

# CALGARY & REGION ECONOMIC OUTLOOK



2014-2024



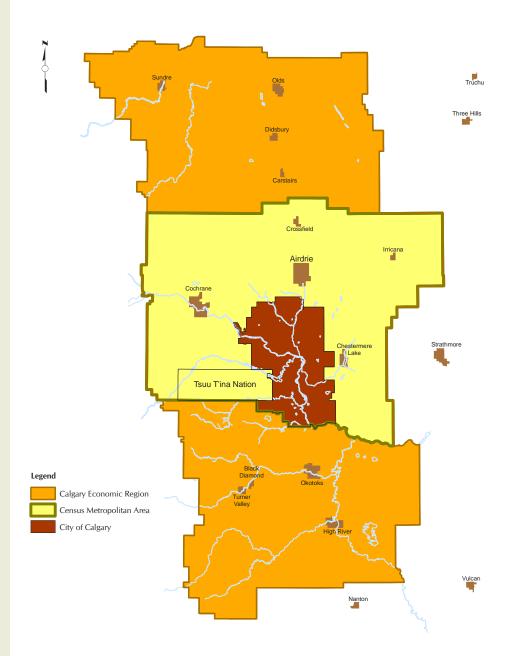


# Calgary GDP outlook housing

# Table of Contents

Executive Summary
Calgary6
Assumptions:
Alberta13
World Outside Alberta16
Forecast Tables18
About Corporate Economics 26

# **Calgary Economic Region Map**



Completed: April 2014



# EXECUTIVE SUMMARY

## Calgary

- The pace of economic activity in Calgary will quicken in 2014 and 2015 in reaction to faster growth in the world outside Calgary, and increased investment activity arising from the need to repair the residential and non-residential structures damaged by the flood.
- The consumer price inflation rate for 2013 was estimated at 1.7 per cent, up from 1.0 per cent in 2012. Residential vacancy rates are expected to remain low in 2014, which would again push accommodation costs and consumer prices higher.
- Construction inflation has fluctuated around 3 per cent over the past few years. The outlook for non-conventional oil projects indicates continued expansion, but at the current pace.
- Construction activity would be driven by low vacancy rates in the residential sector in 2014 and 2015. Employment and population growth would also add to the need for new space and support building intentions. However, the value of building permits is expected to decline from \$6.1 billion in 2013 and settle in the range of \$3.9 to \$4.9 billion by 2018.
- The city of Calgary's population is projected to reach 1.274 million by 2018. The population is expected to grow by 77,600 persons or by 25,900 persons annually over the 2015-2018 period, down from the annual average of 27,600 for the 2012 to 2014 period.

## Assumptions:

## Alberta

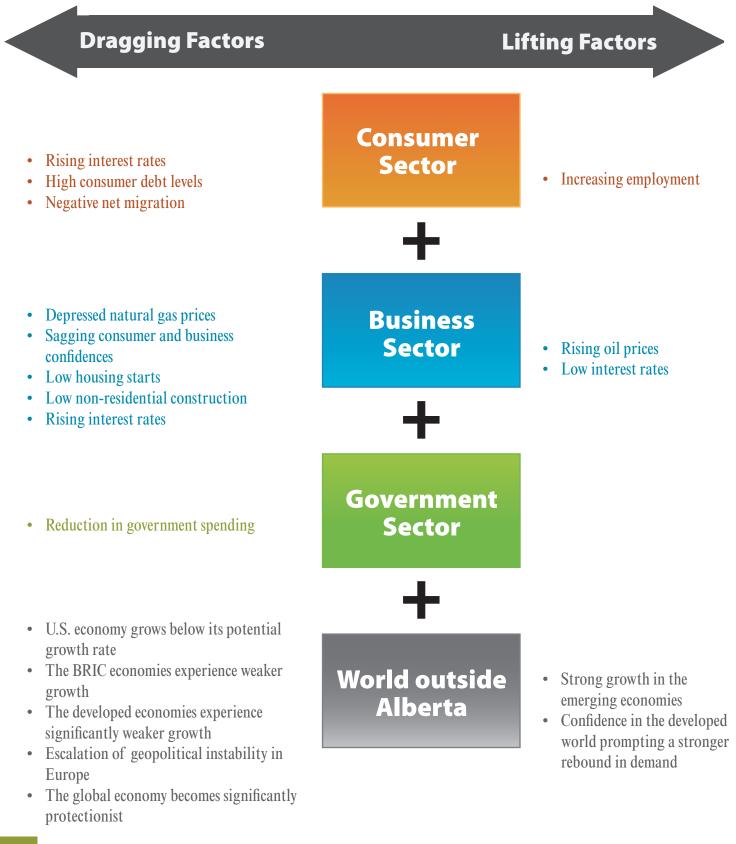
- The Alberta economy will remain buoyant in 2014 thanks to solid oil production, and the reconstruction efforts from the widespread flooding in June 2013. Alberta's economy is expected to grow at 3.3 per cent in 2014, and 3.0 per cent in 2015. An aging population would depress the economy's potential growth rate towards the end of the forecast period as consumer and labour supply both grow at a slower pace.
- Crude oil prices stayed elevated in 2013 compared to historical levels. In the near term, the price discounts for Alberta producers would continue as long as the transportation bottleneck exists. It is expected that WTI crude oil prices will average US\$93.80/bbl in 2014, and US\$90.00/bbl in 2015.
- Natural gas prices at AECO spot in Alberta are expected to average \$3.70/GJ in 2014 and \$4.00/GJ in 2015. The discovery and development of large natural gas shale resources in North America has significantly increased supply in both the U.S. and Canada. As a result, natural gas prices remain below pre-2008 levels.

## World Outside Alberta

- The Canadian economy is expected to expand by 2.2 per cent in 2014 and 2.4 per cent in 2015, up from 1.6 per cent in 2013. The economic growth rate is expected to decelerate from 2016 to the end of the forecast period as the economy grows in line with demographic change.
- U.S. economic growth should accelerate in 2014 as the adverse effects of a relatively tight fiscal policy weaken. Economic growth would also be boosted by historically low short-term interest rates.
- The developed countries should grow stronger in 2014 compared to 2013, while the pace of growth in the emerging countries should decelerate. Almost all regions in the world economy are expected to grow.



