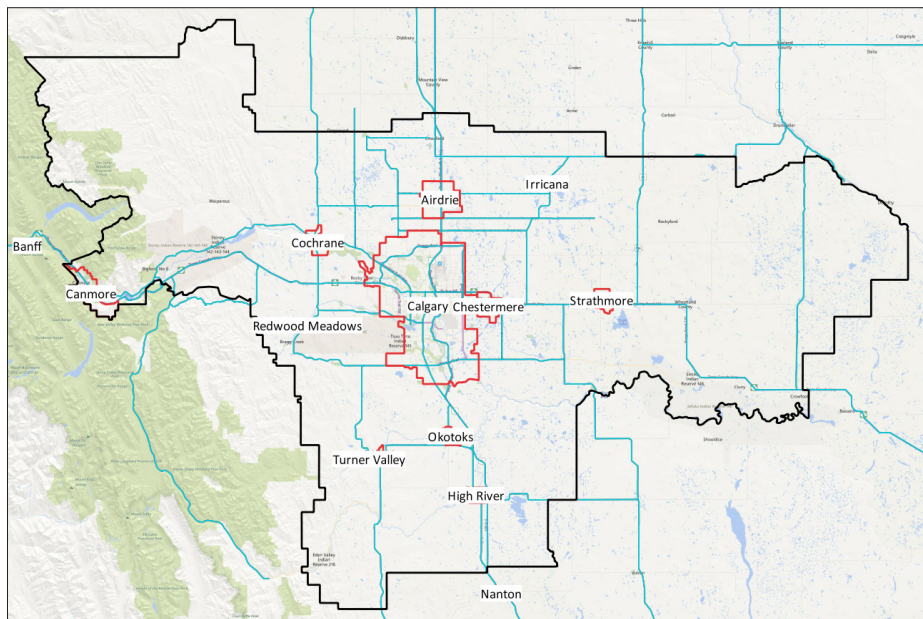

Population Projections: Confirmation of Findings

Calgary Regional Partnership



Prepared for



by

URBAN FUTURES
Strategic Research to Manage Change

Final Report

Revised 23 August 2017

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Introduction & Overview

At the root of long-range regional planning is the requirement to make evidence-based assessments about the future, be they related to the structure of the economy, the dynamics of housing supply and demand, or a growing and changing population. These forward-looking evaluations, in turn, assist in the planning for the wide range of services, infrastructure projects, and amenities that will be required to ensure a vibrant and sustainable future for a region's residents, businesses, and visitors.

By way of developing long-range projections (to 2076) for both the region and its municipal members, the Calgary Regional Partnership (CRP) has established the foundation for effective planning. Building on this, the next step was to evaluate the existing projections both on their own merit (that is, as per the framework used to arrive at the projections) and in the context of a changing economic and socio-demographic environment in Alberta generally, and in the Calgary Region more specifically.

To assist in this evaluation, Urban Futures was retained by the CRP to a) confirm the existing regional projections (developed by Urban Futures in 2012) and b) build consensus among the region's municipal members for the regional and municipal-level projections.

The CRP has developed population projections for the following municipalities:

- Airdrie
- Banff
- Black Diamond
- Calgary
- Canmore
- Chestermere
- Cochrane
- Crossfield
- High River
- Irricana
- Nanton
- Okotoks
- Redwood Meadows
- Strathmore
- Turner Valley
- Bighorn
- Foothills
- Rocky View
- Wheatland

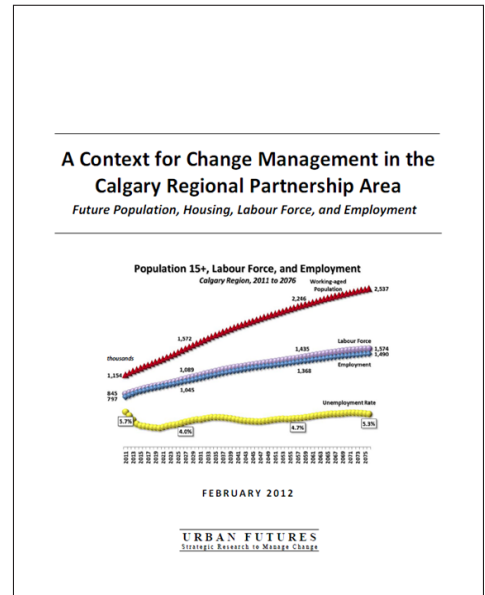
This report represents a summary review of the steps taken, and the outcomes achieved, as part of this process, and it consists of four sections. Section I (page 2) provides a description of the approach used to develop the existing regional projections, while Section II (page 4) presents recent trends in a range of economic and socio-demographic indicators as a means of describing the changing context for the regional outlook that serves as the foundation for developing the municipal projections. Section III (page 13) both presents the municipal population projections and describes the process used to develop them. Section IV (page 17) is a technical appendix that includes a summary roll-up of the municipal population projections, as well as total population charts for each municipality.

I Population Projections: Urban Futures' Existing Regional Outlook

Prior to developing the municipal-level projections, the CRP commissioned Urban Futures to develop a series of provincial- and regional-level projections of population, labour force, employment, and housing occupancy demand. The original projections were developed by Urban Futures in 2008 (with a base year of 2006) and were then updated in 2012 (with a base year of 2011).

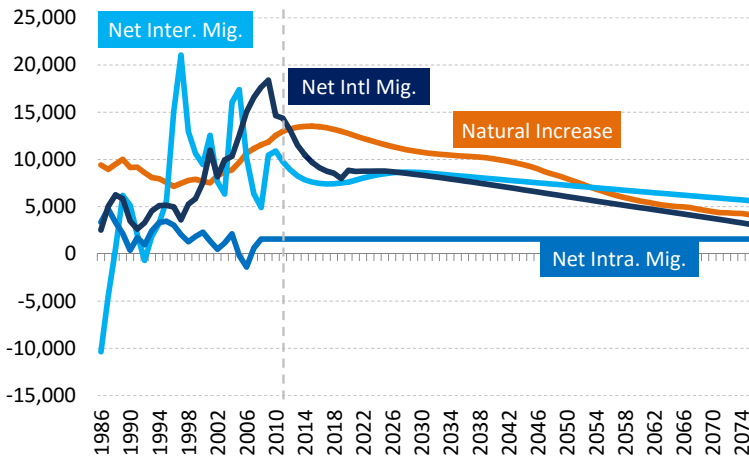
The population projections presented as part of the 2012 update—in a report titled “A Context for Change Management in the Calgary Regional Partnership Area”—were developed using a geographically-nested cohort survival modelling framework. This established and widely-used framework accounts for the processes of fertility, mortality, aging, and migration to and from the region.

The regional projections were formally contextualized within trends expected for the province of Alberta and Canada as a whole. This geographically-nested dimension of the modelling approach ensured consistency among each geographic level of the projections.



Components of Population Change, CRP Area

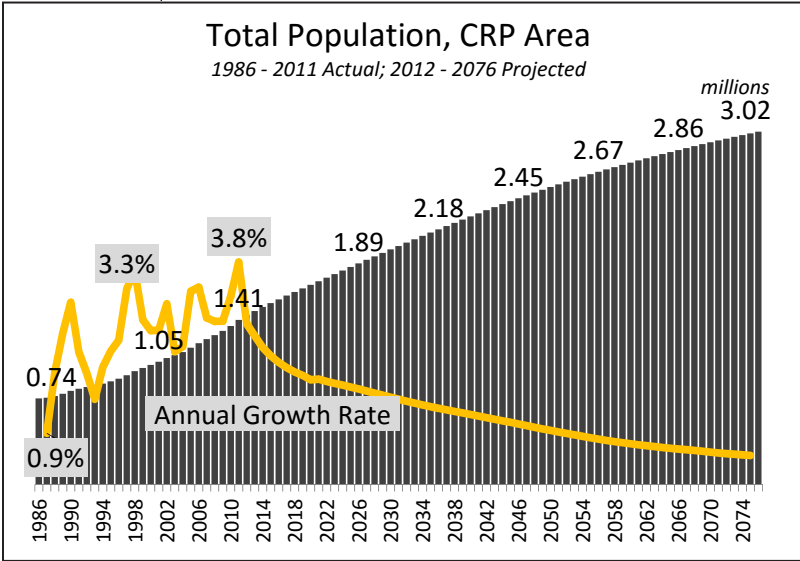
1986 - 2011 Actual; 2012 - 2076 Projected



As part of the 2012 projection series, natural increase (the annual difference between births and deaths) was projected to be the main driver to population growth in the Calgary Region between 2011 and 2053, averaging 10,800 additions to the region over that period (and an average of 5,210 annually thereafter). Between 2054 and 2076, net interprovincial migration was expected to become the main driver, adding 6,320 people annually over this two-decade span. While robust in the years leading up to 2011, net international migration was expected to moderate between 2011 and 2018, before continuing a steady slowing-down out to 2076. Over the 2011 to 2076 period, net international migration was projected to add 6,870 people to the region annually. Net intraprovincial migration, which oscillated between a net outflow and a net inflow

between 1986 and 2011, was expected to be a relatively minor contributor to population growth in the Calgary Region, adding an average of 1,570 people each year between 2011 and 2076.

