

## Introduction

Every two years Alberta Human Services produces Alberta's Occupational Demand and Supply Outlook Models. ${ }^{1}$ Alberta supply outlook model provides labour supply forecasts by occupation over the coming ten years. This model has 30 linked sub-models and over 100,000 data series.

The demographic component of the model is essential because it provides the basis for projecting other components of the model. (See Figure 1) This component projects Alberta's population between 2011 and 2021 by age and gender, and by also three subgroups; Aboriginal people, visible minorities, and those with activity limitations ${ }^{2}$. These projections and their implications form the main focus of this report.

The report is divided into several sections: Alberta's projected population; each of the three subgroups; details the assumptions underlying the demographic forecasts (Appendix A); and, results of the model projections (Appendix B).

Figure 1


Stock-Flow*: A method in estimating the future population of people in a group of interest. To find the forecasted population, the population from the previous year is adjusted to add those expected to enter that group and subtract those that are expected to leave that group.

[^0]
## Alberta's Population

Chart 1 shows that those aged 55 to 64 years and those aged 65 years and older are expected to show the largest population growth in the next 10 years. In both age groups, males tend to have higher growth rates than females. This influences future labour supply.

Participation rates tend to drop once people reach their 60s, causing total labour supply to grow relatively slowly compared to the growth of the total population aged 15 and older. ${ }^{3}$ As this generation retires in the coming decade, there will be a rise in labour force separations ${ }^{4}$ and replacement demand ${ }^{5}$ creating a need for other groups of workers. Given the slower growth rates of all younger age groups compared to these older groups, new approaches may be needed to make up for potential labour shortages, for example further integration of visible minorities, aboriginals, and people with disabilities. The Government of Alberta developed the Building and Educating Tomorrow's Workforce strategy to address future labour shortages.

Migration is expected to be the main contributor to population growth. This will help increase Alberta's labour force, since migrants tend to be of working age.

Chart 1


Data Source: Alberta Finance and Enterprise

[^1]
## Aboriginal Population

Alberta's Aboriginal people are expected to experience faster growth rates than the general population in all age groups except ages 15 and younger and 55-64 years. (See appendix $B$ ) The main source of the Aboriginal population increase is natural increase, that is when birth rate exceeds death rate, rather than interprovincial migration. The age distribution of Aboriginal people is different from that of the general population, as indicated by Chart 2. These differences are expected to continue through 2021, as seen in Appendix B.

Between 2011 and 2021, Aboriginal people are forecasted to continue to show higher birth rates than the general population. For those aged 15 to 24 , Aboriginal people show higher annual growth rates than the general population. However, the labour force participation rate for this group tends to be lower than that of similar age group of the Alberta's population, $59.7 \%$ compared to $73.3 \%{ }^{6}$

The significant growth in the Aboriginal population means Alberta could rely more on this group to fill future labour market needs by increasing their participation in the labour force. Therefore, in occupations typically supplied by youth, Aboriginal people may be overrepresented compared with other jobs. However, since the population projection includes both on-and off-reserve Aboriginal people, the geographic location of the Aboriginal youth may not be the same as the location of the jobs.

Chart 2


Data Source: Alberta's Occupational Supply Outlook Model, 2011-2021

[^2]
## Visible Minorities

Between 2011 and 2021, it is assumed that visible minorities ${ }^{7}$ will have the same birth and death rates as the general population. Therefore, the main difference between visible minorities and the total population relates to migration.

Migrants, some of whom would be identified as visible minorities, will be a vital source of population growth for the province, with net migration expected to increase by $49.1 \%$ by 2021. International net migration will continue to have a higher proportion of the total net migration through out the coming decade.

Chart 3 shows that visible minorities are expected to have higher population growth rates than the total population over the forecast period. In 2011, visible minorities made up $16.1 \%$ of the total population over the age of 15 . By 2021, this proportion is expected to increase slightly to $18.5 \%$.

The longer immigrants remain in Alberta, the more similar their population trends (e.g. birth rates, death rates) will become in comparison to the general population. As a result, the visible minority population is expected to show high growth rates for older age groups. This affects labour supply as a large part of this generation is expected to retire, as discussed previously with regards to the aging of the total population.

Chart 3


Data Source: Alberta's Occupational Supply Outlook Model, 2011-2021

[^3]
## Activity Limitations

As people get older, their likelihood of encountering activity limitations increases. ${ }^{8}$ Since Alberta's population is aging, there is expected to be an increasing proportion of people suffering from activity limitations. The proportion of the population aged 15 and older that is anticipated to suffer from activity limitations is expected to increase from $8.0 \%$ in 2011 to $8.5 \%$ in 2021. Evident in Appendix B, over two thirds of those experiencing activity limitations will be over the age of 45 in the coming decade. As the population ages, the group of people reporting activity limitations will increase.

