



Calgary Economic Region lost 18,300 jobs in 2016 due to the oil price slump induced by an oversupply of oil in late 2014. In the second quarter of 2017 Calgary gained back 22,000 jobs and unemployment rate fell from 9.8 per cent in 2016 to 8.9 in the second quarter of 2017. This relatively strong performance of employment till date in 2017 signals a potential uptick in economic growth in 2017. The city of Calgary experienced a loss of net migration in 2016 of 6,527 persons and gained 974 persons in 2017. As the relative unemployment rate between Calgary and Canada converges, net migration into Calgary should increase, contributing to positive population growth, all else equal.

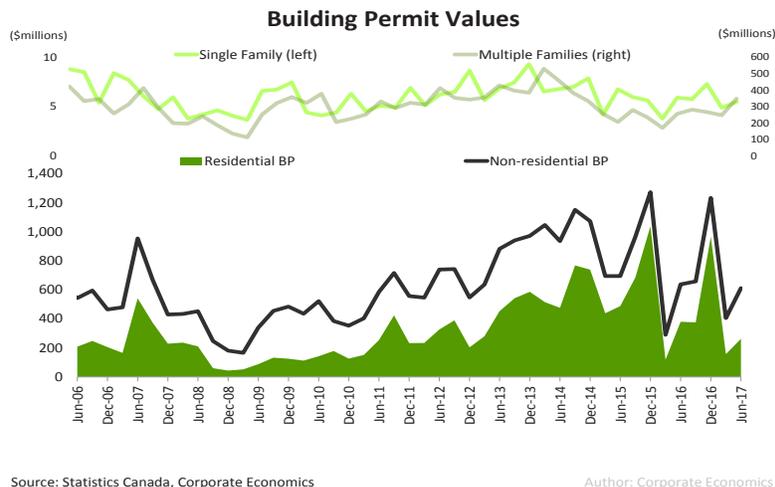
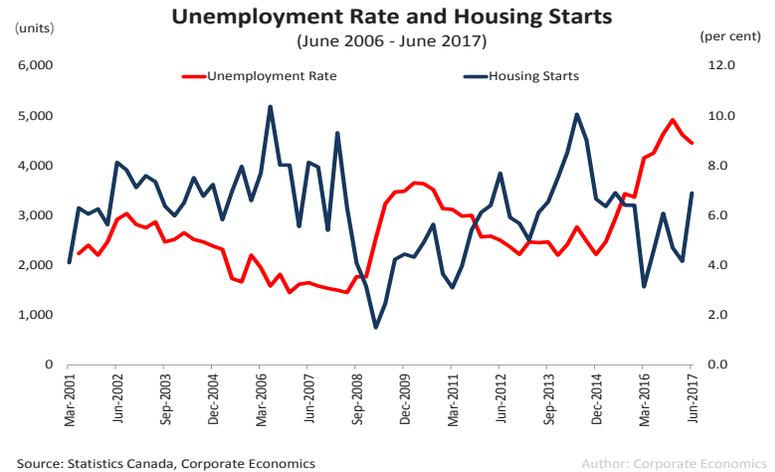
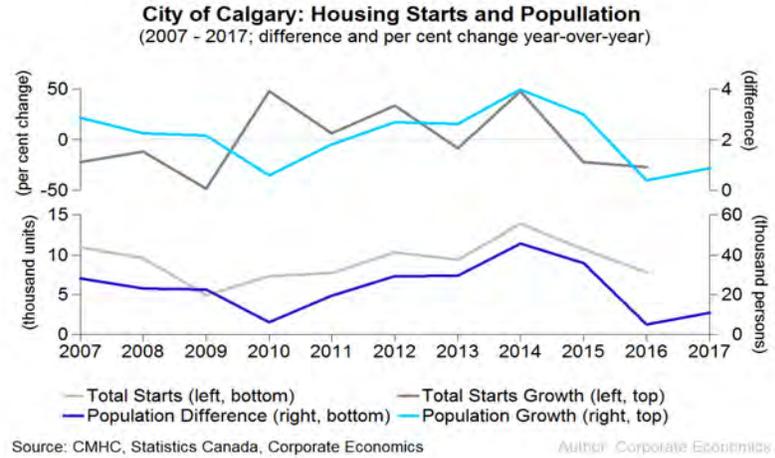
The fall in unemployment rate and availability of jobs signals a positive momentum for business and consumer confidence which should bolster firm and consumer spending. The moderate optimistic environment Calgary finds itself in, due to the previous two years of consecutive economic downturn, lends itself to a relatively cautious real estate market, given the enormity of the level of savings required to engage in home buying. The introduction of a 0.25 per cent basis point interest rate hike in the second quarter of 2017, and the various changes in mortgage rules in 2016 inducing a larger down payment on home purchases will soften housing demand for new and resale homes in Calgary. The expectation is that house price appreciation will be moderate compared to average house price appreciation values accustomed to prior to 2015 and before the last economic downturn in 2009.