## Forecast Risks



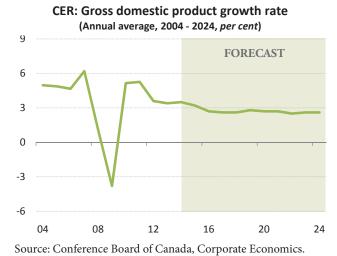


# Forecast Implications (2015-2018)

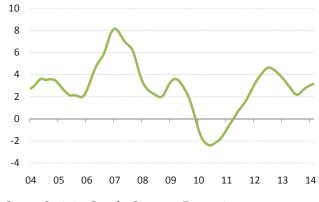
Variable	Past Cycle 2012 - 2014 Average	Current Cycle 2015 - 2018 Average	Forecast Implications
Assumptions			
World Gross Domestic Product (annual % change)	3.50	4.40	Positive economic growth would increase the economic base of the world economy over the 2015-2018 period. Larger economic and demographic bases would increase the demand for commodities. This would place upward pressure on commodity prices. It would have a negative effect on the municipal budget.
U.S. Real Gross Domestic Product Growth (chained 2005 dollar) (%)	2.10	2.93	Increased demand for Canadian (Alberta) exports such as oil and forest products would keep demand and prices high. Municipalities could expect to pay higher prices to purchase commodities over time.
Canada Real Gross Domestic Product Growth (chained 2007 dollar) (%)	2.00	2.37	Increased demand for Alberta exports such as oil and natural gas. This would increase the energy industry's cashflow and drive investment spending over time. The end result is continued economic growth. As the economy exhausts its spare capacity, inflation rates to trend higher. The impact on the municipal budget would be negative.
Prime Business Loan Rate (%)	3.04	5.22	Higher borrowing costs for municipal suppliers and these would increase their purchase costs. Municipalities would face higher borrowing costs.
Exchange Rate (US\$/Cdn\$)	0.98	0.93	Lower exchange rates would increase the purchase price of imports.
Crude Oil Price - WTI (US\$/bbI)	96.40	93.40	Higher prices would increase the price for petroleum based commodities such as diesel fuel and asphalt.
Alberta Natural Gas Price - AECO/NIT (\$/GJ)	2.80	4.20	This would increase municipalities' heating (utility) costs and at the same time increase franchise fee revenues; assuming all things are equal. Both population and price levels are expected to be higher over time and this would have a positive impact on franchise fee revenues.
Alberta Average Wage Rate Increase for All Industries (%) (IHS)	2.7	2.4	Wage inflation would exceed price inflation; disposable incomes would increase. Municipal operating costs would increase as municipalities compete with the private sector for scarce labour.
Calgary - Forecast			
Real Gross Domestic Product (%)	3.3	2.8	Positive economic growth would result in larger economic and demographic bases . Slower growth may allow for catch-up with infrastructure backlog.
Total Employment ('000 Persons)	827.8	918.0	Larger employment would result in an increased demand for non-residential spaces. This would increase property tax bases.
Total Employment Growth (%)	3.1	2.4	Non-residential building permitting fees may moderate over this period as employment grows at a slower rate.
Unemployment Rate (%)	4.8	4.4	This would constrain municipalities' ability to attract highly skilled staff. This would also place pressure on operating and capital costs.
Inflation Rate (%)	1.6	2.1	This would increase the operating cost for municipal partners.
Total Population ('000 Persons)	1,148	1,236	The demand for City services would increase over the previous period. In this period revenue bases that are tied to population size would be larger.
Total Population Growth (%)	2.5	2.0	The demand for services would grow at a slower rate compared to the previous period. Revenues that are tied to population growth would be lower.
Net Migration ('000 Persons)	17.9	14.0	Despite net migration growing at a slower rate, it remains the main source of population growth.
Household Formation ('000 Units)	11.3	11.7	On average, municipalities would be required to provide services to a slightly higher number of households each year.

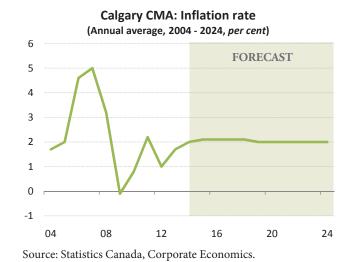
## CALGARY

- The CER's economic growth rate decelerated in 2013 to 3.4 per cent, from 3.6 per cent in 2012, in response to slower growth in the world outside of Calgary. Relatively slower employment growth kept the rate of growth in consumer spending in check. Retail sales increased by 7.4 per cent in January 2014, on an annual basis, up from 4.5 per cent in January 2013. Moreover, economic activity was constrained by the disruption caused by the flooding in June 2013. Consequently growth was lower than what was previously forecasted in the spring. Consumer spending is forecast to trend higher as economic activity quickens. The pace of economic growth will accelerate in 2014 and 2015, in reaction to faster growth in the world outside Calgary and increased investment activity arising from the need to repair the residential and non-residential structures damaged by the flood.
- Total employment averaged 830,000 persons in 2013, up from 806,000 in 2012 and 776,000 in 2011. The pace of job creation slowed in 2013 to 2.6 per cent from the 2012 rate of 3.9 per cent, as the local job market adjusted to weaker oil prices and reduced investment spending in the Alberta economy. The 2013 floods and the associated work disruption served to further dampen the rate of job creation. The unemployment rate averaged 4.8 per cent in 2013, unchanged from 2012. The unemployment rate is expected to fall to 4.5 per cent by 2018 as employment growth exceeds labour force growth.
- The consumer price inflation rate (CPI) for 2013 was estimated at 1.7 per cent, up from 1.0 per cent in 2012. The increase in the overall price level mainly reflects higher shelter costs. Above average population growth resulted in an increased need for residential space and this drove the cost of housing higher. Residential vacancy rates are forecast to remain low in 2014 and 2015, which would again increase accommodation costs and drive consumer prices higher. A depreciated Canadian exchange rate relative to the U.S. dollar would increase the price for imported goods and place upward pressure on the overall inflation rate. Slower world economic growth would result in reduced price pressures for commodities, which should in turn, act as an offset to higher inflation rates. Consumer prices are expected to rise by 2.0 per cent in 2014, increase to 2.1 per cent in 2015, and remain at that rate until 2018 before falling back to 2.0 per cent for the rest of the forecast period.
- The apartment vacancy rate, already low in the thriving



CER: Employment growth rate (12-month-moving-average, per cent)





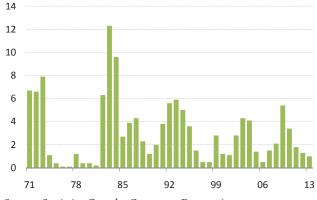
# Calgary



Calgary economy, sank even lower in the aftermath of the flood of 2013. Months later, the vacancy rate sits below 1 per cent as the recovery effort has drawn in workers, particularly from the job-strapped provinces of British Columbia and Ontario. Consequently, the low vacancy rates are exerting upward pressure on rental rates as renters bid for available space.

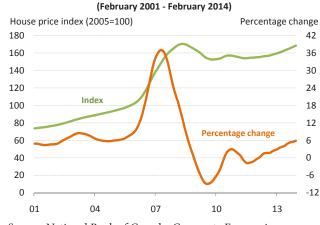
- House prices are now close to their pre-recession peaks. Since 2008, the average house price has increased by less than the CPI or the average wage rate. Also in this period, mortgage rates have remained at historically low levels. These factors have combined to result in house prices in Calgary being relatively affordable compared to other Canadian cities. The outlook for house prices in 2017 onward is for modest increases near the rate of growth in consumer prices.
- The total sales of re-sale (MLS) housing was estimated at 23,486 units in 2013, up by 2,282 units from 2012. At the same time, total MLS listings were calculated at 34,386 units, down by 177 units from 2012. The MLS sales / listing ratio therefore increased sharply to 0.683 in 2013 from 0.613 in 2012, as growth in sales outstripped growth in listings. The sharp increase in the sales / listing ratio exerted upward pressure on the MLS median price (5.5 per cent). The combination of increasing re-sale prices, relatively low mortgage rates, and higher demographic (population and employment) levels has improved the conditions for new home construction. Over the forecast period, the combination of high house price inflation and higher mortgage rates would threaten the affordability of home ownership in Calgary. House prices are expected to increase by 3.5 per cent in 2014, then moderate to 3.0 per cent by 2019, and remain at that rate for the rest of the forecast period as house prices grow in line with wage rate increase.

Calgary CMA: Vacancy rates, apartment structures of six units and over (1971 - 2013, per cent)



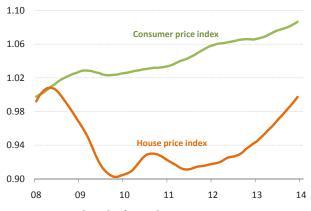
Source: Statistics Canada, Corporate Economics.

Calgary: House price index



Source: National Bank of Canada, Corporate Economics.