In addition, Aboriginal people tend to report a higher incidence of activity limitations than the general population ${ }^{9}$. As discussed earlier, Aboriginal people have the fastest rate of population growth, and that places additional upward pressure on the proportion of the population experiencing activity limitations.

This has important implications for the labour market mainly because activity limitations are defined in terms of the person's ability to attend work or school, thus affecting both educational attainment and overall labour supply. This increases the importance of accommodating workers with activity limitations.

[^4]
## Summary

In the face of growing labour shortages it is important to find ways to prevent, or at least minimize, these shortages. One way to address the labour shortage is to further integrate visible minorities, aboriginals, and people with disabilities into the labour force. Aboriginal people are a key source of labour as their population is growing faster than the general population, particularly those aged 15-24 years. Migrants, some of whom would be identified as visible minorities, are another source because they tend to be of working age when coming to Alberta. In addition, the proportion of the population experiencing activity limitations is expected to increase over the forecast period of 2011 to 2021 as the population ages. Retirements from the labour force will increase due to natural retirements and activity limitations.

## Appendix A

## Demographic Assumptions

A number of assumptions are used to derive the results of this forecast. Those used to generate the results in Appendix B are described below.

## Alberta's Population

- Population levels by age and gender groups are determined by a detailed population projection by single year age cohorts. Total population averages $1.6 \%$ growth from 2011 to 2021.


## Migration

- The level of out-migration is equal to the historic five-year average from 1999 to 2003.
- The level of in-migration equals the projected net-migration plus the assumed out-migration.
- Age and gender distributions for in-migration and out-migration are determined by the historic age and gender distribution for net migration.
- Future immigrants by education type will experience similar occupational outcomes as existing residents of Alberta.


## Aboriginals

- The Alberta aboriginal population's birth and death rates are the same as the Canadian aboriginal population's rates.


## Visible Minorities

- The visible minorities' age/gender birth and death rates are equal to the Alberta general population's birth and death rates.
- The visible minorities' less than 15 years old age groups (less than 1, 1-3, 4-9, 10-15 years) are assumed to have the same distributions as the Alberta younger age groups.


## Appendix A

## Activity Limitations

- To calculate the number of people with activity limitations, a share approach by age and gender was used. ${ }^{1}$

\footnotetext{
${ }^{1}$ Share Approach: A method to estimate the future number of people in a group of interest. The proportion of the group of interest to the general population is applied to the forecasted general population estimates to find the predicted group of interest's population. Example:


## Appendix B

## Alberta's Population

|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Average 2011-2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 15 | 697,670 | 713,170 | 729,445 | 745,725 | 762,535 | 779,425 | 795,760 | 810,070 | 822,715 | 834,770 | 844,790 |  |
| \% of Total | 18.3\% | 18.4\% | 18.5\% | 18.6\% | 18.7\% | 18.8\% | 18.9\% | 18.9\% | 18.9\% | 18.9\% | 18.9\% | 18.7\% |
| Growth Rate (\%) | 1.9 | 2.2 | 2.3 | 2.2 | 2.3 | 2.2 | 2.1 | 1.8 | 1.6 | 1.5 | 1.2 | 1.9 |
| 15 and over | 3,110,690 | 3,159,695 | 3,209,550 | 3,261,345 | 3,314,550 | 3,366,735 | 3,418,380 | 3,471,200 | 3,525,090 | 3,578,920 | 3,633,335 |  |
| \% of Total | 81.7\% | 81.6\% | 81.5\% | 81.4\% | 81.3\% | 81.2\% | 81.1\% | 81.1\% | 81.1\% | 81.1\% | 81.1\% | 81.3\% |
| Growth Rate (\%) | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 | 1.6 | 1.5 | 1.5 | 1.6 |
| 15 to 24 | 515,125 | 505,070 | 498,425 | 492,640 | 487,495 | 484,105 | 481,995 | 482,455 | 485,100 | 488,390 | 493,530 |  |
| \% of Total | 13.5\% | 13.0\% | 12.7\% | 12.3\% | 12.0\% | 11.7\% | 11.4\% | 11.3\% | 11.2\% | 11.1\% | 11.0\% | 11.9\% |
| Growth Rate (\%) | -2.2 | -2.0 | -1.3 | -1.2 | -1.0 | -0.7 | -0.4 | 0.1 | 0.5 | 0.7 | 1.1 | -0.6 |
| 25 to 34 | 623,705 | 634,100 | 640,410 | 645,705 | 648,480 | 646,585 | 640,720 | 631,720 | 621,005 | 610,265 | 600,245 |  |
| \% of Total | 16.4\% | 16.4\% | 16.3\% | 16.1\% | 15.9\% | 15.6\% | 15.2\% | 14.8\% | 14.3\% | 13.8\% | 13.4\% | 15.3\% |
| Growth Rate (\%) | 2.1 | 1.7 | 1.0 | 0.8 | 0.4 | -0.3 | -0.9 | -1.4 | -1.7 | -1.7 | -1.6 | -0.2 |
| 35 to 44 | 559,440 | 570,990 | 583,445 | 596,795 | 611,245 | 626,430 | 644,670 | 664,745 | 685,360 | 703,330 | 718,020 |  |
| \% of Total | 14.7\% | 14.7\% | 14.8\% | 14.9\% | 15.0\% | 15.1\% | 15.3\% | 15.5\% | 15.8\% | 15.9\% | 16.0\% | 15.3\% |
| Growth Rate (\%) | 1.8 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.9 | 3.1 | 3.1 | 2.6 | 2.1 | 2.5 |
| 45 to 54 | 575,200 | 575,675 | 575,765 | 576,255 | 577,690 | 579,925 | 581,535 | 582,380 | 584,345 | 590,680 | 602,000 |  |
| \% of Total | 15.1\% | 14.9\% | 14.6\% | 14.4\% | 14.2\% | 14.0\% | 13.8\% | 13.6\% | 13.4\% | 13.4\% | 13.4\% | 14.1\% |
| Growth Rate (\%) | 0.4 | 0.1 | 0.0 | 0.1 | 0.2 | 0.4 | 0.3 | 0.1 | 0.3 | 1.1 | 1.9 | 0.5 |
| 55 to 64 | 426,460 | 443,900 | 461,905 | 480,910 | 499,855 | 518,365 | 535,420 | 550,640 | 562,330 | 570,050 | 572,845 |  |
| \% of Total | 11.2\% | 11.5\% | 11.7\% | 12.0\% | 12.3\% | 12.5\% | 12.7\% | 12.9\% | 12.9\% | 12.9\% | 12.8\% | 12.3\% |
| Growth Rate (\%) | 5.4 | 4.1 | 4.1 | 4.1 | 3.9 | 3.7 | 3.3 | 2.8 | 2.1 | 1.4 | 0.5 | 3.2 |
| 65 and over | 410,760 | 429,960 | 449,600 | 469,040 | 489,785 | 511,325 | 534,040 | 559,260 | 586,950 | 616,205 | 646,695 |  |
| \% of Total | 10.8\% | 11.1\% | 11.4\% | 11.7\% | 12.0\% | 12.3\% | 12.7\% | 13.1\% | 13.5\% | 14.0\% | 14.4\% | 12.5\% |
| Growth Rate (\%) | 3.4 | 4.7 | 4.6 | 4.3 | 4.4 | 4.4 | 4.4 | 4.7 | 5.0 | 5.0 | 4.9 | 4.5 |
| Total | 3,808,360 | 3,872,865 | 3,938,995 | 4,007,070 | 4,077,085 | 4,146,160 | 4,214,140 | 4,281,270 | 4,347,805 | 4,413,690 | 4,478,125 |  |
| Growth Rate (\%) | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 | 1.6 |