Considering these trends in migration (to and from all destinations and origins), fertility (births), and mortality (deaths), combined with a 2011 base population of 1.41 million residents, the Calgary Region was projected to grow to 3.02 million residents by 2076—a 1.61 million-person, 114 percent, increase over a 65-year time horizon. While representing significant growth over the whole of the period, the annual rate of population change was expected to slow over time, from 3.8 percent in 2011 to 0.5 percent by 2076. On average, the projection was for the region to grow by an average of 1.2 percent per year (adding an average of 24,770 people annually).



Having established this baseline population projection for the region, the next step for the CRP was to determine where *within* the region the additional 1.61 million residents could reasonably be accommodated over a 65-year time frame.

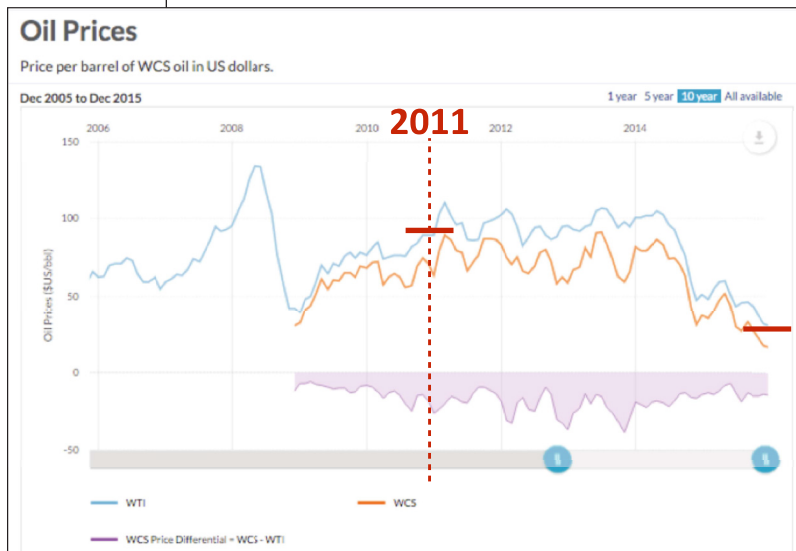
Before considering the municipal population projections specifically (which is done in Section III), it is useful to consider how the economic and socio-demographic landscape in both Alberta and in the Calgary Region has changed since the above-described regional projections were developed (again, in 2012, with a 2011 base year). In turn, this provides context for not only the process of long-range forecasting—as conditions can change rapidly, unexpectedly, and in such a way as to alter the long-run growth path of population—but also the existing

regional population projection itself, which, as noted above, has been used as a benchmark from which to allocate future population growth down to a municipal level to 2076.

II Alberta's Changing Economic & Demographic Context

Much has changed since Urban Futures developed the latest set of projections of population, labour force, employment, and housing demand for the Calgary Region in 2012. While robust economic and population growth was experienced between 2011 and 2014, a dramatically altered price environment governing the energy sector since then has more recently put downward pressure on a range of economic and demographic dimensions, including employment, wages, migration, and population growth.

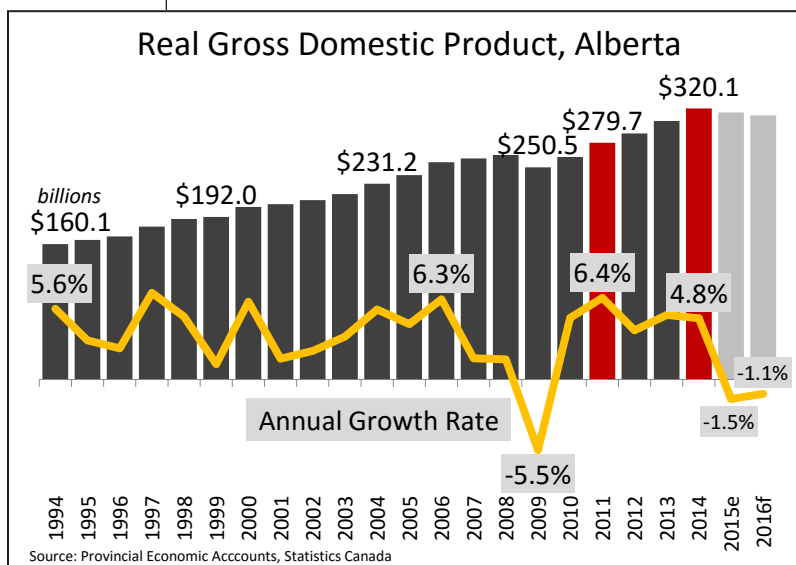
In light of this, the purpose of this section is to describe the changing economic and socio-demographic climate in Alberta and in the Calgary Region—and specifically how current conditions compare to when the most recent regional population projections were produced for the Calgary Region—as it is these recent changes that will inform future iterations of the development of regional and municipal population projections for, and within, the CRP area.



Oil Prices

It is clear that the impetus to the recent decline in economic activity across the province of Alberta has been the precipitous drop in the price of oil, which in turn has failed to recover since beginning to tumble midway through 2014.

Compared to when the current set of regional population projections were produced (with a base year of 2011), when the price of a barrel of WTI¹ oil was \$89.74 (USD; June 2011) and the price of a barrel of WCS² oil was \$63.42 (USD), prices have since fallen. More specifically, the price of WTI oil was \$30.62 (USD) per barrel in January 2016, while the price of a barrel of WCS oil was \$16.30 (USD).



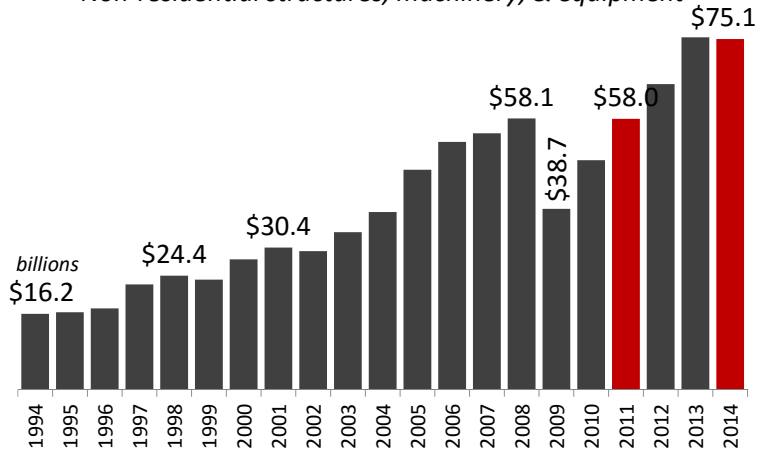
Real GDP (Alberta)

While real gross domestic product (GDP) rose consistently and robustly between 2011 and 2014—going from \$279.7 billion to \$320.1 billion over three years—the decline in, and now persistently low, oil prices has resulted in a real GDP estimate for 2015 that is 1.5 percent below 2014, thus reflecting recessionary conditions across the province. For the full year 2016, it is currently expected that the province will see its economy contract once again, with real provincial GDP declining by a further 1.1 percent from 2015's estimated level.