Calgary: Inflation rates - consumer and house prices (index March 2008 = 1, January 2001 - February 2014)



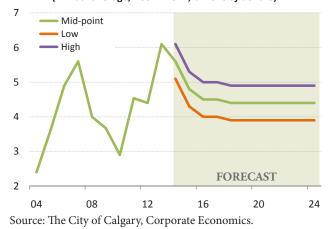
Source: National Bank of Canada, Corporate Economics.

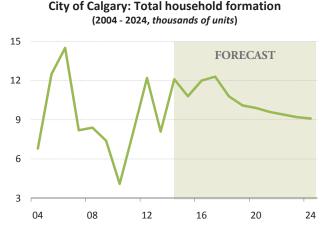
- The current downtown office vacancy rate in Calgary sits at over 8 per cent, up from 5 per cent only a few months ago. Nearly 800,000 square feet of space has been vacated recently with major moves out of the downtown core into the beltline and suburbs. The National Energy Board, several smaller energy companies, and a few mid-sized law firms have relocated into the beltline while CP rail and Esso are also relocating out of the core. As a result, not all of the currently announced construction projects will go ahead within the next 5 years. Downtown office market vacancies will likely fluctuate within the market range of 8-10 per cent over the forecast horizon while the traditionally higher vacancies in the surrounding areas will slowly whittle down.
- The total value of building permits was estimated at \$6.1 billion in 2013, up from \$4.4 billion in 2012. The growth in building permit values over the 2012-13 period was driven by both residential (\$0.873 billion) and non-residential (\$0.751 billion) investment. New single family permits were up 7 per cent in 2013 to 4,900, while permits for multi-family dwellings shot up 76 per cent with over 3,000 more apartments permitted compared to 2012. Given the delay between the beginning of construction and completion of new residential space, vacancy rates are expected to remain below measurable levels for at least 2 more years.
- Construction activity in 2014 and 2015, would be driven by low vacancy rates in the residential sector, while employment and population growth would also add to the need for new space and support building intentions. The population projections indicate that population growth would support an extra 11,500 housing units annually over the 2015-2018 period. Moreover, the need to re-build structures damaged by the recent floods would boost construction values in the short-term. The completion of office space currently under construction should have a dampening effect on non-residential space construction from 2016 to the end of the forecast period. The forecast calls for the value of building permits to decline from \$6.1 billion in 2013, and settle in the range of \$3.9 to \$4.9 billion by 2018.



Source: Altus Insite, Corporate Economics.

City of Calgary: Total building permit value (Annual average, 2004 - 2024, billions of dollars)





Source: The City of Calgary, Corporate Economics.

# Calgary



## Non-Residential Building Price Inflation

Construction inflation has fluctuated around 3 per cent for the past few years. The outlook for non-conventional oil projects indicates continued expansion, but at the current pace. Few new oilsands jobs means that during the forecast period Calgary will stop losing trades people, beyond normal turnover. While oil prices are expected to stabilize in the mid \$90's, construction inflation is expected to moderate to the level of general inflation over the forecast horizon. That said, current construction of downtown office towers is causing market tightness for concrete, site delivery and some trades such as commercial plumbers. These issues are expected to continue for 2-3 more years.

Commodity markets were more volatile than expected during the U.S. election season. With the uncertainty of the election now behind us we look to calm commodity markets.

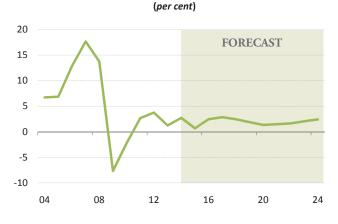
## **Commodity Prices**

### Asphalt

Higher oil prices combined with a lower value of the Canadian dollar will serve to push up asphalt prices this season. Price declines last year will be eliminated and we anticipate prices to average \$755/tonne, up from the winter price of \$680. Prices are expected to soften over the forecast period to around \$600 by 2024, mostly as a result of increased production capacity.

### Rubber

Weather and oil prices cause dramatic shifts in prices making rubber markets the second most volatile in the world next to electricity. Barring any extreme weather events, recent oil price increases will cause international rubber prices to spike by nearly 20 per cent this year. Stabilizing global demand for rubber will dampen prices into the future and we anticipate only moderate price increases in line with general inflation for the remainder of the forecast horizon.

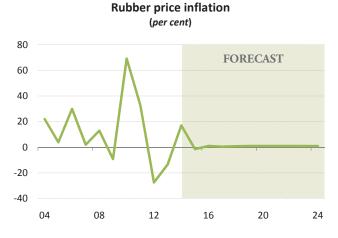


Non-residential building price inflation

Source: Statistics Canada, Corporate Economics.



Source: Statistics Canada, Corporate Economics.



### Diesel

Calgary diesel prices spiked in 2011 when a major pipeline feeding Edmonton refineries leaked, resulting in significant refining downtime in Alberta. With oil prices and exchange rates firming, we expect some modest escalation in price in 2014 and continued inflationary increases thereafter.

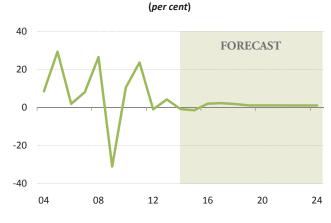
#### Vehicle Parts

Calgary Transit spends just over \$20 million per year on vehicle parts. The City incurs additional charges for vehicle parts buried in lease agreements.

Vehicle sales are recovering somewhat faster than expected in the U.S. There were 15.9 million sales in 2013, up from 14.8 million in 2012. Pent-up demand, availability of lowrate financing and a return of easier credit terms are helping the U.S. auto industry recover quickly. As such, our forecast for price increases in vehicle parts has been revised to show moderately strong and consistent escalation throughout the forecast period.

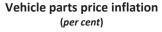
#### Aluminum

Aluminum is a primary metal used in transportation, packaging, building, electrical and general goods. Since 2009, facilities in the U.S. have been struggling to re-start and in 2013 "temporary" closures became permanent. Production is moving to places where costs for electricity and shipping bauxite are cheaper. China and Saudi Arabia are now the primary producer locations. A Canadian attempt to smelt alumina using locally available clay instead of bauxite is viable, but not as cheap as was hoped. The existence of this technology is acting as a limit on international prices rather than bringing riches to Canada. With the U.S. imposing a rule that the average U.S. vehicle should achieve 55 mpg by 2020, demand for aluminum is set to expand. Indeed, the 2015 Ford F-150 will be made mostly of aluminum. Even so, we anticipate only moderate global price increases in aluminum throughout the forecast period.



**Diesel oil price inflation** 









Source: Statistics Canada, Corporate Economics.



#### Wood

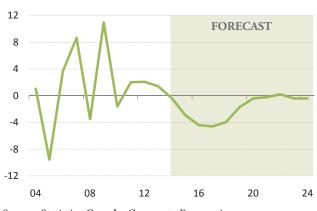
Canadian wood markets are divided into 3 sectors: lengths, fibre-boards and pulp. As an input to construction projects and as a component of paper, The City is a large consumer of wood products.

Canada can produce enough wood lengths to frame 1.3 million houses per year. Housing starts in the U.S. have stalled since the start of the global recession, but recently U.S. housing starts grew to reach 1 million units (from 1.3 million per year on average before the recession). However, about half of those 1 million starts this year are multiplex dwellings traditionally constructed using other materials. Even though prices for boards are firming in the U.S. at around \$400 per thousand feet, U.S. lumber production is ramping up to meet demand. We look for Canadian prices to bounce up and down by as much as 25 per cent in a single construction season while facilities re-start to meet demand, but expect prices to soften on a yearto-year basis over the forecast period.