## Appendix B

## Female Population

|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | $\begin{gathered} \text { Average } \\ \text { 2011-2021 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 15 | 338,515 | 346,305 | 354,145 | 362,140 | 370,370 | 378,805 | 387,140 | 394,460 | 401,020 | 407,115 | 412,245 |  |
| \% of Total | 18.1\% | 18.2\% | 18.3\% | 18.4\% | 18.5\% | 18.6\% | 18.7\% | 18.7\% | 18.7\% | 18.7\% | 18.7\% | 18.5\% |
| Growth Rate (\%) | 1.9 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 1.9 | 1.7 | 1.5 | 1.3 | 2.0 |
| 15 and over | 1,527,185 | 1,552,370 | 1,578,395 | 1,605,315 | 1,633,010 | 1,660,060 | 1,686,725 | 1,714,025 | 1,741,825 | 1,769,825 | 1,798,060 |  |
| \% of Total | 81.9\% | 81.8\% | 81.7\% | 81.6\% | 81.5\% | 81.4\% | 81.3\% | 81.3\% | 81.3\% | 81.3\% | 81.3\% | 81.5\% |
| Growth Rate (\%) | 1.7 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.7 |
| 15 to 24 | 250,135 | 246,105 | 243,740 | 241,405 | 239,390 | 237,845 | 236,380 | 236,030 | 236,885 | 238,220 | 240,365 |  |
| \% of Total | 13.4\% | 13.0\% | 12.6\% | 12.3\% | 11.9\% | 11.7\% | 11.4\% | 11.2\% | 11.1\% | 10.9\% | 10.9\% | 11.8\% |
| Growth Rate (\%) | -1.6 | -1.6 | -1.0 | -1.0 | -0.8 | -0.6 | -0.6 | -0.1 | 0.4 | 0.6 | 0.9 | -0.5 |
| 25 to 34 | 295,695 | 301,660 | 305,975 | 309,985 | 312,920 | 313,660 | 312,760 | 310,455 | 307,150 | 303,715 | 300,360 |  |
| \% of Total | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| Growth Rate (\%) | 2.3 | 2.0 | 1.4 | 1.3 | 0.9 | 0.2 | -0.3 | -0.7 | -1.1 | -1.1 | -1.1 | 0.4 |
| 35 to 44 | 266,375 | 271,565 | 277,320 | 283,665 | 290,605 | 298,240 | 307,355 | 317,175 | 327,410 | 336,600 | 344,385 |  |
| \% of Total | 14.3\% | 14.3\% | 14.4\% | 14.4\% | 14.5\% | 14.6\% | 14.8\% | 15.0\% | 15.3\% | 15.5\% | 15.6\% | 14.8\% |
| Growth Rate (\%) | 1.7 | 1.9 | 2.1 | 2.3 | 2.4 | 2.6 | 3.1 | 3.2 | 3.2 | 2.8 | 2.3 | 2.5 |
| 45 to 54 | 280,345 | 280,495 | 280,265 | 280,110 | 280,250 | 280,460 | 280,255 | 280,040 | 280,390 | 282,755 | 287,820 |  |
| \% of Total | 15.0\% | 14.8\% | 14.5\% | 14.2\% | 14.0\% | 13.8\% | 13.5\% | 13.3\% | 13.1\% | 13.0\% | 13.0\% | 13.8\% |
| Growth Rate (\%) | 0.4 | 0.1 | -0.1 | -0.1 | 0.0 | 0.1 | -0.1 | -0.1 | 0.1 | 0.8 | 1.8 | 0.3 |
| 55 to 64 | 210,165 | 218,460 | 227,145 | 236,375 | 245,705 | 254,820 | 263,510 | 271,180 | 276,875 | 280,835 | 282,075 |  |
| \% of Total | 11.3\% | 11.5\% | 11.8\% | 12.0\% | 12.3\% | 12.5\% | 12.7\% | 12.9\% | 12.9\% | 12.9\% | 12.8\% | 12.3\% |
| Growth Rate (\%) | 5.3 | 3.9 | 4.0 | 4.1 | 3.9 | 3.7 | 3.4 | 2.9 | 2.1 | 1.4 | 0.4 | 3.2 |
| 65 and over | 224,470 | 234,085 | 243,950 | 253,775 | 264,140 | 275,035 | 286,465 | 299,145 | 313,115 | 327,700 | 343,055 |  |
| \% of Total | 12.0\% | 12.3\% | 12.6\% | 12.9\% | 13.2\% | 13.5\% | 13.8\% | 14.2\% | 14.6\% | 15.1\% | 15.5\% | 13.6\% |
| Growth Rate (\%) | 3.2 | 4.3 | 4.2 | 4.0 | 4.1 | 4.1 | 4.2 | 4.4 | 4.7 | 4.7 | 4.7 | 4.2 |
| Total | 1,865,700 | 1,898,675 | 1,932,540 | 1,967,455 | 2,003,380 | 2,038,865 | 2,073,865 | 2,108,485 | 2,142,845 | 2,176,940 | 2,210,305 |  |
| Growth Rate (\%) | 1.7 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 | 1.5 | 1.7 |