1 WTI: West Texas Intermediate, an industry-standard classification of crude oil originating in Texas.

2 WCS: Western Canadian Select, or discounted heavy oil produced in Western Canada for the US market,

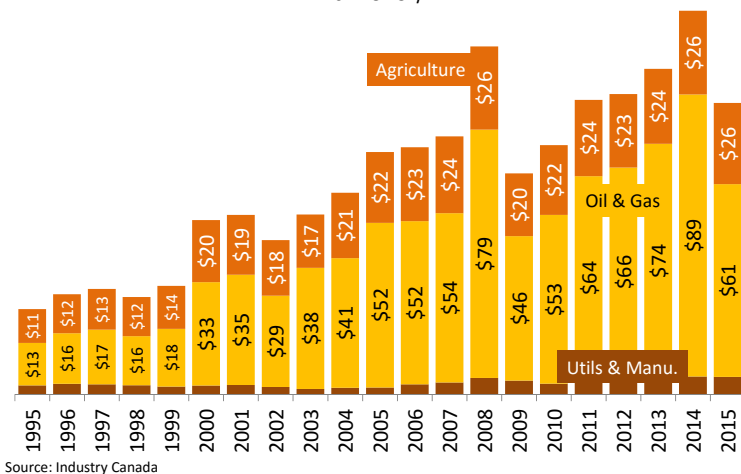
Gross Fixed Capital Formation, Alberta Non-residential structures, machinery, & equipment



Investment (Alberta)

Gross fixed capital investment in non-residential structures, machinery, and equipment in Alberta experienced tremendous year-over-year growth beginning in the early-2000s, reaching a high of \$58.1 billion in 2008. Following a drop-off during the Great Recession of 2009, investment rebounded strongly, matching 2008’s level by 2011 (when the current population projections were developed), before continuing to rise to 2013. By 2014, gross fixed capital formation in Alberta reached \$75.1 billion—an all-time high—although it is likely that the values for 2015 and 2016 will be significantly lower than this once the data have been made available.

International Merchandise Exports, Alberta billions \$



Exports (Alberta)

After reaching an all-time high (to-date) of \$110.0 billion in international merchandise exports in 2008, Alberta saw its export value dip to \$69.8 billion in 2009, before incrementally rising to \$93.1 billion by 2011 and further to \$121.3 billion in 2014. In 2015, this value dropped by 24 percent, to \$92.1 billion, due solely to a 31 percent decrease in the value of oil and gas exports (going from \$89 billion in 2014 to \$61 billion in 2015). Broadly-speaking, all other exports remained consistent in their value between 2014 and 2015. Compared to 2011, 2015’s export value was down by one percent.

the foreseeable future—it is likely that the value of full-year 2016 international merchandise exports from the province will be consistent with (or slightly lower than) what was seen in 2015.

Employment

The number of people who worked for pay or profit, performed unpaid domestic work, or had a job but were not able to work due to legitimate absence. For this indicator seasonally adjusted estimates are shown.

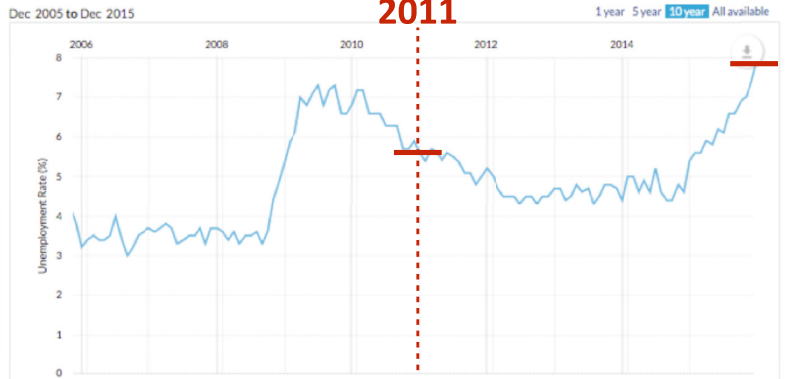


Employment (Alberta)

Generally-speaking, province-wide employment has grown consistently since 2011; however, by midway through 2014, total employment in Alberta had plateaued in the neighbourhood of 2.30 million jobs, and more recently (through the end of 2014 and into early 2015) actually declined to 2.28 million jobs due largely to the energy sector contraction. That said, when compared to 2011’s 2.08 million jobs, Alberta has experienced a ten percent expansion in its jobs base since then. Going forward it is expected that the employment level in Alberta will remain stagnant, if not contracting further in the short-term.

Unemployment Rate

The number of people who are unemployed as a percentage of the active labour force (i.e. employed and unemployed). For this indicator seasonally adjusted estimates are shown.



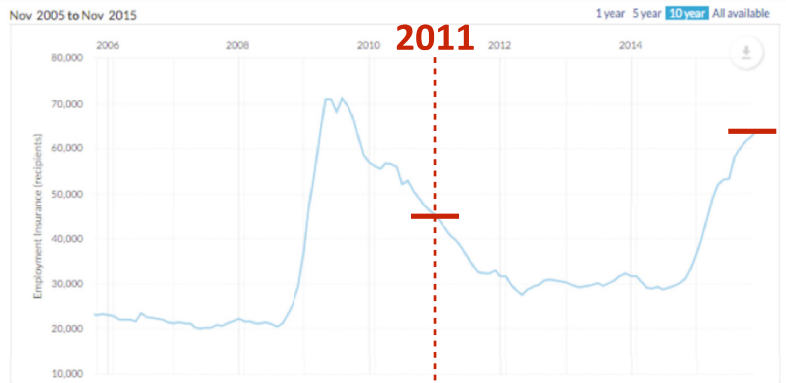
labour-related out-migration, Alberta's unemployment rate could continue to climb slightly in the near-term, even further above the level seen when the previous provincial and regional population projections were developed by Urban Futures.

Unemployment Rate (Alberta)

Following a prolonged period characterized by province-wide labour market tightening—which saw Alberta's unemployment rate fall from 7.3 percent at the end of 2009 to 5.9 percent in 2011 and further into the neighbourhood of 4.5 percent through 2013, the province's unemployment rate has been steadily increased since midway through 2014, reaching 7.9 percent in early 2016. This pattern of change is consistent with the trend seen in provincial employment, with a relatively steady labour force competing for a decreasing number of jobs more recently. Unless the province experiences some

Employment Insurance

The number of Employment Insurance beneficiaries represents a count of persons who lose their jobs and who are available for and able to work, but can't find a job. For this indicator seasonally adjusted estimates are shown.



Employment Insurance (Alberta)

A stark manifestation of the recent economic downturn in Alberta is the change in the number of employment insurance (EI) beneficiaries in the province. After peaking at 71,100 recipients in August 2009, the number of EI beneficiaries declined sharply, falling to 45,260 at the beginning of 2011, and then reaching a trough of 27,470 midway through 2012. After remaining stable for the next two years, the number of EI beneficiaries rose steeply in the latter-half of 2014, reaching 63,590 by the end of 2015. This was 40 percent higher than the level seen in 2011, with the increase in the current number of EI beneficiaries now beginning to slow.

Average Weekly Earnings

Average weekly earnings are derived by dividing total weekly earnings (including overtime earnings) by the number of employees. This data is compiled from the Survey of Employment, Payrolls and Hours which is a business census of non-farm payroll employees.



Average Weekly Earnings (Alberta)

Another sign of the province's labour market weakening is the recent change in average weekly earnings (data that, obviously, pertain to those who are still employed). After a decade of consistent growth, average weekly earnings in Alberta peaked midway through 2014, and have declined thereafter. Compared to 2011's \$1,043/week earnings, average weekly earnings stood at \$1,111 by the end of 2014 (a seven percent increase). This was, however, down five percent from the high reached in 2014.