A foreign buyer real estate tax was introduced in British Columbia and Ontario to calm the spiraling double digit house price appreciation being observed in their two major cities Vancouver and Toronto, respectively. Alberta currently has no foreign buyer real estate tax. The positive economic outlook of a return to economic growth in Calgary, presents it as a potential substitutable market for Vancouver and Toronto real estate investors.

What We Know

Calgary has experienced two consecutive years of economic downturn in 2015 and 2016, with unemployment rate increasing from 4.9 per cent in 2014 to 6.1 per cent in 2015 and rising to 8.9 per cent in 2016. Since the beginning of the first quarter of 2015, unemployment rate has increased consecutively through the last 8 quarters (except in 2015 last quarter) to 9.8 per cent of 2016 fourth quarter. During the last economic downturn prior 2015, which was in 2009, Calgary Economic Region experienced unemployment rate increase from 3.2 per cent in 2008 to 6.4 per cent in 2009. The average house price in 2008 appreciated by -3 per cent and -4.2 per cent in 2009. While, average house price appreciated by -1.7 per cent in 2015 and by 2.3 per cent in 2016.

The industry aggregate weekly real wage of workers increased by \$13.36 dollars in the first quarter of 2017 and by \$10.44 dollars in





the second quarter of 2017, while the last two quarters in 2016 saw weekly wage drops.