## Appendix B

Male Population

|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | $\begin{gathered} \text { Average } \\ \text { 2011-2021 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 15 | 359,155 | 366,865 | 375,300 | 383,585 | 392,165 | 400,620 | 408,620 | 415,610 | 421,695 | 427,655 | 432,545 |  |
| \% of Total | 18.5\% | 18.6\% | 18.7\% | 18.8\% | 18.9\% | 19.0\% | 19.1\% | 19.1\% | 19.1\% | 19.1\% | 19.1\% | 18.9\% |
| Growth Rate (\%) | 2.0 | 2.1 | 2.3 | 2.2 | 2.2 | 2.2 | 2.0 | 1.7 | 1.5 | 1.4 | 1.1 | 1.9 |
| 15 and over | 1,583,505 | 1,607,325 | 1,631,155 | 1,656,030 | 1,681,540 | 1,706,675 | 1,731,655 | 1,757,175 | 1,783,265 | 1,809,095 | 1,835,275 |  |
| \% of Total | 81.5\% | 81.4\% | 81.3\% | 81.2\% | 81.1\% | 81.0\% | 80.9\% | 80.9\% | 80.9\% | 80.9\% | 80.9\% | 81.1\% |
| Growth Rate (\%) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.4 | 1.4 | 1.5 |
| 15 to 24 | 264,990 | 258,965 | 254,685 | 251,235 | 248,105 | 246,260 | 245,615 | 246,425 | 248,215 | 250,170 | 253,165 |  |
| \% of Total | 13.6\% | 13.1\% | 12.7\% | 12.3\% | 12.0\% | 11.7\% | 11.5\% | 11.3\% | 11.3\% | 11.2\% | 11.2\% | 12.0\% |
| Growth Rate (\%) | -2.7 | -2.3 | -1.7 | -1.4 | -1.2 | -0.7 | -0.3 | 0.3 | 0.7 | 0.8 | 1.2 | -0.6 |
| 25 to 34 | 328,010 | 332,440 | 334,435 | 335,720 | 335,560 | 332,925 | 327,960 | 321,265 | 313,855 | 306,550 | 299,885 |  |
| \% of Total | 16.9\% | 16.8\% | 16.7\% | 16.5\% | 16.2\% | 15.8\% | 15.3\% | 14.8\% | 14.2\% | 13.7\% | 13.2\% | 15.5\% |
| Growth Rate (\%) | 1.9 | 1.4 | 0.6 | 0.4 | 0.0 | -0.8 | -1.5 | -2.0 | -2.3 | -2.3 | -2.2 | -0.6 |
| 35 to 44 | 293,065 | 299,425 | 306,125 | 313,130 | 320,640 | 328,190 | 337,315 | 347,570 | 357,950 | 366,730 | 373,635 |  |
| \% of Total | 15.1\% | 15.2\% | 15.3\% | 15.4\% | 15.5\% | 15.6\% | 15.8\% | 16.0\% | 16.2\% | 16.4\% | 16.5\% | 15.7\% |
| Growth Rate (\%) | 2.0 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.8 | 3.0 | 3.0 | 2.5 | 1.9 | 2.4 |
| 45 to 54 | 294,855 | 295,180 | 295,500 | 296,145 | 297,440 | 299,465 | 301,280 | 302,340 | 303,955 | 307,925 | 314,180 |  |
| \% of Total | 15.2\% | 15.0\% | 14.7\% | 14.5\% | 14.3\% | 14.2\% | 14.1\% | 13.9\% | 13.8\% | 13.8\% | 13.9\% | 14.3\% |
| Growth Rate (\%) | 0.4 | 0.1 | 0.1 | 0.2 | 0.4 | 0.7 | 0.6 | 0.4 | 0.5 | 1.3 | 2.0 | 0.6 |
| 55 to 64 | 216,295 | 225,440 | 234,760 | 244,535 | 254,150 | 263,545 | 271,910 | 279,460 | 285,455 | 289,215 | 290,770 |  |
| \% of Total | 11.1\% | 11.4\% | 11.7\% | 12.0\% | 12.3\% | 12.5\% | 12.7\% | 12.9\% | 12.9\% | 12.9\% | 12.8\% | 12.3\% |
| Growth Rate (\%) | 5.6 | 4.2 | 4.1 | 4.2 | 3.9 | 3.7 | 3.2 | 2.8 | 2.1 | 1.3 | 0.5 | 3.2 |
| 65 and over | 186,290 | 195,875 | 205,650 | 215,265 | 225,645 | 236,290 | 247,575 | 260,115 | 273,835 | 288,505 | 303,640 |  |
| \% of Total | 9.6\% | 9.9\% | 10.2\% | 10.6\% | 10.9\% | 11.2\% | 11.6\% | 12.0\% | 12.4\% | 12.9\% | 13.4\% | 11.3\% |
| Growth Rate (\%) | 3.7 | 5.1 | 5.0 | 4.7 | 4.8 | 4.7 | 4.8 | 5.1 | 5.3 | 5.4 | 5.2 | 4.9 |
| Total | 1,942,660 | 1,974,190 | 2,006,455 | 2,039,615 | 2,073,705 | 2,107,295 | 2,140,275 | 2,172,785 | 2,204,960 | 2,236,750 | 2,267,820 |  |
| Growth Rate (\%) | 1.6 | 1.6 | 1.6 | 1.7 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 | 1.4 | 1.4 | 1.6 |