Demand for pulp and paper is shrinking as electronic screens become the mainstream reading and advertising medium in North America. Due to the distance from international markets and rising electricity prices since construction, Alberta pulp mills are no longer globally competitive producers. However, since their local market is also a great distance from other suppliers, local producers have some price support. We look for Alberta pulp and paper prices to remain stable throughout the forecast period.

#### Steel

Steel prices typically surge every 4 to 5 years as global economic activity, particularly in international trade, increases. It seems to cycle with the Olympic Games, but also depends on how far the host city is from major manufacturing facilities. Also, demand for cars and shipping containers are major drivers of steel demand. Prices for international shipping rose slightly in the usual last-minute rush to get facilities ready for the 2014 Olympics, but quickly fell and continue to hover at around 10 per cent of what they were just before the global recession. Demand for steel is growing moderately but there are signs growth is softening in developing countries. Our outlook is for modest increases in steel prices except in 2020. With the games returning to Tokyo, we anticipate Japan will take the opportunity to showcase one of the world's largest cities.



Wood price inflation (per cent)



Source: Statistics Canada, Corporate Economics.



## Population - City of Calgary

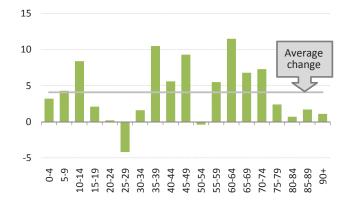
- Calgary's population is projected to reach 1.274 million by 2018, up from 1.196 million in 2015. The population is expected to grow by 77,600 persons or by 25,900 persons annually over the 2015-18 period, down from the annual average of 27,500 for the 2012 to 2014 period. The annual growth rate for the 2015 to 2018 period is estimated at 1.9 per cent, down from 2.4 per cent over the 2012-14 period.
- In this period net migration is expected to account for 46,000 of the 77,600 population growth, with natural increase accounting for the remaining 31,600. Net migration would be influenced by the relatively low unemployment rates in Calgary and Alberta compared to Canada. Meanwhile, the rate of natural increase is projected to slow over the forecast period as the death rate grows faster than the birth rate. A lack of apartment vacancies will temper the population growth in the City in 2014 with some migrants electing to reside in the region instead. Thereafter, Calgary will experience a slowing in net migration as the rest of the Canadian and World economy improves.
- The age distribution of Calgary's population would shift by 2018, in response to the combination of population aging, net migration and natural increase. The largest population increases would be experienced by the 60-64 cohort (11,500), and the 35-39 cohort (10,500). The increase in the 60-64 age group represents aging of the baby boomers, while growth in the 35-39 age group comes from the effects of net migration as a source for economic growth.
- The number of households is expected to reach 500,600 in 2018, up from 465,400 in 2015, an increase of 35,200. This should drive the demand for additional housing units and government services.

FORECAST FORECAST FORECAST 0 0 04 08 12 16 20 24

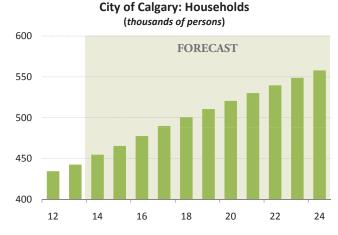
City of Calgary: Population growth rate (2004-2024, per cent)

Source: City of Calgary Civic Census, Corporate Economics.

City of Calgary: Population change 2015-2018 (thousands of persons)



Source: City of Calgary Civic Census, Corporate Economics.



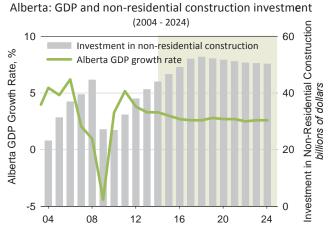
Source: City of Calgary Civic Census, Corporate Economics.

# Assumption: Alberta



# ALBERTA

- The Alberta economy will remain buoyant in 2014 thanks to solid oil production and the reconstruction efforts from widespread flooding in June 2013. Business investment in the oil sands and related sectors should be a key driver of economic activity in the province in 2014. A tight labour market, higher incomes and a healthy flow of inmigration will also boost the province's fortunes in 2014. However, with oil price growth moderating, oil sands investment should be essentially flat in the medium term. The forecast is therefore for real business investment to increase by 4.7 per cent in 2014, followed by another 4.4 per cent in 2015. Alberta's economy is expected to grow at 3.3 per cent in 2014, and 3.0 per cent in 2015. An aging population would depress the economy's potential growth rate towards the end of the forecast period as consumer and labour supply both grow at a slower pace.
- With the labour market tightening, wage growth in Alberta has accelerated and remained well above the national average. In 2013, personal income per capita in Alberta increased 3.9 per cent over 2012. Wages are forecast to increase another 3.2 per cent in 2014, and 3.4 per cent in 2015. This should continue to support consumer spending and retailers will benefit from these conditions going forward. Retail sales posted strong growth of 5.9 per cent in Alberta in 2013. Demographics also played a role in boosting Alberta's retail performance. With a relatively young average age than other provinces, Albertans tend to purchase more per capita. Retail sales are expected to grow by 4.1 per cent in 2014 and 5.1 per cent in 2015, respectively.
- Crude oil prices remained elevated in 2013 compared to historical levels. The price discount for Canada Western Select (WCS) compared with West Texas Intermediate (WTI) has fluctuated widely since 2012, due to transportation and refinery constraints. Given the increasing production capacity, the need for additional transportation has become a priority for Canadian oil producers. Rail transportation of crude oil has increased substantially, helping to alleviate some of the strain on the current pipeline network. In the near term, price discounts for Alberta producers should continue as long as the transportation bottleneck exists. It is expected that WTI crude oil prices will average at US\$93.80/bbl in 2014 and US\$90.00/bbl in 2015.



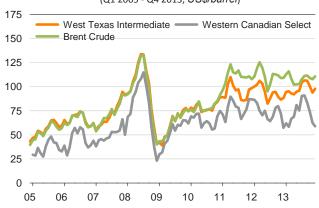
Source: IHS Global Insight, Conference Board of Canada, Corporate Economics.

Alberta: Retail sales and personal income growth (2000 - 2018)



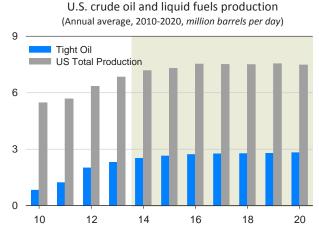
Source: IHS Global Insight, Statistics Canada, Corporate Economics.

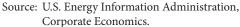
International and Alberta crude oil prices (Q1 2005 - Q4 2013, US\$/barrel)

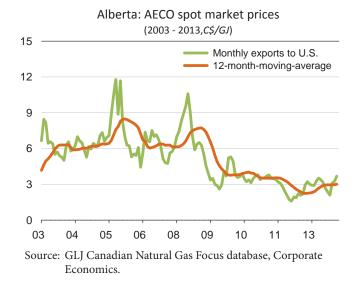


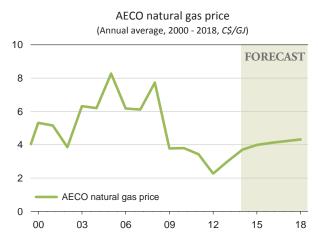
Source: U.S. Energy Information Administration, Federal Reserve Bank of St. Louis, Bloomberg, NetEnergy, Natural Gas Exchange, Cenovus, Corporate Economics.