City of Calgary

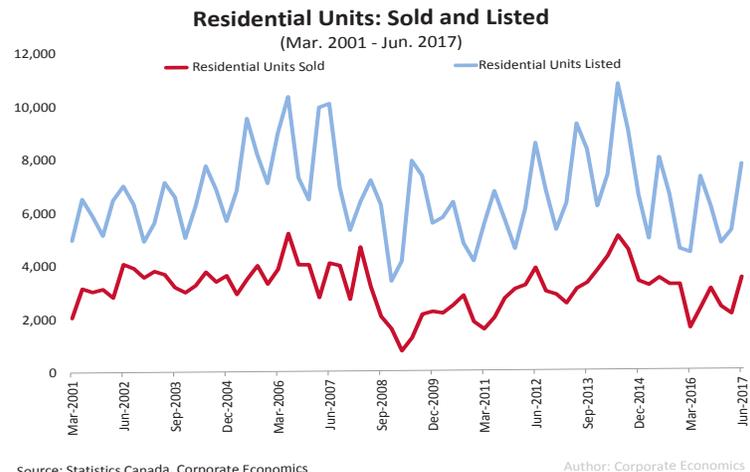
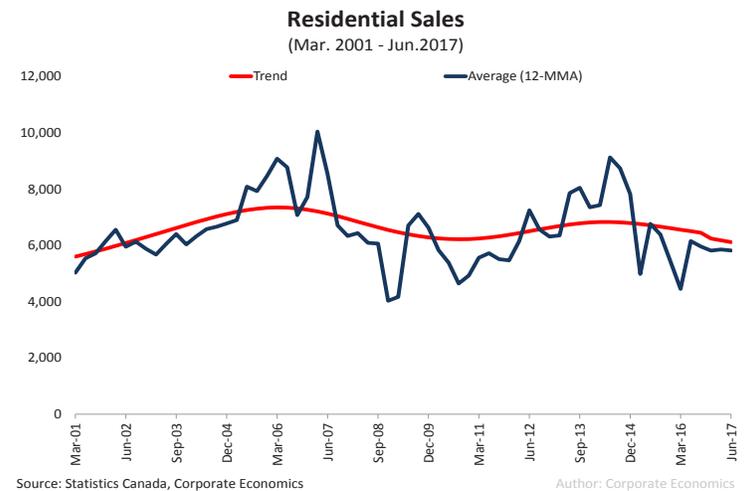
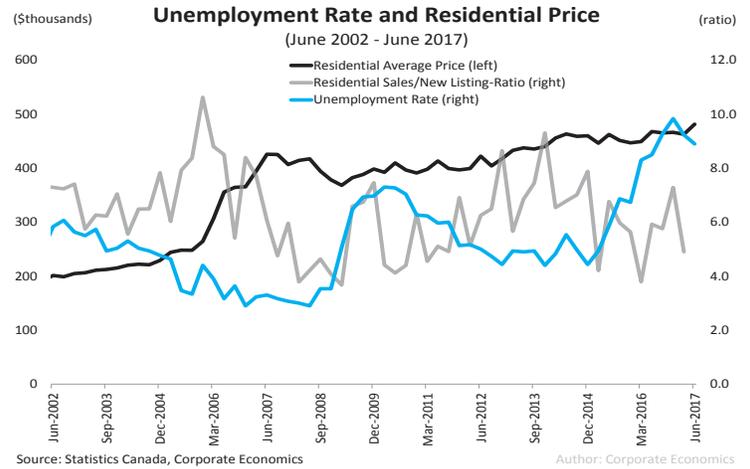
In 2015 total residential construction investment was 3.6 billion dollars catalyzed by the changes in Alberta building and fire construction code, and the change in the National energy code of Canada. The total residential construction investment in 2009 was 1.4 billion dollars, but when adjusted for inflation, the real construction investment value in 2009 was 1.2 billion dollars compared to 2.7 billion dollars in 2015. The real investment construction dropped from 3.2 billion dollars in 2014 to 2.1 billion in 2016. The share of single-family construction investment from total residential investment dollars decreased from an annual average of 0.58 between 2005 and 2014 to 0.35 between 2015 and 2016. In the last two quarters of 2017 it bounced back to an annual average share of 0.59 of the total residential construction investment. The distribution of shares suggests that the residential construction investment for the last two years, 2015 and 2016 was in multi-family residential construction. The housing starts for the city of Calgary were 6,318 units in 2009, reaching 13,033 units in 2015, also spurred on by a population growth of 3 per cent, while in 2009 population growth was 2.2 per cent. Total housing starts in the first two quarters of 2017 were 5,525 units, up 1,665 units compared to total starts across first two quarters of 2016 of 3,860 units. Starts increased by 1,367 units between the first and second quarter of 2017; this difference is the biggest increase in the first two quarters of any year since 2001.

The 2017 Calgary Civic Census found more people moved to Calgary than left in 2017, unlike 2016, where more people left Calgary than came in. The city's population grew by 0.9 per cent in 2017 and 0.3 per cent in 2016, but less than the historical annual average growth of 2.6 per cent between 2015 and 2006 (within the last 10 years). Going forward, this foreseen lag or fall in population growth will provide downward pressures on residential house price appreciation, all else equal.

In the city of Calgary, residential sales of housing priced above \$650,000 has increased in market share between 2008 and 2017, while housing shares of sales priced under \$550,000 has fallen within the same period.