This is an expected consequence associated with a weakening labour market characterized by declining employment and a rising unemployment rate. That said, due to the existence of contracts, collectively-

bargained wage agreements, and the relative ease with which unemployed and underemployed residents are able to pursue employment opportunities in other provinces, earnings tend to be “downward-sticky” (that is, they are resistant to significant and/or prolonged declines); as such, they are not expected to fall much further from their current level.

Retail Trade

The sales of all goods purchased for resale, minus returns and discounts. The retail trade sector includes companies engaged primarily in retailing merchandise. For this indicator seasonally adjusted estimates are shown, unless otherwise indicated.

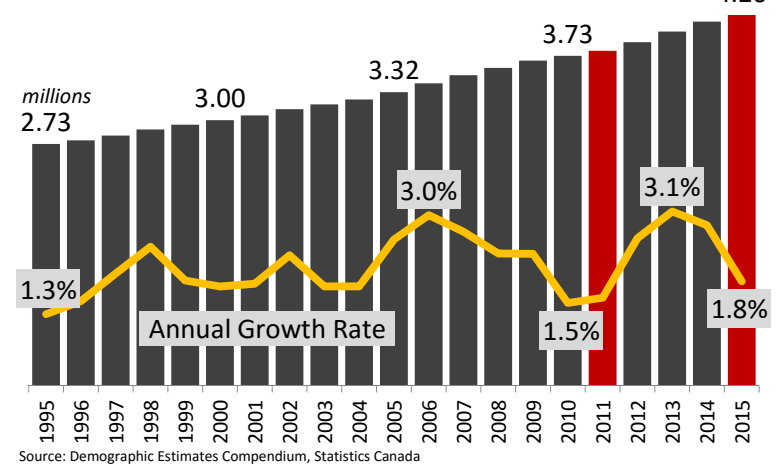


Retail Trade (Alberta)

The value of retail transactions is a strong current indicator of economic activity. In Alberta, monthly retail trade was valued at \$5.1 billion at the beginning of 2011, after which point it continued its upward trajectory that began in 2009 to a high of \$6.7 billion in August 2014. A sharp drop-off was seen towards the end of 2014, and after a short-lived, modest recovery, retail sales dipped further to \$6.1 billion by the end of 2015. While down over the recent period, it is worth noting that these most recent monthly retail sales are 20 percent higher than the level that prevailed during the previous update to the provincial and regional population projections.

Total Population, Alberta

1995 - 2015

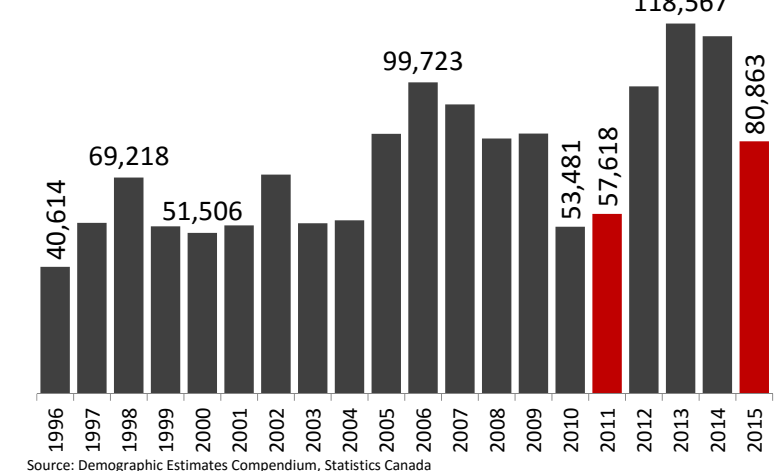


Total Population (Alberta)

Despite the economic challenges being faced by the province of Alberta, its population continues to exhibit relatively robust growth, rising from 3.79 million residents in 2011 to 4.20 million in 2015. That being said, the rate of population growth has more recently slowed: after rising from 1.5 percent growth in 2011 to a peak of 3.1 percent in 2013, 2014 and 2015 saw increasingly slow growth of 2.8 percent and 1.8 percent, respectively.

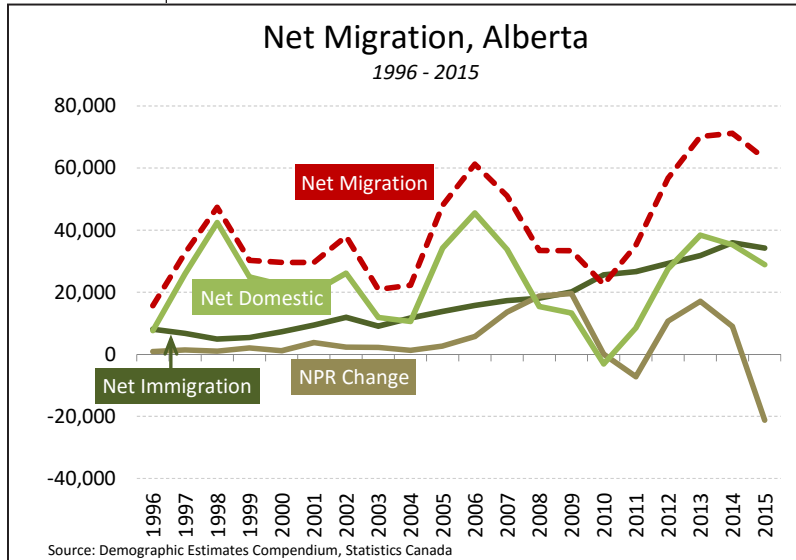
Population Change, Alberta

1996 - 2015



Population Additions (Alberta)

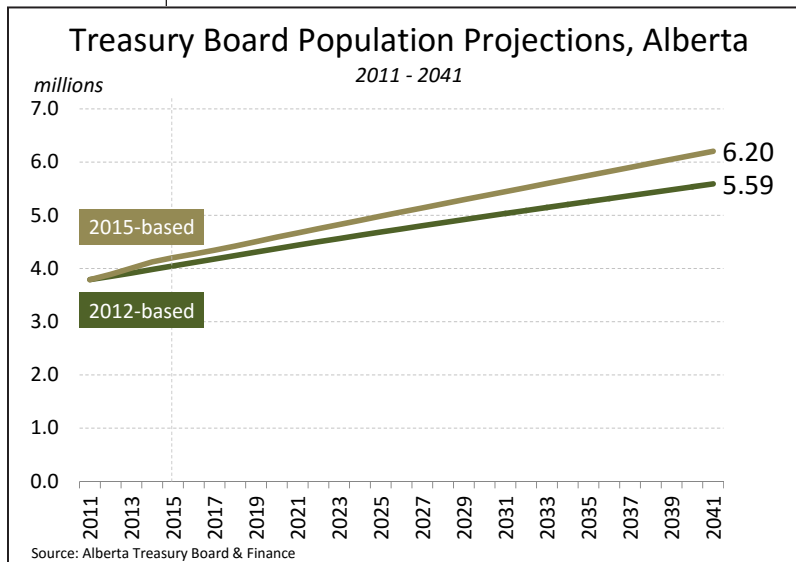
While useful in its own right, the rate of population growth can belie the actual magnitude of population additions. For Alberta, the relatively high growth rates seen during the 2012 to 2014 period were accompanied by robust annual population additions, peaking at 118,567 in 2013. With an increasingly slowing rate of growth observed into 2015, the most recent additions number 80,863, which are still 40 percent above the additions made in 2011.



