued operations of the oil sands and general improvements in the economic wellbeing of the region. However, recent high oil prices have not translated to increased oil-sands development as was in the past, as oil companies are focused on optimization and investing in emissions-reducing technologies. As a result, CD 16 is forecast to increase at an average annual rate of 2.2% between 2022 to 2025, which is slightly lower than the provincial average (2.5%). Over the entire projection period, natural increase is expected to contribute 30% 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 1.3% between 2022 and 2051.

Grande Prairie: a service centre for Alberta and British Columbia

CD 19, home to the city of Grande Prairie, continues to experience robust growth. At 1.6%, the region's average annual growth (between 2022 and 2051) 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 gender ratio of CD 19 (Grande Prairie) is less skewed towards males, and the region is more attractive to young adults of both genders. As a result, the population in CD 19 contains momentum for future growth. This region is forecast to have net inflows of migrants between 2023 and 2051. With stability in oil prices, CD 19 is expected to attract more people during the projected period.

Lethbridge: growth potential

CD 2, which includes the City of Lethbridge, is an economically diverse region with industries such as agriculture, government and manufacturing. The Lethbridge area is well-known for its fertile land and extensive irrigation systems, which support the production of crops such as wheat, canola, barley, and sugar beets. CD 2 has become an increasingly attractive destination for migrants and their families, as well as for young adults due to its postsecondary education institutions. Given its relatively young age structure and higher-than-average fertility, CD 2 has the potential for continued future growth. Over the projection period, CD 2 is expected to grow at 1.2% (2022-2051). There has also been an uptick in renewable resource development, which should support growth in the short term.

Drumheller: enhanced investments

CD 5 will see an uptick in economic activities centred around renewable energy in the short term. Solar power generation projects, protein food processing and wallboard manufacturing will be some of the main economic activities taking place in CD 5. This is expected to drive a steady intake of interprovincial and intraprovincial migrants in the short term.

The population of CD 5 grew at less than 0.5% yearly from 2015 to 2021, signifying the effects of the recession and pandemic. In the short term (2023-2025), growth is expected to jump to nearly 2.0% before gradually sliding back. During the projection period, the population of CD 5 is expected to grow at an annual average of 0.8% with net migration contributing to 25% of overall population growth.

For more information on the Population Projections see:

Data for Alberta Population Projections.

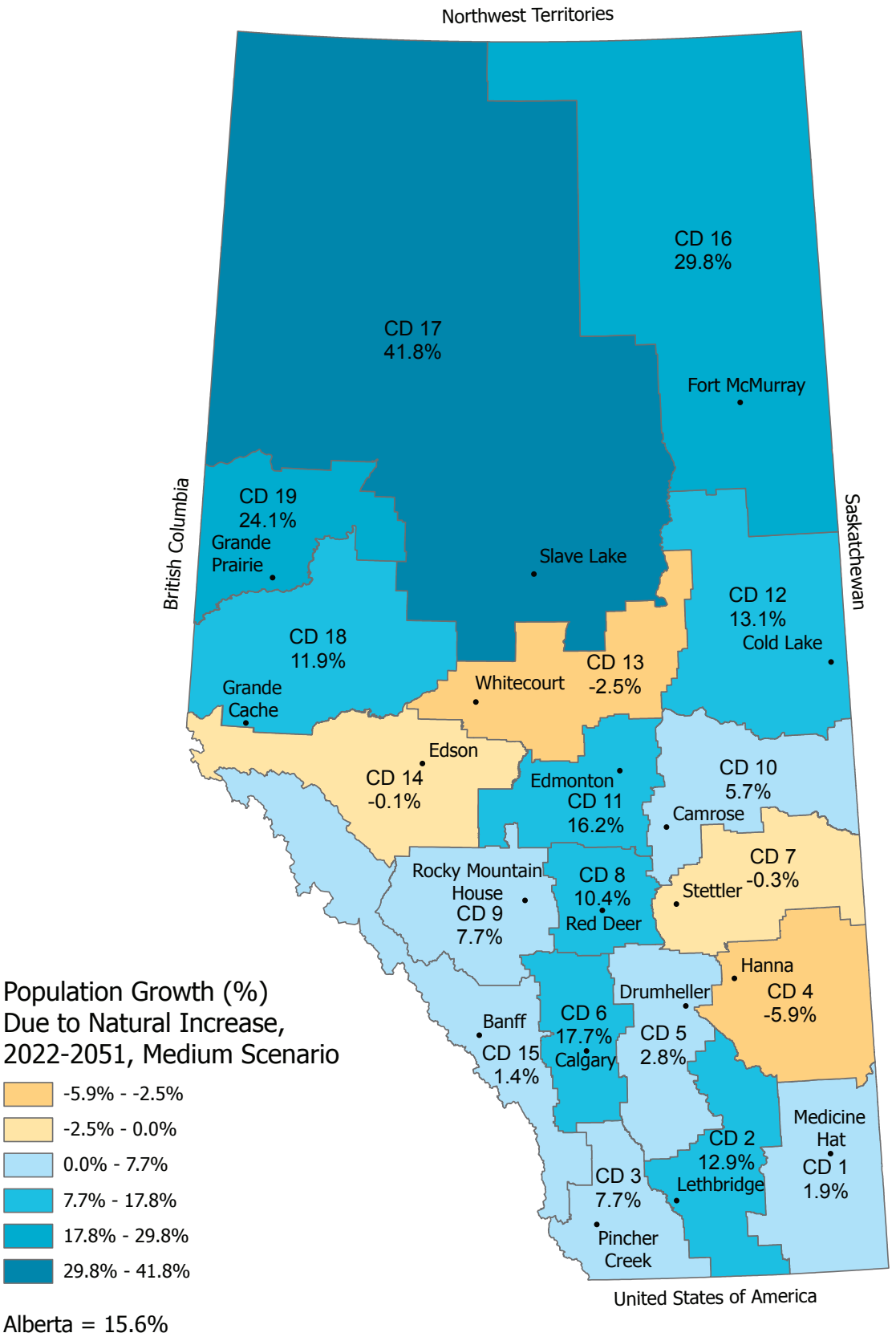
Includes estimated (1996-2022) and projected (2023-2051) population of Alberta and its 19 Census Divisions by single year of age and sex as well as some summary statistics.