**Calgary Census Metropolitan Area (CMA)
Re-sale Market**

Total housing starts in the first two quarters of 2009 were 1,981 units; in 2014 there were 9,294 at the height of the oil peak, in 2015 there were 6,628 units spurred on by changing energy and construction building codes for Alberta and Canada. And in 2016, total housing starts were 3,860 units, also catalyzed by changing construction energy efficiency rules in Alberta. The historical annual





average of total housing starts of the first two quarters between 2001 and 2016 was 6,195 units. In 2017, total housing starts in the first two quarters were 5,525 units, 670 units lower than the historical annual average. The race to beat changing construction and energy rules may have over supplied the market. However, we expect to see some downward correction in housing starts based on market forces as observed in 2017 and continuing. Total housing starts increased from 2,079 units in the first quarter of 2017 to 3,446 units in the second quarter of 2017.

We report the sales-to-listing ratio as a measure of discerning when a market is in favor of the seller or of the buyer in the residential resale market. Total sales increased from 5,220 units sold in the first quarter of 2017 to 7,709 units in the second quarter, while correspondingly, units listed jumped from 19,463 to 14,061 units. Since the last quarter of 2015 the sales-to-listing residential resale market ratio has averaged 0.55, suggesting the housing resale market is balanced: the buyer or seller both have equal probability of meeting their needs (the market is neither a seller's nor buyer's market).

Though the sale-to-listing ratio edged up from 0.5 in the first quarter of 2017 to 0.55 in the second quarter, growth in employment and real wages, all else equal, will propel the sales to listing ratio upward and firm up house price appreciation.

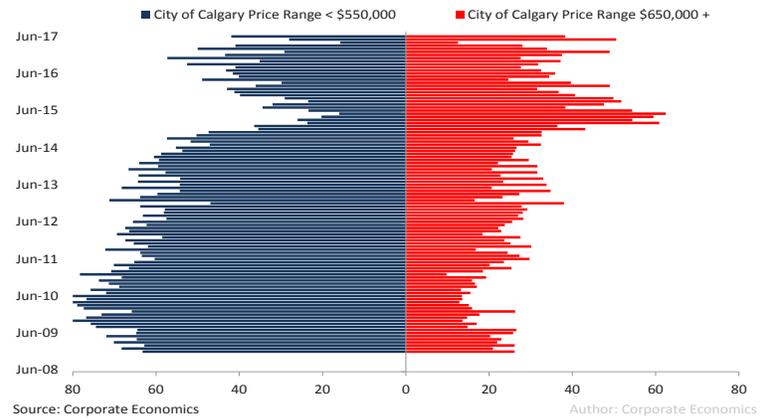
Average house prices increased from \$462,855 dollars in the first quarter of 2017 to \$481,355 dollars in the second quarter of 2017, appreciating 4 per cent. Between the first quarter of 2015 and last quarter of 2016 the annual average compounded house price appreciated was a meager 0.4 per cent per annum

Calgary CMA Housing Affordability Index¹

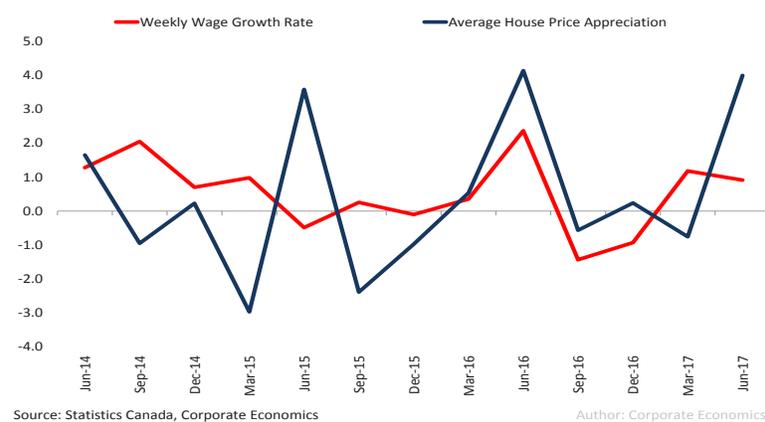
The affordability index is a ratio of housing costs to wages. When the affordability index increases, it implies housing services are less affordable, and when it decreases, it means housing services are more affordable, all else equal. During the oil price peak of 2014, affordability index increased to 0.51, this was above the average historical affordability index of 0.47 over 2001 and 2013. Between 2015 and second quarter of 2017 the affordability index averaged 0.48. So, housing has been relatively more affordable before and after 2014. However, if we zoom in on the interval 2001 through 2013 we note that, between every quarter starting with the second quarter of 2006 till the last quarter of 2008 the affordability index was above 0.5, and averaged 0.53. So, within 2006 and 2008 housing was relatively less affordable than any other period between 2001 and 2017. In the second quarter of 2017, the affordability index increased to 0.49 from 0.48 in the first quarter of 2017.