Migration (Alberta)

The trend in population additions in the province closely follows the direction and magnitude of change in migration flows. With that in mind, it is no surprise that accompanying the incremental increases in annual population additions during the 2010 to 2014 period was net migration that increased from 22,490 in 2010 to 35,150 in 2011 and further to 71,190 in 2014. This upward trend was the result of increasing net flows of domestic migrants, international migrants, and non-permanent residents. However, as economic conditions worsened beginning in 2014, a slowing was seen in both net domestic and international migration flows, while the number of non-permanent residents in Alberta declined between 2014 and 2015. Despite these changes, the

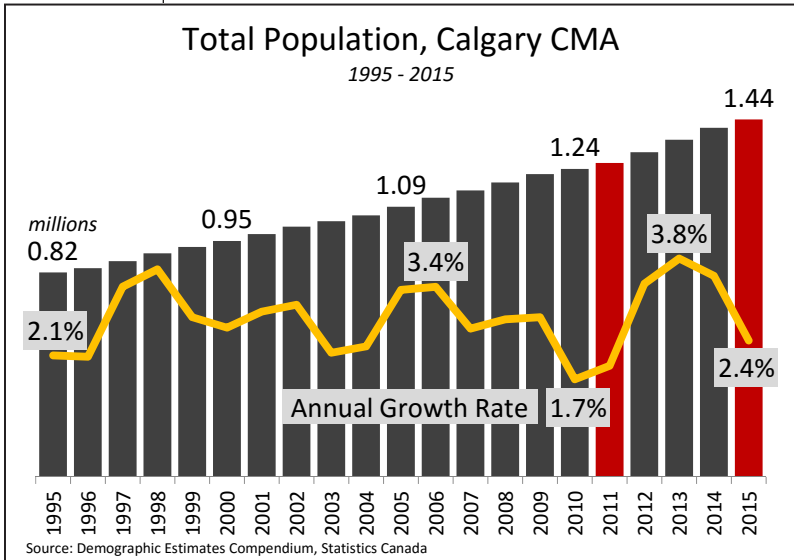
most recent level of migration to the province (63,090) is robust in comparison to what was seen four years earlier, with total provincial net migration in 2015 remaining 79 percent above that of 2011.



Treasury Board Projections (Alberta)

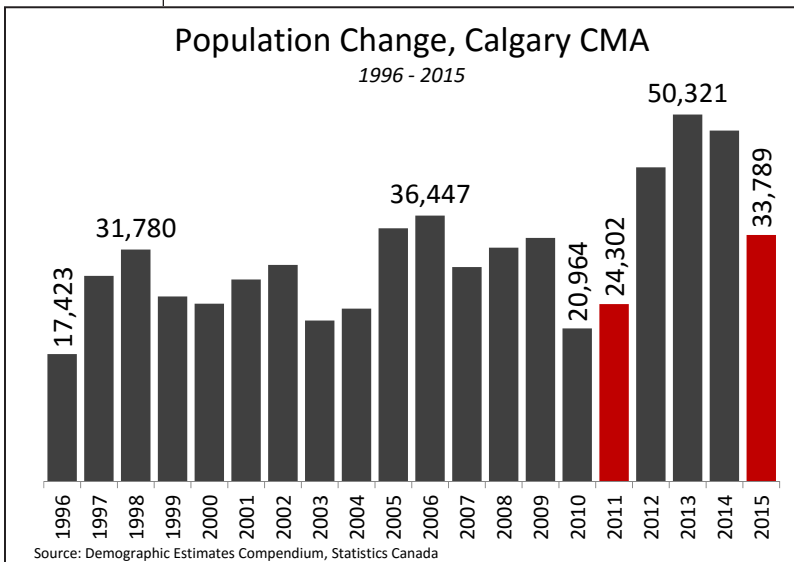
As noted in the introduction to this section, one of the reasons for considering recent trends in this collection of economic and socio-demographic indicators is to assess how future projections developed for Alberta (and for the Calgary Region) might be shaped by sharp and unexpected turns of events. Interestingly, despite the recent downturn in virtually all economic and demographic indicators for the province, the most recent Alberta Treasury Board population projections for the province as a whole are higher than those developed at the time of Urban Futures' most recent projections (in 2012). This is largely because Alberta experienced robust economic expansion between 2011 and 2014, with the recent downturn (described by data through

2015) leaving the province ahead of where it was in 2011 in most instances. With a stronger base from which to develop a population outlook, then, the Treasury Board currently anticipates there being 6.20 million people living in Alberta by 2041, compared to 5.59 million as per the 2012-based projection (having adjusted the projections so they have a common starting point).



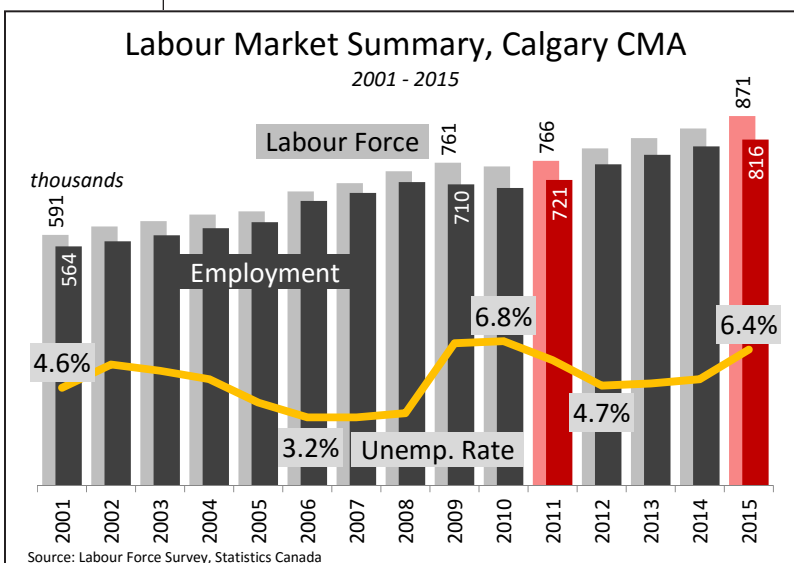
Total Population (Calgary CMA)

Trends in total population in the Calgary Census Metropolitan Area (CMA) closely follow that of the province, with the region experiencing continued growth in population over the recent past. From a 2011 base of 1.26 million residents, the Calgary CMA grew to 1.44 million people by 2015. Growth ebbed and flowed over this brief period of time, with an increasing pace of growth characterizing the 2011 to 2013 years (to a peak of 3.8 percent growth), and then slowing growth thereafter (to 2.4 percent in 2015, which was higher than 2011's 2.0 percent).



Population Additions (Calgary CMA)

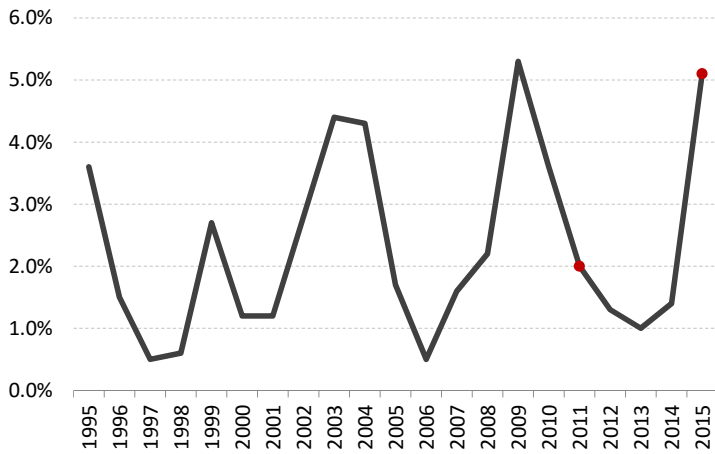
The incremental additions to the regional population followed in step with the change in the pace of growth, with there being a peak of 50,321 people added to the Calgary CMA in 2013, which was more than double the 24,302 additions in 2011. Accompanying the slowing rate of growth into 2015 was a smaller number of additions, with 2015 adding 33,789 people to the regional population. That said, this was 39 percent more than in 2011.



Labour Market Summary (Calgary CMA)

Since dipping slightly in 2010, the labour force and total employment in the Calgary CMA has grown consistently each year. Since 2011, the regional labour force expanded from 766,000 people to 871,000 (14 percent growth), while employment grew from 721,000 to 816,000 jobs (13 percent growth). With the labour force growing marginally faster than employment, the regional unemployment rate necessarily rose over this period, from 5.9 percent in 2011 to 6.4 percent in 2015 (in between it actually dipped as low as 4.7 percent in 2012). Of note is that despite the economic headwinds faced by the province in the last couple of years, employment in the Calgary CMA has continued to grow.