Population Projection Methodology and Assumptions.

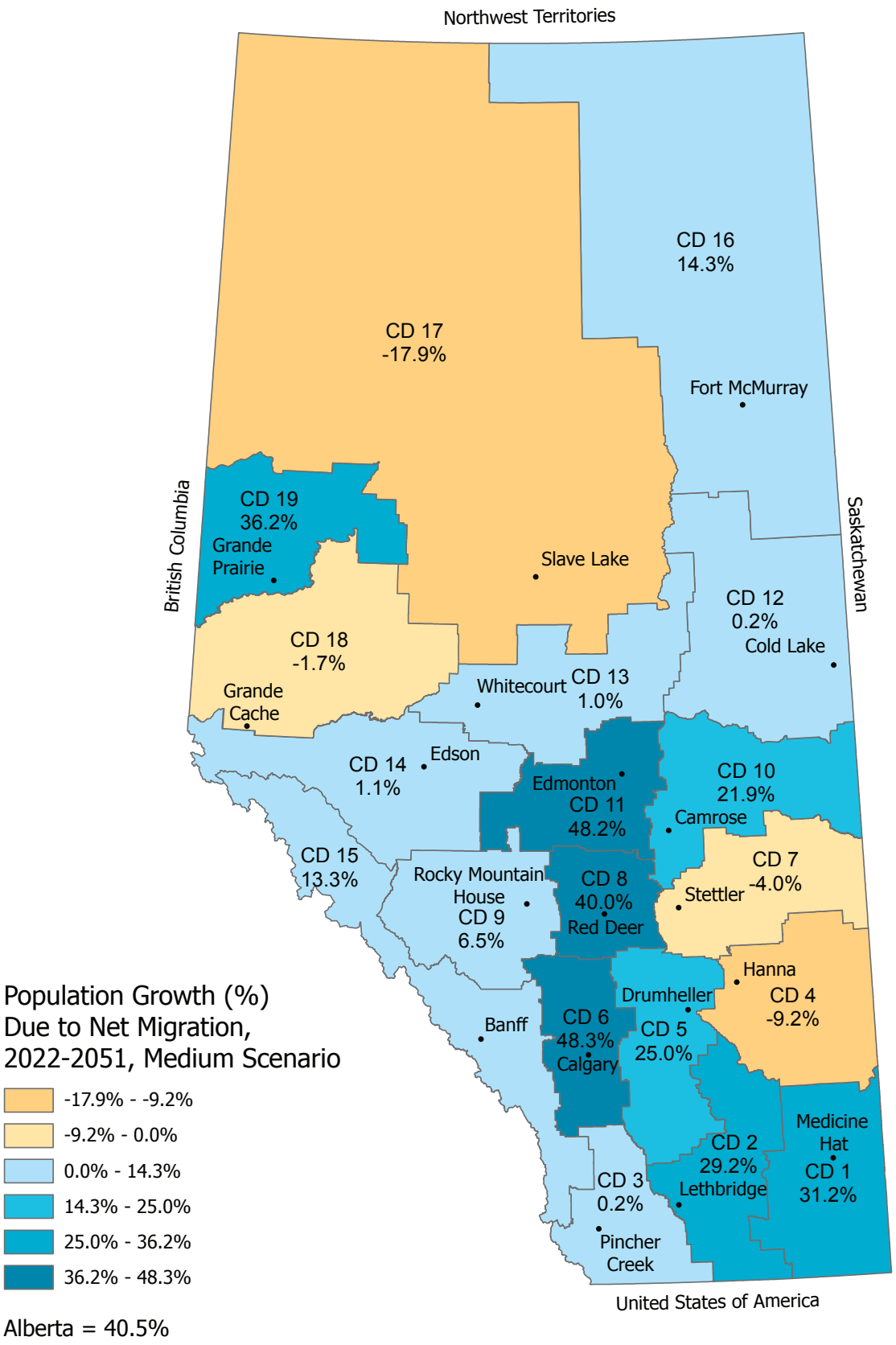
Details the methodology and assumptions of the long-term population projections.

Contact Jennifer Hansen at 780.427.8811

MAP 1: POPULATION GROWTH DUE TO NATURAL INCREASE, 2022-2051, MEDIUM SCENARIO



MAP 2: POPULATION GROWTH DUE TO NET MIGRATION, 2022-2051, MEDIUM SCENARIO



MAP 3: AVERAGE ANNUAL POPULATION GROWTH (PERCENT), 2022-2051, MEDIUM SCENARIO