- The United States has been the major export destination for Alberta crude oil products. With rapid growth in the U.S. domestic oil supply, the demand for Alberta crude has decelerated. U.S. domestic crude oil output increased 1.0 million bbl/d in 2013, thanks to tight oil production. This was the biggest increase in the U.S. in the past 24 years. The U.S. Energy Information Administration expects strong crude oil production growth, primarily concentrated in the Bakken, Eagle Ford, and Permian regions, to continue through 2020. In the medium to long term, this should put downward pressure on bitumen prices and oil sands investment in Alberta. In the near term, U.S. demand for Canadian crude should continue, since most of the U.S. refineries are geared for dealing with Alberta bitumen. Canadian oil sands usually have a flat production profile and a long reserve life. This should provide greater stability relative to the U.S. tight oil plays, which mitigates a key risk with any long-term projects.
- In 2013, Alberta natural gas prices at AECO spot averaged \$3.01/GJ, about one third higher than the 2012 average of \$2.27/GJ. Natural gas prices advanced in the first half of last year in response to increased power generation demand, but dipped in Q3 2013 due to the extra supply in the province caused by a temporary disruption in pipeline transportation. Prices surged in the last quarter of 2013 in response to extremely cold weather. Cold weather boosted the demand for heating fuel, and prompted record-high withdrawals from storage. Inventories at the end of this heating season should drop to the lowest levels since 2008. The reduction in working gas storages should keep natural gas prices elevated. Production was disrupted in several areas of the U.S. and resulted in increased imports from Canada to mitigate the loss of supply.
- Natural gas prices at AECO spot in Alberta are expected to average \$3.70/GJ in 2014 and \$4.00/GJ in 2015. The discovery and development of large natural gas shale resources in North America have significantly increased supply in both the U.S. and Canada. As a result, natural gas prices remain below pre-2008 levels. Relatively low natural gas prices support coal-to-gas switching in power generation in the medium term. Higher natural gas production should also support increases in exports of both pipeline and liquefied natural gas. For Alberta producers, transportation remains a critical issue, particularly during peak demand periods.









Source: GLJ Canadian Natural Gas Focus database, U.S. Energy Information Administration, Corporate Economics.

# Assumption: Alberta



- Healthy economic growth in Alberta continues to drive employment to new heights. Job creation was strong in 2013, with an annual employment growth rate of 2.8 per cent. Improved job opportunities attracted migrants to the province at a faster pace in 2012 and 2013. Job gains are expected to outpace the growth in the labour force throughout the forecast period. The unemployment rate was 4.6 per cent in 2013, and should fall to 4.5 per cent in 2014.
- Housing starts are estimated at 35,800 in 2013, up 8 per cent over 2012. Single-family starts rose by 5 per cent, while multi-family activity increased 11 per cent. It will be another busy year for Alberta's new home builders and renovators in 2014, supported by the record-high in-migration level in 2013. Looking ahead, improving economic activity in other provinces in Canada should lead to an easing in interprovincial migration into Alberta. We expect total housing starts to increase by 3 per cent in 2014, and moderate slightly after 2015.
- The consumer inflation rate (CPI) was 1.4 per cent in 2013, up from 1.1 per cent in 2012. Consumer prices picked up slightly toward the end of 2013, driven mainly by higher gasoline prices. Aside from energy prices, the CPI index increased in reaction to higher shelter costs.
- Wage growth continues to exceed the inflation rate, which supports growth in real purchasing power and increased consumer confidence in Alberta. In the near term slack in the economy, as well as heightened competition in the retail sector, should moderate the growth in inflation. Inflation is expected to remain soft in 2014 at 1.9 per cent, and gradually move upward to 2.0 per cent in 2015, and 2.1 per cent in 2016.



Alberta: Unemployment rate and employment growth

ource: Statistics Canada, Conference Board of Canada Corporate Economics.





Source: Statistics Canada, Conference Board of Canada, Corporate Economics.

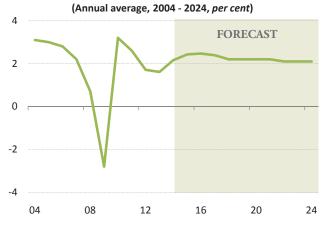
calgary.ca/economy 15



# **Assumption:** World Outside Alberta

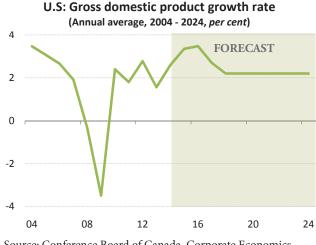
## WORLD OUTSIDE ALBERTA

- The pace of economic growth in Canada will quicken in 2014 and 2015, as the U.S. economy shifts to higher growth rates as fiscal policy becomes less restrictive. As the pace of U.S. economic activity quickens, the demand for Canadian exports would increase and this would be further aided by a weaker Canadian dollar. The Canadian economy is forecast to expand by 2.2 per cent in 2014 and 2.4 per cent in 2015, up from 1.6 per cent in 2013. The economic growth rate is expected to decelerate from 2016 to the end of the forecast period as the economy grows in line with demographic change. Higher levels of economic activity would result in a reduction of the economy's spare capacity and an increase in inflationary pressures. Consequently, the Bank of Canada should begin tightening monetary policy in order to reduce inflationary pressures in the economy by 2015.
- The U.S. economic growth rate averaged 1.6 per cent in 2013, down from 2.8 per cent in 2012 in response to tighter fiscal policy brought on by sequestration. Higher taxes and public sector job losses have combined to reduce consumer and business confidence and depress the rate of economic growth. Private sector job growth, an improving housing market and increased domestic oil production from shale should combine to offset some of the negative effects of fiscal policy. Economic growth should accelerate in 2014 as the adverse effects of a relatively tight fiscal policy weaken. Economic growth would also be boosted by historically low short-term interest rates.
- The forecast for the global stage in 2014 is for the developed countries to grow at a stronger pace than 2013, while the pace of growth in the emerging countries should decelerate. Most regions in the world economy are expected to grow. We continue to expect positive growth from the developing countries given the expectations of increased demand from the developed nations for imports, which should drive net exports of these countries and further stimulate world economic activity.



Canada: Gross domestic product growth rate

Source: Conference Board of Canada, Corporate Economics.



Source: Conference Board of Canada, Corporate Economics.

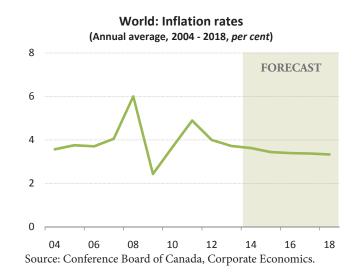
World: Gross domestic product growth rate

(Annual average, 2004 - 2024, per cent) 6 FORECAST 5 4 3 2 1 0 -1 04 08 12 16 20 24

Source: Conference Board of Canada, Corporate Economics.

# Assumption: World Outside Alberta

- Output growth for the global economy is expected to rise in 2014 to around 3.7 per cent and to 3.9 per cent in 2015. Growth is projected to continue into 2018, averaging around 4.6 per cent over the 2015-2018 forecast period.
- Moderate growth in the developed and emerging countries will keep pressure on commodity markets relatively subdued and therefore global inflation under less pressure. Inflation is expected to fall from 3.7 per cent in 2013 to 3.6 per cent in 2014, and edge down further to 3.4 per cent in 2015.