## Appendix B

## Aboriginal Population

|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | $\begin{gathered} \text { Average } \\ 2011-2021 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 15 | 68,282 | 69,733 | 71,195 | 72,654 | 74,102 | 75,531 | 76,938 | 78,321 | 79,678 | 81,011 | 82,322 |  |
| \% of Total | 26.7\% | 26.6\% | 26.4\% | 26.3\% | 26.2\% | 26.1\% | 26.0\% | 25.9\% | 25.8\% | 25.6\% | 25.5\% | 26.1\% |
| Growth Rate (\%) | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 1.9 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.9 |
| 15 and over | 187,455 | 192,726 | 197,986 | 203,243 | 208,503 | 213,768 | 219,045 | 224,336 | 229,640 | 234,960 | 240,295 |  |
| \% of Total | 73.3\% | 73.4\% | 73.6\% | 73.7\% | 73.8\% | 73.9\% | 74.0\% | 74.1\% | 74.2\% | 74.4\% | 74.5\% | 73.9\% |
| Growth Rate (\%) | 2.9 | 2.8 | 2.7 | 2.7 | 2.6 | 2.5 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.5 |
| 15 to 24 | 45,039 | 45,453 | 45,879 | 46,329 | 46,813 | 47,335 | 47,898 | 48,503 | 49,147 | 49,828 | 50,541 |  |
| \% of Total | 17.6\% | 17.3\% | 17.0\% | 16.8\% | 16.6\% | 16.4\% | 16.2\% | 16.0\% | 15.9\% | 15.8\% | 15.7\% | 16.5\% |
| Growth Rate (\%) | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 1.1 | 1.2 | 1.3 | 1.3 | 1.4 | 1.4 | 1.1 |
| 25 to 34 | 42,092 | 43,270 | 44,359 | 45,360 | 46,279 | 47,124 | 47,904 | 48,630 | 49,312 | 49,961 | 50,587 |  |
| \% of Total | 16.5\% | 16.5\% | 16.5\% | 16.4\% | 16.4\% | 16.3\% | 16.2\% | 16.1\% | 15.9\% | 15.8\% | 15.7\% | 16.2\% |
| Growth Rate (\%) | 3.1 | 2.8 | 2.5 | 2.3 | 2.0 | 1.8 | 1.7 | 1.5 | 1.4 | 1.3 | 1.3 | 2.0 |
| 35 to 44 | 34,180 | 35,193 | 36,248 | 37,332 | 38,432 | 39,536 | 40,634 | 41,714 | 42,770 | 43,795 | 44,785 |  |
| \% of Total | 13.4\% | 13.4\% | 13.5\% | 13.5\% | 13.6\% | 13.7\% | 13.7\% | 13.8\% | 13.8\% | 13.9\% | 13.9\% | 13.6\% |
| Growth Rate (\%) | 2.9 | 3.0 | 3.0 | 3.0 | 2.9 | 2.9 | 2.8 | 2.7 | 2.5 | 2.4 | 2.3 | 2.8 |
| 45 to 54 | 28,532 | 29,134 | 29,755 | 30,402 | 31,081 | 31,794 | 32,542 | 33,325 | 34,140 | 34,985 | 35,855 |  |
| \% of Total | 11.2\% | 11.1\% | 11.1\% | 11.0\% | 11.0\% | 11.0\% | 11.0\% | 11.0\% | 11.0\% | 11.1\% | 11.1\% | 11.0\% |
| Growth Rate (\%) | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.3 |
| 55 to 64 | 20,456 | 21,257 | 22,023 | 22,758 | 23,466 | 24,152 | 24,820 | 25,478 | 26,129 | 26,778 | 27,432 |  |
| \% of Total | 8.0\% | 8.1\% | 8.2\% | 8.2\% | 8.3\% | 8.3\% | 8.4\% | 8.4\% | 8.4\% | 8.5\% | 8.5\% | 8.3\% |
| Growth Rate (\%) | 4.3 | 3.9 | 3.6 | 3.3 | 3.1 | 2.9 | 2.8 | 2.6 | 2.6 | 2.5 | 2.4 | 3.1 |
| 65 and over | 17,155 | 18,419 | 19,723 | 21,062 | 22,431 | 23,827 | 25,247 | 26,686 | 28,142 | 29,613 | 31,097 |  |
| \% of Total | 6.7\% | 7.0\% | 7.3\% | 7.6\% | 7.9\% | 8.2\% | 8.5\% | 8.8\% | 9.1\% | 9.4\% | 9.6\% | 8.2\% |
| Growth Rate (\%) | 7.7 | 7.4 | 7.1 | 6.8 | 6.5 | 6.2 | 6.0 | 5.7 | 5.5 | 5.2 | 5.0 | 6.3 |
| Total | 255,736 | 262,459 | 269,180 | 275,896 | 282,605 | 289,300 | 295,984 | 302,657 | 309,319 | 315,971 | 322,617 |  |
| Growth Rate (\%) | 2.7 | 2.6 | 2.6 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.4 |