Row / Apartment Vacancy Rates, Calgary CMA
1995 - 2015

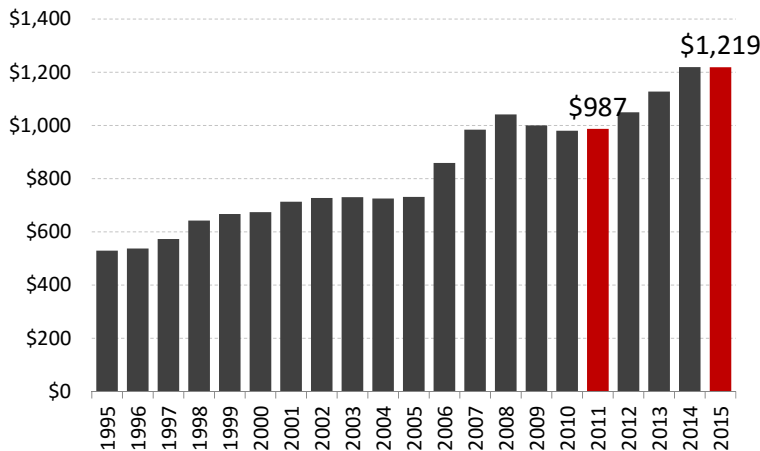


Source: CMHC

Vacancy Rates (Calgary CMA)

The region's housing market is beginning to show signs of slowing down across a number of dimensions. For starters, the Calgary CMA's vacancy rate for purpose-built row and apartment dwellings is nearing a two-decade high set in 2009 during the Great Recession. While the rental market tightened as the Albertan economy recovered beginning in 2010—with the vacancy rate averaging 2.0 percent in 2011 and 1.0 percent in 2013, it has shot up in the last two years, reaching 5.1 percent in 2015.

Row / Apartment Average Rent, Calgary CMA
1995 - 2015

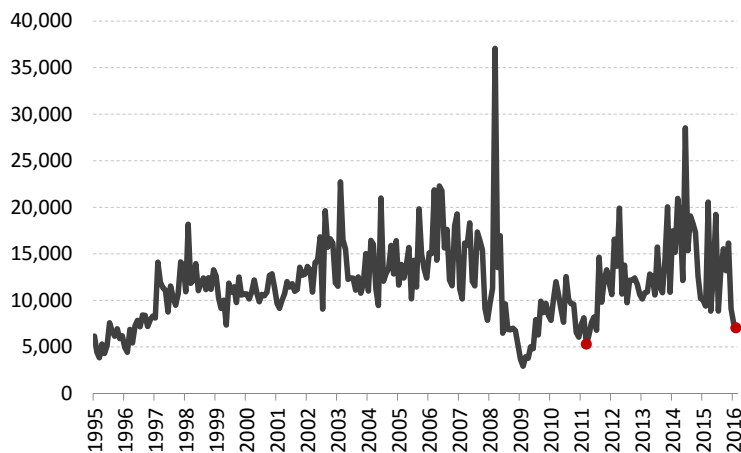


Source: CMHC

Average Rent (Calgary CMA)

The recent uptick in rental vacancy rates has, not surprisingly, impacted average monthly rents in purpose-built row and apartment dwellings. While monthly rent averaged \$987 in 2011, it rose over the following years as the vacancy rate declined (indicating a relative shortage in rental accommodation in the region at that time). However, with the recent spike in the vacancy rate, average monthly rent has stagnated, with both 2014 and 2015 seeing average monthly rent of \$1,219. That said, despite the markedly higher vacancy rate in 2015 versus 2011, average monthly rent is up by 24 percent over the same period.

Housing Starts, SAAR, Calgary CMA
January 1995 - February 2016



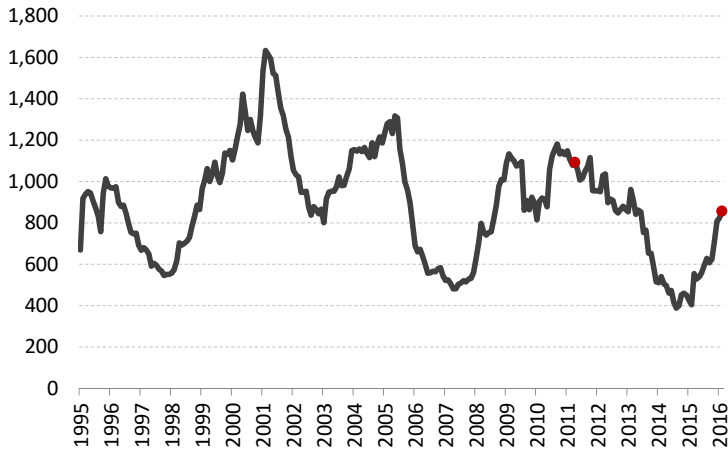
Source: CMHC

Housing Starts (Calgary CMA)

As the province (and region) dug out of the 2009 recessionary hole, annual housing starts activity became evermore robust into 2014, when 28,524 homes were started (at a seasonally-adjusted annual rate, or SAAR). While below the 37,063 starts seen midway through 2008, the peak in starts in 2014 was more than five times the 5,287 starts observed in 2011, the base year for Urban Futures' most recent regional population projections. Since that recent peak, starts activity has slowed to its lowest level since the end of 2011, reaching 7,042 SAAR starts at the beginning of 2016. Even so, this relatively low level was 33 percent higher than in 2011. Looking ahead, it is likely that starts activity will slow further over the balance of the year, especially should migration continue to slow (or become a net outflow).

Completed & Unoccupied Housing, Calgary CMA

January 1995 - February 2016



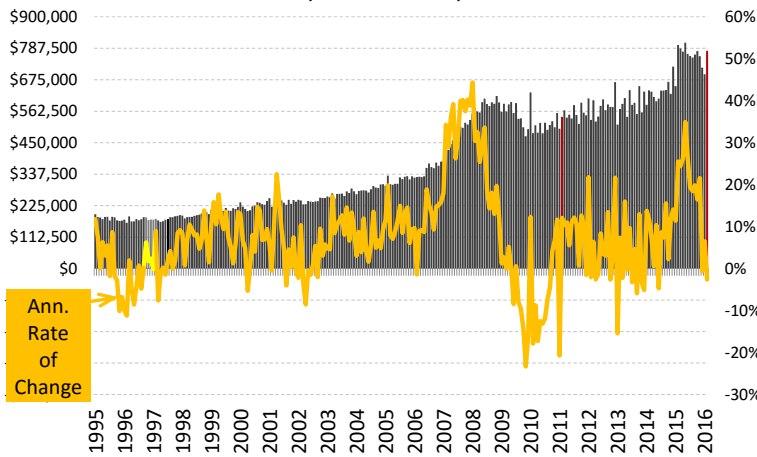
Source: CMHC

Completed & Unoccupied Housing (Calgary CMA)

While starts have been slowing, the number of completed and unoccupied homes has been steadily increasing since midway through 2014. By early 2016 the inventory of completed and unoccupied homes in the Calgary CMA stood at 856 which, while much higher than the 399 from mid-2014, was 22 percent lower than then 1,092 registered in 2011.

Average Residential Sales Price, Calgary CMA

January 1995 - February 2016



Source: CREB

Residential Sales Prices (Calgary CMA)

The trend in average residential sales prices mirrors that seen in the pattern of completed and unoccupied housing. More specifically, with the region experiencing robust economic and demographic growth leading up to 2009, average sales prices jumped upwards as the number of completed and unoccupied homes plummeted. During the immediate aftermath of 2009's recession, as growth was present but somewhat moderate, prices rose steadily, if not dramatically, while the number of completed and unoccupied homes returned to an equilibrium level. Since 2011, average residential sales prices have continued to increase, although they have come down slightly since peaking in 2015.

By early 2016, the average residential sales price in the Calgary CMA was \$778,546, down four percent from the peak of \$807,297 in early-2015, but still 44 percent above the \$542,376 recorded in 2011.