## **Table 1 - Selected Economic Indicators**

Rest of the World, United States, Canada, Alberta, Calgary Economic Region (CER) & Calgary Census Metropolitan Area (CMA)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ASSUMPTIONS										
Global Economy										
World Gross Domestic Product (annual % change)	4.9	4.5	5.2	5.4	2.8	-0.6	5.3	3.9	3.2	3.6
The United States										
U.S. Real Gross Domestic Product Growth (chained 2005 dollar) (%)	3.5	3.1	2.7	1.9	-0.3	-3.5	2.4	1.8	2.8	1.6
Canada	·									
Canada Real Gross Domestic Product Growth (chained 2007 dollar) (%)	3.1	3.0	2.8	2.2	0.7	-2.8	3.2	2.6	1.7	1.6
Prime Business Loan Rate (%)	4.0	4.4	5.8	6.1	4.7	2.4	2.6	3.0	3.0	3.0
Exchange Rate (US\$/Cdn\$)	0.77	0.83	0.88	0.93	0.94	0.88	0.97	1.01	1.00	0.9
Alberta										
Gross Domestic Product (%)	5.5	4.8	6.2	2.1	1.0	-4.4	3.3	5.2	3.5	3.3
Total Employment Growth (%)	2.6	2.7	4.9	3.8	3.1	-1.4	-0.4	3.8	2.6	2.8
Unemployment Rate (%)	4.6	3.9	3.4	3.5	3.6	6.6	6.5	5.5	4.6	4.6
Housing Starts ('000 Units)	36.3	40.8	49.0	48.3	29.2	20.3	27.1	25.7	33.4	35.
Inflation Rate (%)	1.4	2.1	3.9	4.9	3.2	-0.1	1.0	2.4	1.1	1.4
Crude Oil Price - WTI (US\$/bbl)	41.40	56.50	66.10	72.30	99.60	61.80	79.50	95.10	94.10	98.0
Western Canadian Select - WCS (US\$/bbl)	54.85	36.20	45.00	49.60	79.60	52.10	65.30	77.97	73.14	72.8
Alberta Natural Gas Price - AECO/NIT (\$/GJ)	3.50	5.70	4.60	6.40	7.70	3.80	3.80	3.43	2.27	3.0
FORECAST										
Calgary Economic Region (CER)										
Gross Domestic Product (%)*	5.0	4.9	4.7	6.2	1.1	-3.8	5.1	5.3	3.6	3.4
Total population**	1,119	1,152	1,188	1,230	1,251	1,296	1,338	1,362	1,398	1,43
Total Employment ('000 Persons)	643	649	718	745	768	765	755	776	806	830
Total Employment Growth (%)	3.1	1.0	8.0	3.8	3.1	-0.4	-1.3	2.8	3.9	2.6
Unemployment Rate (%)	5.0	3.9	3.4	3.2	3.3	6.3	7.0	6.2	4.8	4.8
Inflation Rate (%) (CMA)	1.7	2.0	4.6	5.0	3.2	-0.1	0.8	2.2	1.0	1.7
Building Permits (\$billion)	3.1	4.3	6.0	7.1	5.1	4.5	3.8	5.5	5.6	7.5
Low Forecast	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High Forecast	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Housing Starts ('000 Units) (CMA)	14.0	13.7	17.0	13.5	11.4	6.3	9.3	9.3	12.8	12.
Non-Residential Building Price Inflation (%) (CMA)	6.7	6.9	12.8	17.7	13.7	-7.7	-2.2	2.7	3.7	1.2
Numbers may not add up due to rounding	* Source: (	Centre for Sp	atial Econom	nics, Corpora	te Economic:	5				

Numbers may not add up due to rounding

\* Source: Centre for Spatial Economics, Corporate Economics \*\* Total population, census divisions and census metropolitan areas, 2001 Census boundaries



## **Table 1 - Selected Economic Indicators**

Rest of the World, United States, Canada, Alberta, Calgary Economic Region (CER) & Calgary Census Metropolitan Area (CMA)

FORECAST COMPLETED: March 2014					BAS	E FOREC	AST				
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ASSUMPTIONS											
Global Economy											
World Gross Domestic Product (annual % change)	3.7	3.9	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
The United States											
U.S. Real Gross Domestic Product Growth (chained 2005 dollar) (%)	2.6	3.4	3.5	2.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Canada											
Canada Real Gross Domestic Product Growth (chained 2007 dollar) (%)	2.2	2.4	2.5	2.4	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Prime Business Loan Rate (%)	3.0	3.2	4.8	6.4	6.5	6.7	6.7	6.5	6.5	6.5	6.5
Exchange Rate (US\$/Cdn\$)	0.95	0.95	0.94	0.92	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Alberta											
Gross Domestic Product (%)	3.3	3.0	2.7	2.6	2.6	2.8	2.7	2.7	2.5	2.6	2.6
Total Employment Growth (%)	2.2	2.0	1.5	1.3	1.4	1.3	1.4	1.3	1.3	1.3	1.4
Unemployment Rate (%)	4.5	4.2	4.3	4.4	4.2	4.4	4.3	4.2	4.2	4.1	4
Housing Starts ('000 Units)	37.1	36.0	35.1	34.8	34.3	41.6	38.9	37.4	36.5	36.1	36.1
Inflation Rate (%)	1.9	2.0	2.1	2.2	2.1	2.2	2.3	2.3	2.2	2.3	2.3
Crude Oil Price - WTI (US\$/bbl)	93.80	90.00	92.70	95.00	95.70	97.00	98.50	100.50	102.50	103.70	104.40
Western Canadian Select - WCS (US\$/bbl)	78.40	72.20	75.00	79.80	81.00	81.80	82.90	83.50	84.60	85.80	87.20
Alberta Natural Gas Price - AECO/NIT (\$/GJ)	3.73	3.99	4.12	4.22	4.32	4.25	4.69	4.90	4.82	4.96	5.22
FORECAST											
Calgary Economic Region (CER)										·	
Gross Domestic Product (%)*	3.5	3.2	2.7	2.6	2.6	2.8	2.7	2.7	2.5	2.6	2.6
Total population**	1,467	1,493	1,527	1,562	1,590	1,615	1,640	1,664	1,688	1,711	1,734
Total Employment ('000 Persons)	860	885	905	925	945	965	985	1,005	1,025	1,045	1,065
Total Employment Growth (%)	3.6	2.9	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	1.9
Unemployment Rate (%)	4.6	4.4	4.3	4.5	4.5	4.4	4.3	4.3	4.2	4.2	4.1
Inflation Rate (%) (CMA)	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0
Building Permits (\$billion)	7.0	6.0	5.6	5.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Low Forecast	6.4	5.4	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9
High Forecast	7.6	6.6	6.3	6.3	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Housing Starts ('000 Units) (CMA)	12.5	13.5	15.0	15.4	13.5	12.6	12.4	12.1	11.7	11.5	11.3
Non-Residential Building Price Inflation (%) (CMA)	2.7	0.7	2.4	2.8	2.5	1.9	1.3	1.5	1.6	2.0	2.4
Numbers may not add up due to rounding		Centre for						nsus bound			

Calgary & Region Economic Outlook 2014-2024 | Spring 2014

# Table 2 - Selected Indicators for City of Calgary

City of Calgary										
FORECAST COMPLETED: March 20	14									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
DEMOGRAPHY										
Total Population ('000 Persons)	933	956	992	1,020	1,043	1,065	1,072	1,091	1,120	1,149
Total Population Growth (%)	1.2	2.4	3.7	2.9	2.2	2.2	0.6	1.8	2.7	2.6
Net Migration ('000 Persons)	2.3	13.7	25.6	17.6	12.4	12.9	-4.2	9.6	19.7	19.1
Household Formation ('000 Units)	6.8	12.5	14.5	8.2	8.4	7.4	4.1	8.1	12.2	8.1
REAL ESTATE										
Residential Market										
Housing Starts ('000 units)	12.2	11.7	14.1	10.9	9.6	5.0	7.3	7.7	10.3	9.4
House Price Index Inflation (%)	5.8	8.3	31.4	24.0	0.5	-7.8	2.7	-1.2	2.5	5.7
Total Building Permits mid point (\$billions)	2.4	3.6	4.9	5.6	4.0	3.7	2.9	4.5	4.4	6.1