## Appendix B

## Visible Minorities

|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | $\begin{gathered} \text { Average } \\ \text { 2011-2021 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 15 | 118,765 | 122,364 | 126,089 | 129,962 | 133,934 | 137,954 | 142,003 | 146,022 | 150,059 | 154,077 | 158,078 |  |
| \% of Total | 19.1\% | 19.1\% | 19.0\% | 19.0\% | 19.0\% | 19.0\% | 19.0\% | 19.0\% | 19.0\% | 19.0\% | 19.0\% | 19.0\% |
| Growth Rate (\%) | 2.8 | 3.0 | 3.0 | 3.1 | 3.1 | 3.0 | 2.9 | 2.8 | 2.8 | 2.7 | 2.6 | 2.9 |
| 15 and over | 501,730 | 519,308 | 536,674 | 553,947 | 571,057 | 587,970 | 604,804 | 621,503 | 638,416 | 655,515 | 672,900 |  |
| \% of Total | 80.9\% | 80.9\% | 81.0\% | 81.0\% | 81.0\% | 81.0\% | 81.0\% | 81.0\% | 81.0\% | 81.0\% | 81.0\% | 81.0\% |
| Growth Rate (\%) | 3.5 | 3.5 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.7 | 2.7 | 3.0 |
| 15 to 24 | 94,646 | 96,462 | 98,123 | 99,670 | 101,125 | 102,518 | 103,904 | 105,307 | 106,820 | 108,453 | 110,230 |  |
| \% of Total | 15.3\% | 15.0\% | 14.8\% | 14.6\% | 14.3\% | 14.1\% | 13.9\% | 13.7\% | 13.5\% | 13.4\% | 13.3\% | 14.2\% |
| Growth Rate (\%) | 1.9 | 1.9 | 1.7 | 1.6 | 1.5 | 1.4 | 1.4 | 1.3 | 1.4 | 1.5 | 1.6 | 1.6 |
| 25 to 34 | 107,556 | 111,577 | 115,344 | 118,896 | 122,201 | 125,245 | 128,067 | 130,650 | 133,136 | 135,524 | 137,864 |  |
| \% of Total | 17.3\% | 17.4\% | 17.4\% | 17.4\% | 17.3\% | 17.3\% | 17.1\% | 17.0\% | 16.9\% | 16.7\% | 16.6\% | 17.1\% |
| Growth Rate (\%) | 3.8 | 3.7 | 3.4 | 3.1 | 2.8 | 2.5 | 2.3 | 2.0 | 1.9 | 1.8 | 1.7 | 2.6 |
| 35 to 44 | 98,398 | 101,940 | 105,553 | 109,243 | 112,958 | 116,657 | 120,336 | 123,944 | 127,527 | 131,061 | 134,557 |  |
| \% of Total | 15.9\% | 15.9\% | 15.9\% | 16.0\% | 16.0\% | 16.1\% | 16.1\% | 16.1\% | 16.2\% | 16.2\% | 16.2\% | 16.1\% |
| Growth Rate (\%) | 3.4 | 3.6 | 3.5 | 3.5 | 3.4 | 3.3 | 3.2 | 3.0 | 2.9 | 2.8 | 2.7 | 3.2 |
| 45 to 54 | 82,883 | 85,156 | 87,496 | 89,931 | 92,461 | 95,085 | 97,811 | 100,627 | 103,552 | 106,573 | 109,689 |  |
| \% of Total | 13.4\% | 13.3\% | 13.2\% | 13.1\% | 13.1\% | 13.1\% | 13.1\% | 13.1\% | 13.1\% | 13.2\% | 13.2\% | 13.2\% |
| Growth Rate (\%) | 2.7 | 2.7 | 2.7 | 2.8 | 2.8 | 2.8 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 2.8 |
| 55 to 64 | 61,762 | 64,350 | 66,867 | 69,328 | 71,738 | 74,107 | 76,451 | 78,781 | 81,126 | 83,497 | 85,908 |  |
| \% of Total | 10.0\% | 10.0\% | 10.1\% | 10.1\% | 10.2\% | 10.2\% | 10.2\% | 10.3\% | 10.3\% | 10.3\% | 10.3\% | 10.2\% |
| Growth Rate (\%) | 4.4 | 4.2 | 3.9 | 3.7 | 3.5 | 3.3 | 3.2 | 3.0 | 3.0 | 2.9 | 2.9 | 3.5 |
| 65 and over | 56,484 | 59,823 | 63,291 | 66,879 | 70,573 | 74,359 | 78,234 | 82,194 | 86,254 | 90,407 | 94,652 |  |
| \% of Total | 9.1\% | 9.3\% | 9.5\% | 9.8\% | 10.0\% | 10.2\% | 10.5\% | 10.7\% | 10.9\% | 11.2\% | 11.4\% | 10.2\% |
| Growth Rate (\%) | 5.9 | 5.9 | 5.8 | 5.7 | 5.5 | 5.4 | 5.2 | 5.1 | 4.9 | 4.8 | 4.7 | 5.4 |
| Total | 620,495 | 641,671 | 662,763 | 683,909 | 704,991 | 725,925 | 746,806 | 767,525 | 788,474 | 809,592 | 830,978 |  |
| Growth Rate (\%) | 3.3 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.7 | 2.6 | 3.0 |