¹ The Ratio is a cost-to-wage ratio; the costs include house price, costs for maintenance, utilities.

Residential Sales by Market Shares of the Price Ranges
(Jun. 2008 - Jun. 2017; per cent from the total monthly sales)



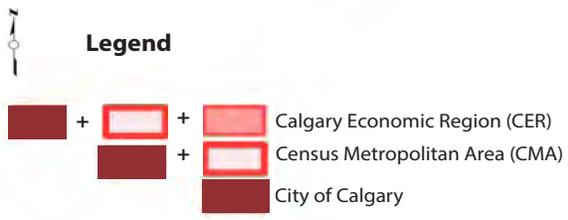
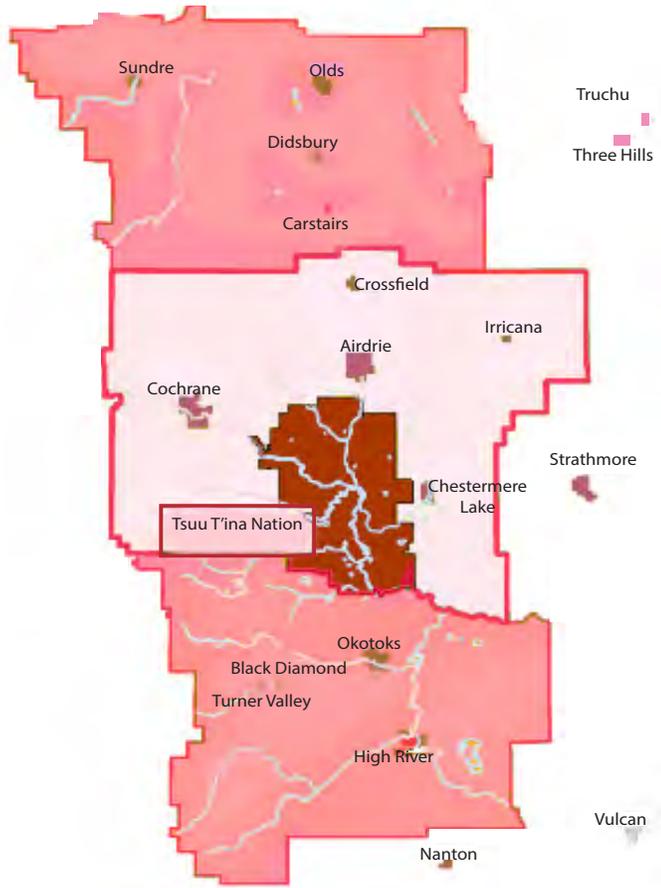
Weekly Wage Growth and House Price Appreciation
(Jun. 2014 - Jun. 2017, Q/Q per cent change)



Affordability (Costs-to-Wage Rate)
(March 2010 - June 2017)



Calgary Economic Region Map



Who We Are

Corporate Economics provides services in four areas: forecasting, information provision, policy analysis and consulting. We also monitor the current economic trends which allows us to develop unique insights on how external events are impacting the local economy and the Municipal government. We are experienced at researching different economic topics and have developed reliable methods of forecasting and analysis.

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Many of our publications are available on the internet at www.calgary.ca/housing.

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Sources: Statistics Canada, CMHC, CREA, City of Calgary, Corporate Economics