	BASE FORECAST										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
DEMOGRAPHY											-
Total Population ('000 Persons)	1,175	1,196	1,223	1,251	1,274	1,294	1,314	1,333	1,352	1,371	1,389
Total Population Growth (%)	2.2	1.8	2.2	2.3	1.8	1.6	1.5	1.5	1.4	1.4	1.3
Net Migration ('000 Persons)	15.0	10.0	16.0	18.0	12.0	10.0	10.0	10.0	10.0	10.0	10.0
Household Formation ('000 Units)	12.1	10.8	12.0	12.3	10.8	10.1	9.9	9.6	9.4	9.2	9.1

REAL ESTATE											
Residential Market											
Housing Starts ('000 units)	10.0	10.8	12.0	12.3	10.8	10.1	9.9	9.6	9.4	9.2	9.1
House Price Index Inflation (%)	3.5	3.2	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Building Permits mid point (\$billions)	5.6	4.8	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Low Forecast	5.1	4.3	4.0	4.0	3.9	3.9	3.9	3.9	3.9	3.9	3.9
High Forecast	6.1	5.3	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9

Numbers may not add up due to rounding



## Table 3 - City of Calgary Population Projection

FORECAST COMPLETED: July 2013				BA	SE FORECA	.ST	
	2012	2013	2014	2015	2016	2017	2018
Total Population (as April)	1,120,200	1,149,600	1,175,400	1,196,200	1,222,800	1,251,300	1,273,800
Total Population Growth Rate (April - March)	2.7	2.6	2.2	1.8	2.2	2.3	1.8
Total Net Migration (April - March)	19,700	19,100	15,000	10,000	16,000	18,000	12,000
Total Births (April - March)	15,000	15,300	15,500	15,500	15,600	15,800	15,700
Total Deaths (April - March)	4,700	4,500	4,700	4,900	5,100	5,300	5,500
Total Natural Increase (April - March)	10,300	10,800	10,800	10,600	10,500	10,400	10,200
Total Households (as April)	434,500	442,600	454,700	465,400	477,500	489,800	500,600
Total Household Formation (April - March)	12,200	8,100	12,100	10,800	12,000	12,300	10,800
Population by Cohort				BA	SE FORECA	.ST	
* *	2012	2013	2014	2015	2016	2017	2018
0-4	76,700	76,200	76,400	76,600	77,500	78,800	79,800
5-9	66,800	71,000	74,400	77,100	79,500	81,100	81,400
10-14	62,400	64,800	66,200	67,700	70,000	73,000	76,100
15-19	65,200	67,000	67,600	67,600	68,200	69,000	69,700
20-24	73,100	75,600	74,700	73,300	73,100	73,900	73,500
25-29	93,500	93,700	92,000	90,000	88,600	87,200	85,800
30-34	96,400	98,100	102,000	103,800	105,500	106,700	105,400
35-39	91,200	91,900	94,700	97,100	100,500	104,100	107,600
40-44	89,100	90,000	92,000	93,500	95,200	97,400	99,100
45-49	87,000	85,800	86,200	86,800	89,700	93,100	96,100
50-54	84,900	86,700	88,200	89,200	89,000	89,200	88,800
55-59	71,600	75,300	78,600	81,100	83,400	85,000	86,600
60-64	52,500	55,400	58,400	62,000	65,900	70,000	73,500
65-69	35,700	40,100	43,000	46,000	49,100	51,100	52,800
70-74	24,900	26,900	28,400	29,800	31,100	33,700	37,100
75-79	19,900	20,600	20,900	21,400	22,100	22,700	23,800
80-84	15,600	15,900	16,200	16,600	16,800	17,000	17,300
85-89	8,500	9,300	10,100	10,800	11,500	12,000	12,500
90+	5,200	5,300	5,500	5,800	6,100	6,500	6,900
Total	1,120,200	1,149,600	1,175,400	1,196,200	1,222,800	1,251,300	1,273,800
12-17	76,500	78,700	79,400	79,900	81,800	83,900	86,000

Numbers may not add up due to rounding

Base forecast 2019-2024 on page 22 →

# Table 3 - City of Calgary Population Projection (continued)

FORECAST COMPLETED: July 2013			BASE FO	RECAST		
	2019	2020	2021	2022	2023	2024
Total Population (as April)	1,293,900	1,313,700	1,333,100	1,352,000	1,370,500	1,388,700
Total Population Growth Rate (April - March)	1.6	1.5	1.5	1.4	1.4	1.3
Total Net Migration (April - March)	10,000	10,000	10,000	10,000	10,000	10,000
Total Births (April - March)	15,600	15,400	15,200	15,000	14,900	14,700
Total Deaths (April - March)	5,800	6,000	6,300	6,500	6,800	7,000
Total Natural Increase (April - March)	9,800	9,400	8,900	8,500	8,100	7,700
Total Households (as April)	510,600	520,600	530,200	539,600	548,800	557,900
Total Household Formation (April - March)	10,100	9,900	9,600	9,400	9,200	9,100
Population by Cohort		- 	BASE FO	RECAST		
	2019	2020	2021	2022	2023	2024
0-4	80,000	79,800	79,500	79,100	78,400	77,500
5-9	81,200	81,400	81,800	82,500	83,300	83,500
10-14	79,200	81,900	83,800	84,900	85,000	84,800
15-19	70,900	72,400	74,200	76,600	79,600	82,700
20-24	73,500	73,400	73,500	73,600	74,200	75,400
25-29	84,100	82,500	81,500	81,200	80,600	80,600
30-34	102,900	100,900	98,400	95,700	93,900	92,300
35-39	110,900	112,800	113,600	113,700	112,000	109,500
40-44	101,300	103,800	106,500	109,200	112,600	115,800
45-49	97,600	99,200	100,300	101,700	103,200	105,400
50-54	89,000	89,800	92,300	95,100	97,900	99,500
55-59	88,000	89,100	88,800	88,700	88,300	88,500
60-64	76,800	79,300	81,500	83,200	84,700	86,100
65-69	55,800	59,300	63,300	67,300	70,700	73,900
70-74	39,900	42,700	45,800	47,800	49,500	52,400
75-79	25,200	26,600	27,900	30,400	33,500	36,100
80-84	17,700	18,100	18,700	19,400	20,400	21,600
85-89	12,700	13,000	13,200	13,400	13,600	13,900
90+	7,400	7,900	8,400	8,800	9,100	9,300
Total	1,293,900	1,313,700	1,333,100	1,352,000	1,370,500	1,388,700
12-17	88,500	91,800	95,600	98,500	101,000	102,600