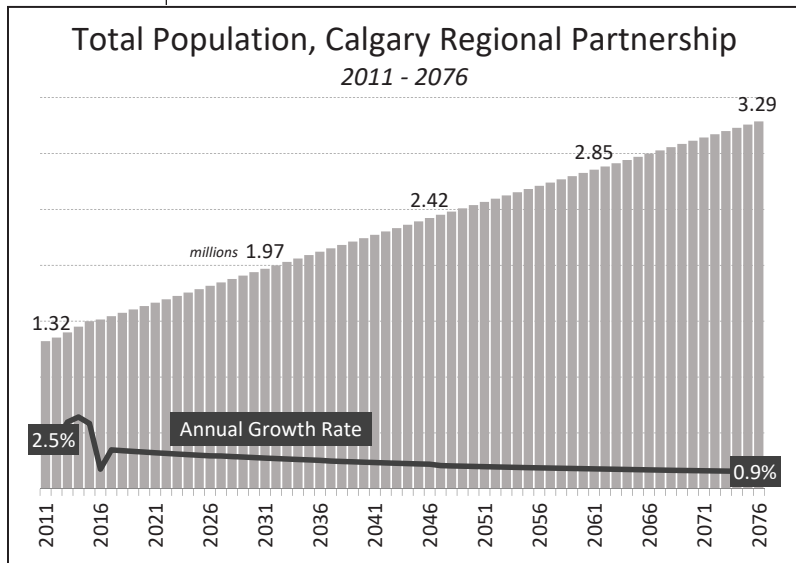
Summary of Indicators

Generally-speaking, the primary economic and demographic indicators for Alberta and the Calgary Region have been trending in a negative direction in recent years. That being said, most remain above their respective 2011 levels. This is largely due to the robust run-up in Alberta's economic activity between 2011 and 2014, which in turn fortified the province's—and the Calgary Region's—demographic base, and it is the primary reason why the Alberta Treasury Board's most recent provincial population projections (with a 2015 base) are more optimistic than the outlook developed in 2012.

While it is reasonable to assume that an update to Urban Futures' base provincial and regional population projections that are used as the foundation for developing the landscape of municipal outlooks within the CRP Area would result in an adjustment to the year 2076 (or earlier) figures, such an adjustment would likely have a marginal impact on the long-run level and spatial distribution of population throughout the region.

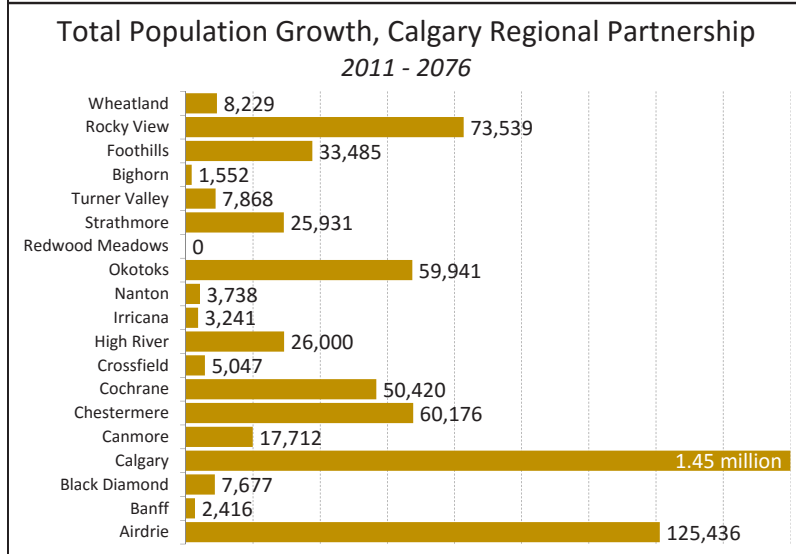
That being said, while the currently-used regional population projections are useful as a starting point for developing a series of municipal-level projections, it is recommended that the provincial and regional projections be updated upon the release of the full suite of 2016 Census data, which is expected to be available beginning in February 2017. These data will not only provide a new base from which to develop the near-term and longer-term outlooks, they will encapsulate the recent economic—and by extension, demographic—transformations currently taking place throughout the province).

III Population Projections: The CRP's Municipal Outlook



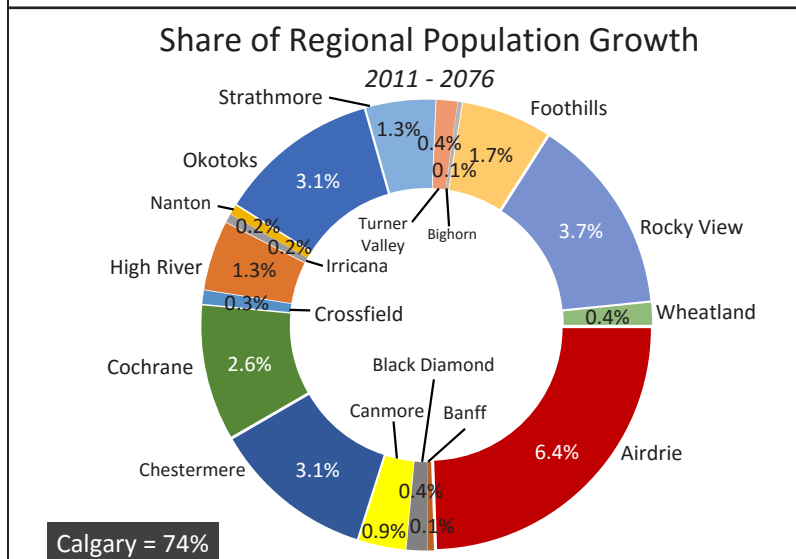
The Projections

As shown in Section II, Urban Futures' 2012-based population projections provided a foundation for considering changes within the region. While the current regional projection being utilized by the CRP does not precisely match that of Urban Futures, it is similar—as it is derived from the 2012-based outlook—with the Calgary Region projected to grow from 1.32 million residents in 2011 to 3.29 million by 2076. This represents a 1.97 million-person, 149 percent increase over 65 years, for an average annual rate of growth of 1.4 percent (approximately 30,200 people per year). By the end of the projection period the region would be growing at a rate of 1.1 percent annually. This current regional projection represents the go-forward control total when considering future municipal population totals, with the sum of the municipal projections equalling the projected population for the region as a whole each year to 2076.



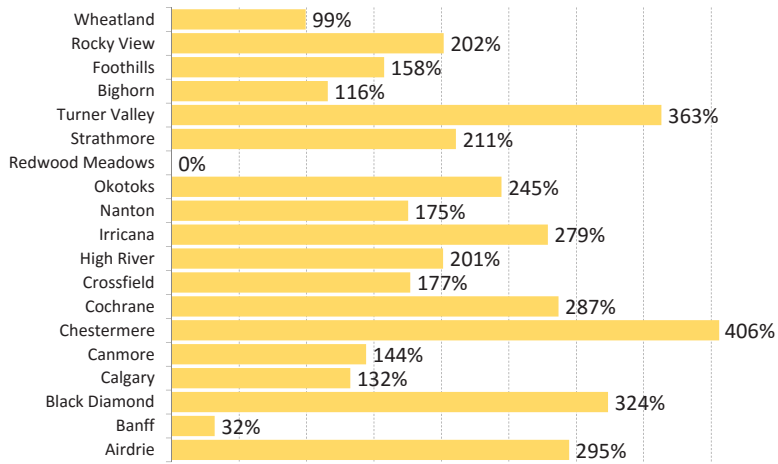
Within the region, the city of Calgary is expected to add the greatest number of people of any of the 19 municipalities, at 1.45 million people. This would account for almost three-quarters (74 percent) of total regional growth to 2076.

The municipality with the second-largest absolute growth projected for its population would be Airdrie, at 125,436 people, representing 6.4 percent of total CRP-wide growth. Rounding out the top five growers are Rocky View (73,539 additions; 3.7 percent of total growth), Chestermere (60,176; 3.1 percent), and Okotoks (59,941; 3.1 percent). The remaining 14 municipalities would account for the remaining ten percent of total regional population growth (193,320 people).



In relative terms, the fastest-growing municipality would be Chestermere, whose population is projected to quintuple in size (growth of 406 percent). This would be followed by Turner Valley and Black Diamond (363 percent and 324 percent, respectively), Airdrie (295 percent), and Cochrane (287 percent). These high rates of growth are partly a function of what are generally small base-year populations; conversely, the region's largest

**Total Population Growth, Calgary Regional Partnership
2011 - 2076**



municipality (Calgary) is projected to achieve a relatively slower growth rate of 132 percent between 2011 and 2076, due mainly to the comparatively large size of its base-year population.