## Appendix B

## Activity Limitations

|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | $\begin{gathered} \text { Average } \\ 2011-2021 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 and over | 249,042 | 254,597 | 260,262 | 266,110 | 272,186 | 278,288 | 284,384 | 290,595 | 296,838 | 303,031 | 309,116 |  |
| Growth Rate (\%) | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.2 |
| 15 to 24 | 22,304 | 21,870 | 21,583 | 21,333 | 21,111 | 20,964 | 20,871 | 20,890 | 21,002 | 21,142 | 21,362 |  |
| \% of 15 and over | 9.0\% | 8.6\% | 8.3\% | 8.0\% | 7.8\% | 7.5\% | 7.3\% | 7.2\% | 7.1\% | 7.0\% | 6.9\% | 7.7\% |
| Growth Rate (\%) | -2.1 | -1.9 | -1.3 | -1.2 | -1.0 | -0.7 | -0.4 | 0.1 | 0.5 | 0.7 | 1.0 | -0.6 |
| 25 to 34 | 30,173 | 30,691 | 31,018 | 31,296 | 31,455 | 31,393 | 31,146 | 30,751 | 30,273 | 29,793 | 29,344 |  |
| \% of 15 and over | 12.1\% | 12.1\% | 11.9\% | 11.8\% | 11.6\% | 11.3\% | 11.0\% | 10.6\% | 10.2\% | 9.8\% | 9.5\% | 11.1\% |
| Growth Rate (\%) | 2.1 | 1.7 | 1.1 | 0.9 | 0.5 | -0.2 | -0.8 | -1.3 | -1.6 | -1.6 | -1.5 | -0.1 |
| 35 to 44 | 38,072 | 38,852 | 39,694 | 40,599 | 41,579 | 42,612 | 43,852 | 45,216 | 46,616 | 47,839 | 48,840 |  |
| \% of 15 and over | 15.3\% | 15.3\% | 15.3\% | 15.3\% | 15.3\% | 15.3\% | 15.4\% | 15.6\% | 15.7\% | 15.8\% | 15.8\% | 15.4\% |
| Growth Rate (\%) | 1.8 | 2.0 | 2.2 | 2.3 | 2.4 | 2.5 | 2.9 | 3.1 | 3.1 | 2.6 | 2.1 | 2.5 |
| 45 to 54 | 53,010 | 53,082 | 53,119 | 53,192 | 53,349 | 53,576 | 53,748 | 53,857 | 54,069 | 54,672 | 55,725 |  |
| \% of 15 and over | 21.3\% | 20.8\% | 20.4\% | 20.0\% | 19.6\% | 19.3\% | 18.9\% | 18.5\% | 18.2\% | 18.0\% | 18.0\% | 19.4\% |
| Growth Rate (\%) | 0.4 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.3 | 0.2 | 0.4 | 1.1 | 1.9 | 0.5 |
| 55 to 64 | 52,653 | 54,801 | 57,018 | 59,357 | 61,689 | 63,967 | 66,067 | 67,942 | 69,380 | 70,333 | 70,679 |  |
| \% of 15 and over | 21.1\% | 21.5\% | 21.9\% | 22.3\% | 22.7\% | 23.0\% | 23.2\% | 23.4\% | 23.4\% | 23.2\% | 22.9\% | 22.6\% |
| Growth Rate (\%) | 5.4 | 4.1 | 4.0 | 4.1 | 3.9 | 3.7 | 3.3 | 2.8 | 2.1 | 1.4 | 0.5 | 3.2 |
| 65 and over | 52,830 | 55,301 | 57,829 | 60,333 | 63,003 | 65,776 | 68,698 | 71,940 | 75,497 | 79,252 | 83,166 |  |
| \% of 15 and over | 21.2\% | 21.7\% | 22.2\% | 22.7\% | 23.1\% | 23.6\% | 24.2\% | 24.8\% | 25.4\% | 26.2\% | 26.9\% | 23.8\% |
| Growth Rate (\%) | 3.5 | 4.7 | 4.6 | 4.3 | 4.4 | 4.4 | 4.4 | 4.7 | 4.9 | 5.0 | 4.9 | 4.5 |


[^0]:    ${ }^{1}$ See http://employment.alberta.ca/documents/occupational-demand-and-supply-outlook.pdf for more information on Alberta's Occupational Supply Outlook
    ${ }_{2}$ Includes those who report limitations in their ability to work or go to school, either sometimes or often

[^1]:    ${ }^{3}$ Statistics Canada's Labour Force Survey, 2010
    ${ }^{4}$ The number of people leaving the labour force, due to retirement or other reasons
    ${ }^{5}$ The number of people needed to fill the vacancies resulting from labour force separations; however, for occupations experiencing a decrease in employment, not all vacancies will need to be filled

[^2]:    ${ }^{6}$ Statistics Canada's 2006 Census

[^3]:    ${ }^{7}$ People who are non-Caucasian in race or non-white in colour, excluding Aboriginals (Statistics Canada)

[^4]:    ${ }^{8}$ http://www.statcan.gc.ca/pub/89-628-x/2007002/4125018-eng.htm
    ${ }^{9}$ Statistics Canada's 2006 Census