Numbers may not add up due to rounding



## Table 4 - Calgary Economic Region (CER) Population Projection

Calgary Economic Region (CER)							
FORECAST COMPLETED: July 2013				BA	SE FORECA	ST	
	2012	2013	2014	2015	2016	2017	2018
Total Population (as April)	1,398,400	1,435,000	1,467,300	1,493,300	1,526,500	1,562,200	1,590,200
Total Population Growth Rate (April - March)	2.6	2.6	2.3	1.8	2.2	2.3	1.8
Total Net Migration (April - March)	23,100	18,800	12,500	20,000	22,500	15,000	12,500
Total Births (April - March)	19,000	19,100	19,300	19,400	19,500	19,700	19,600
Total Deaths (April - March)	5,500	5,600	5,800	6,100	6,300	6,600	6,900
Total Natural Increase (April - March)	13,500	13,500	13,500	13,300	13,200	13,000	12,700
Total Households (as April)	542,000	554,600	567,400	580,100	592,400	604,100	615,100
Total Household Formation (April - March)	14,200	12,600	12,800	12,700	12,300	11,700	11,000
Population by Cohort				BA	SE FORECA	ST	
	2012	2013	2014	2015	2016	2017	2018
0-4	95,000	95,100	95,400	95,600	96,700	98,400	99,600
5-9	85,100	88,600	92,900	96,300	99,200	101,300	101,600
10-14	80,100	80,800	82,700	84,500	87,400	91,100	95,000
15-19	84,200	83,700	84,400	84,400	85,200	86,100	87,100
20-24	92,500	94,400	93,300	91,500	91,300	92,300	91,700
25-29	112,000	117,000	114,800	112,300	110,600	108,800	107,100
30-34	115,700	122,400	127,300	129,600	131,700	133,300	131,600
35-39	111,100	114,700	118,200	121,300	125,500	129,900	134,400
40-44	110,000	112,400	114,800	116,700	118,800	121,600	123,700
45-49	108,500	107,100	107,600	108,300	112,000	116,200	119,900
50-54	107,300	108,200	110,100	111,400	111,200	111,300	110,900
55-59	90,900	94,000	98,100	101,300	104,100	106,100	108,000
60-64	67,000	69,200	72,900	77,400	82,300	87,400	91,800
65-69	46,400	50,100	53,600	57,400	61,300	63,700	66,000
70-74	31,900	33,600	35,400	37,200	38,900	42,100	46,300
75-79	24,900	25,700	26,100	26,700	27,500	28,300	29,800
80-84	19,200	19,900	20,200	20,700	20,900	21,200	21,600
85-89	10,400	11,600	12,600	13,500	14,400	15,000	15,600
90+	6,400	6,600	6,800	7,200	7,600	8,200	8,600
Total	1,398,600	1,435,100	1,467,200	1,493,300	1,526,600	1,562,300	1,590,300

Numbers may not add up due to rounding

Base forecast 2019-2024 on page 24 →

## Table 4 - Calgary Economic Region (CER) Population Projection (continued)

FORECAST COMPLETED: July 2013			BASE FO	RECAST		
	2019	2020	2021	2022	2023	2024
Total Population (as April)	1,615,400	1,640,100	1,664,300	1,688,000	1,711,100	1,733,800
Total Population Growth Rate (April - March)	1.6	1.5	1.5	1.4	1.4	1.3
Total Net Migration (April - March)	12,500	12,500	12,500	12,500	12,500	12,500
Total Births (April - March)	19,400	19,200	19,000	18,800	18,600	18,400
Total Deaths (April - March)	7,200	7,500	7,800	8,100	8,400	8,700
Total Natural Increase (April - March)	12,200	11,700	11,200	10,700	10,100	9,700
Total Households (as April)	625,800	636,200	646,400	656,200	665,600	674,900
Total Household Formation (April - March)	10,700	10,400	10,200	9,800	9,400	9,300
Population by Cohort			BASE FO	RECAST		
	2019	2020	2021	2022	2023	2024
0-4	99,800	99,600	99,300	98,700	97,800	96,800
5-9	101,400	101,600	102,100	103,000	104,000	104,200
10-14	98,900	102,200	104,600	106,000	106,100	105,900
15-19	88,500	90,300	92,700	95,700	99,400	103,200
20-24	91,800	91,600	91,700	91,900	92,700	94,100
25-29	105,000	103,000	101,700	101,400	100,600	100,600
30-34	128,400	125,900	122,900	119,500	117,300	115,200
35-39	138,400	140,900	141,900	141,900	139,800	136,700
40-44	126,500	129,600	133,000	136,400	140,500	144,500
45-49	121,900	123,900	125,200	126,900	128,800	131,600
50-54	111,100	112,100	115,300	118,700	122,200	124,200
55-59	109,800	111,200	110,900	110,800	110,300	110,500
60-64	95,900	99,000	101,800	103,800	105,700	107,400
65-69	69,700	74,100	79,000	84,000	88,300	92,200
70-74	49,800	53,300	57,100	59,600	61,800	65,400
75-79	31,500	33,200	34,800	37,900	41,900	45,100
80-84	22,000	22,500	23,300	24,200	25,500	27,000
85-89	15,800	16,200	16,400	16,700	17,000	17,400
90+	9,300	9,800	10,500	10,900	11,400	11,700
Total	1,615,500	1,640,000	1,664,200	1,688,000	1,711,100	1,733,700

Numbers may not add up due to rounding

**Forecast Tables** 



## **Table 5 - Selected Commodity Prices**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
CONSTRUCTION COMMOD	ITIES									
Iron and steel products	20.1	2.4	-2.5	-2.3	15.7	-3.0	-0.9	1.9	-1.3	-1.3
Aluminum products	2.9	-1.3	15.7	-5.5	-0.4	-19.8	10.3	4.3	-9.5	0.1
Wood	1.0	-9.6	3.7	8.7	-3.5	11.0	-1.6	2.0	2.1	1.4
Asphalt**	-9.0	4.9	51.1	9.1	61.8	-25.4	13.1	-0.7	13.6	-5.4

#### OPERATIONAL COMMODITIES

Rubber	22.0	3.9	29.9	2.0	13.0	-9.2	69.2	32.8	-27.5	-13.5
Diesel oil	8.5	29.3	1.9	8.1	26.4	-31.1	10.5	23.6	-1.0	4.2
Vehicle parts	3.5	3.2	3.5	7.9	4.6	5.3	1.7	1.8	2.6	0.1

	BASE FORECAST										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
CONSTRUCTION COMMODITIES											
Iron and steel products	1.6	-2.7	2.7	-3.5	2.8	-1.6	8.7	2.9	-1.9	-1.9	4.0
Aluminum products	3.7	-2.8	-0.6	-4.6	1.2	-2.7	9.1	-7.3	-2.0	-3.3	1.4
Wood	-0.3	-2.9	-4.4	-4.6	-3.9	-1.7	-0.4	-0.2	0.2	-0.4	-0.4
Asphalt**	4.1	-6.6	-4.4	-4.8	-4.2	-1.7	-0.7	0.2	-0.1	-0.6	0.2

#### **OPERATIONAL COMMODITIES**

Rubber	17.0	-1.4	1.1	0.4	0.8	1.0	1.0	1.0	1.0	1.0	1.0
Diesel oil	-0.8	-1.5	2.0	2.3	1.8	1.1	1.1	1.1	1.0	1.0	1.0
Vehicle parts	1.8	1.2	1.2	2.1	2.4	3.3	3.2	4.7	4.1	3.2	4.2

Numbers may not add up due to rounding

\*\* Based on Ontario Ministry of Transportation Asphalt Price Index

### WHO WE ARE

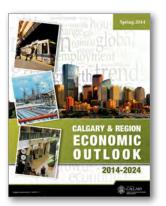
Corporate Economics provides services in four areas: forecasting, information provision, policy analysis and consulting. We also monitor the current economic trends which allows us to develop unique insights on how external events are impacting the local economy and the Municipal government. We are experienced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

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#### Corporate Research Analyst: Estella Scruggs

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Sources:

Statistics Canada, CMHC, CREB, MLS, Bank of Canada, Conference Board of Canada, GLJ Energy Publications, The City of Calgary, Centre for Spatial Economics, IHS Global Insight, U.S. Federal Bank Reserve of St. Louis, International Money Fund (World Economy Outlook), World Bank, Central Plan Bureau Netherlands, and others.