In arriving at these projections, a number of steps were taken by both the CRP and Urban Futures to ensure that the collection of municipal outlooks a) generally reflected established growth plans and capacity estimates and b) were supported by a consensus among municipal members of the CRP. These steps are summarized next.

Document Review

As part of its objective of confirming the CRP’s municipal-level population projections, Urban Futures undertook a document review that sought to ensure that there was consistency between the CRP’s projections and the relevant Municipal Development Plans and Growth Plans/Strategies produced by the region’s municipalities.

More specifically, Urban Futures reviewed the following documents with a view of reconciling the population projections and/or capacities identified in these documents (if any) with the outlooks produced by the CRP:

- Airdrie City Plan (2014)
- Airdrie Comprehensive Growth Strategy (2011)
- Banff Community Plan (2009)
- Black Diamond Municipal Development Plan (2001)
- Calgary Municipal Development Plan (2009)
- Calgary Metropolitan Plan (2014)
- Canmore Municipal Development Plan (2016)
- Chestermere Municipal Development Plan (2009)
- Cochrane Growth Management Strategy (2013)
- Cochrane Municipal Development Plan (2008)
- Crossfield Municipal Development Plan (2010)
- High River Municipal Development Plan (2013) & Growth Management Strategy (2013)
- Town of Irricana Growth Study (2008)
- Irricana Municipal Development Plan (2009)
- Municipal District of Bighorn Municipal Development Plan (2012)
- Foothills Municipal Development Plan (2010)
- Foothills Growth Management Strategy (2013)
- Nanton Municipal Development Plan (2009)
- Okotoks Municipal Development Plan (2012)
- Town of Okotoks Growth Study and Financial Assessment (2014)
- Rocky View Growth Management Strategy (2009)

- Rocky View County Plan (2013)
- Strathmore Municipal Development Plan (2014)
- Turner Valley Municipal Development Plan (2013)
- Wheatland County Municipal Development Plan (2013)

Urban Futures found that any population growth targets, expectations, and/or capacities expressed in these reports were generally reflected in the CRP's suite of municipal population projections. This was the case for two reasons: one, CRP staff used these reports as a starting point for developing the municipal population projections; and two, the initially-developed projections were then vetted by staff from several member municipalities during meetings with CRP staff. An overview of these meetings is presented next.

Municipal Member Meetings

In 2015, CRP staff attempted to meet with municipalities in the region to discuss the population projection work. As part of this process, the CRP met with staff from the following municipalities (meeting date in parentheses):

- Turner Valley (26 May 2015)
- Canmore (9 June 2015)
- Cochrane (9 June 2015)
- Airdrie (17 June 2015)
- Strathmore (17 June 2015)
- Okotoks (21 June 2015)
- High River (22 June 2015)
- Chestermere (9 July 2015)
- Calgary (ongoing)

As the initial set of projections were partly derived from existing plans, there was a general consensus among municipal planning staff about the long-run municipal-level population expectations being adopted by the CRP.

Workshop Outcomes

On April 4th, 2016, the CRP hosted a workshop at the Cochrane RancheHouse with staff from a number of member municipalities. Ryan Berlin, from Urban Futures, facilitated the workshop.

The workshop had a number of objectives. As a starting point, it was necessary to update workshop attendees on the array of background work that had been completed to-date as part of the process to develop the regional and municipal population projections, including the development of Urban Futures' population projections in 2008 and 2012, and the subsequent efforts made by CRP staff to step down from the regional outlook to develop a suite of spatial projections within the CRP Area.

Another objective of the workshop was to present an update to a range of economic and socio-demographic indicators in Alberta and in the Calgary Region (refer to Section II for a summary of this). The purpose of this was twofold. First, this market review was intended to show that while long-range forecasting is a challenging task unto itself, it is made all the more complex by rapid and unforeseen changes to the factors that inform the projections. (As a corollary to this, the importance of updating the projections on a regular basis was emphasized.) Second, the review showed that while many key economic and demographic indicators have recently been trending in a negative direction, these recent changes have come on the heels of a rapid expansion in the province's economy generally—and energy sector, specifically—and its

population during the 2011 to 2014 period. As such, while there exists a degree of pessimism in regards to the near-term prospects for Alberta's economy, the province is, in many regards, more well-suited to address the current economic crisis than it would have been three years prior.

Following this, the workshop transitioned into a facilitated group discussion, with the goal of achieving consensus regarding the current municipal population projections. After confirming with staff from each municipality that attended, it was agreed that consensus had been achieved.

The draft projections were also circulated to each municipality's administration and CAO for review. Comments received at that time were incorporated into the projections.

A second workshop was then convened on June 28th, 2016 at the Cochrane RancheHouse. It was again facilitated by Ryan Berlin and attended by staff from a number of member municipalities. The purpose of this workshop was to provide attending staff the opportunity to contribute final comments on the municipal-level population projections, as well as to confirm the most recent municipal Census counts that served as the foundation for the projections.

The regional and municipal population totals included in the Appendix (A-1 and A-2) reflect the most recent Census counts as well as the vetted projections to 2076.

IV Appendix

A-1 Municipal Population Projection Summary

Total Population Growth, CRP Municipalities 2011 - 2076											
Municipality	2011	2016	2026	2036	2046	2056	2066	2076	2011-76 Growth		
	Absolute	Relative	Average Annual								
Airdrie	42,564	61,842	95,000	112,000	130,000	142,667	155,333	168,000	125,436	295%	2.1%
Banff	7,584	9,487	10,000	10,000	10,000	10,000	10,000	10,000	2,416	32%	0.4%
Black Diamond	2,373	2,893	3,933	4,586	5,159	6,789	8,420	10,050	7,677	324%	2.2%
Calgary	1,096,833	1,235,171	1,432,925	1,656,248	1,879,571	2,102,894	2,326,217	2,549,540	1,452,707	132%	1.3%
Canmore	12,288	13,722	16,589	19,800	29,053	29,369	29,684	30,000	17,712	144%	1.4%
Chestermere	14,824	19,715	30,276	47,415	55,000	61,667	68,333	75,000	60,176	406%	2.5%
Cochrane	17,580	25,122	39,810	46,422	52,222	57,481	62,741	68,000	50,420	287%	2.1%
Crossfield	2,853	3,132	4,200	5,500	6,700	7,100	7,500	7,900	5,047	177%	1.6%
High River	12,920	16,526	23,737	27,680	31,138	33,732	36,326	38,920	26,000	201%	1.7%
Irricana	1,162	1,608	2,500	3,600	4,200	4,268	4,335	4,403	3,241	279%	2.1%
Nanton	2,132	2,745	3,970	4,629	5,207	5,428	5,649	5,870	3,738	175%	1.6%
Okotoks	24,511	29,559	40,697	46,938	58,000	66,817	75,635	84,452	59,941	245%	1.9%
Redwood Meadows	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	0	0%	0.0%
Strathmore	12,305	13,594	16,828	25,459	28,639	31,838	35,037	38,236	25,931	211%	1.8%
Turner Valley	2,167	2,836	4,173	4,866	5,474	6,994	8,515	10,035	7,868	363%	2.4%
Bighorn	1,341	1,429	1,605	1,872	2,105	2,368	2,630	2,893	1,552	116%	1.2%
Foothills	21,258	23,477	27,916	32,553	36,620	42,661	48,702	54,743	33,485	158%	1.5%
Rocky View	36,461	40,248	47,556	55,000	65,000	80,000	95,000	110,000	73,539	202%	1.7%
Wheatland	8,285	9,770	12,739	14,855	16,711	16,645	16,580	16,514	8,229	99%	1.1%
Total - CRP	1,320,591	1,514,023	1,815,604	2,120,573	2,421,949	2,709,868	2,997,787	3,285,706	1,965,115	149%	1.4%

A-2 Municipal Population Projections

