Fall 2023

Calgary and Region Economic Outlook

2023-2028

Executive Summary

The primary takeaway is that Calgary should expect resilient economic growth in 2023, supported by strong energy sector cashflows, solid consumer spending and residential investment driven by population growth. The higher interest rate environment should affect the conviction to deploy capital and investment levels.

Executive Summary

1. Robust crude oil production and exports in the province have provided solid support to Calgary's local and regional economic growth

Total oil production in Alberta has been growing steadily for many years, increasing 104 per cent from 2007 to 2019. Production declined by 5.1 per cent in 2020, largely due to the COVID-19 pandemic. In 2021, production started increasing again, surpassing its pre-COVID level with an annual growth rate of 8.0 per cent. The growth trend continued into 2022, as the war in Ukraine led to a surge in world oil prices and demand for non-Russian oil. Alberta crude oil production increased 11 per cent in 2022. Strong Alberta crude oil production has supported sturdy export growth. In the first half of 2023, Alberta's crude oil represented 83 per cent of Canadian production and 89 per cent of Canadian total crude exports.

From 2023 through 2028, Alberta crude oil exports should continue to grow, while at a decelerated pace compared to the rapid growth in the past two years. The slowing growth is expected under all three scenarios developed by the Canada Energy Regulator in 2023, including the *'Global Net-Zero'* scenario and *'Canada Net-zero'* scenario, which both assume Canada achieves net-zero emission by 2050, and the *'Current Measures'* scenario, which also assumes active nationwide actions to reduce GHG emissions. Specifically, achieving the net-zero scenarios requires Canada's oil and gas industry to significantly reduce its emissions and restructure its end-use energy sources.

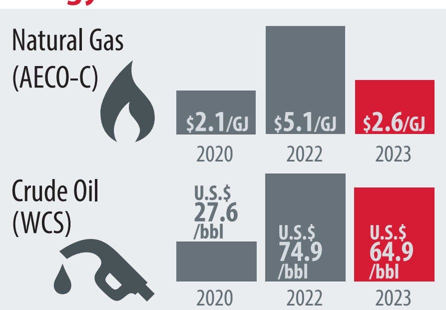
The average prices of Canadian crude oil exports were volatile over the past few years, which impacted the export values and the cashflows into the energy industry. After averaging around U.S.$58 per barrel (bbl) from 2017 to 2019, the annual average price for West Texas Intermediate (WTI) crude oil fell to U.S.$39/bbl in 2020. This price decrease was largely caused by reduced global demand during the COVID-19 pandemic. Crude oil prices began to increase again in 2021 as business activities rebounded when many countries eased pandemic restrictions. Price increases accelerated in early 2022 when the war in Ukraine started, with the WTI average at U.S.$95/bbl. For the forecast horizon, the average annual price should remain strong, above 2017-2020 prices, while softened from the 2022 high. Alberta's export capacity depends on pipelines and crude-by-rail. With Trans Mountain pipeline expansion completion delayed to the second quarter of 2024, the price differential between the Western Canadian Select (WCS) and WTI should continue to exist in the near term before improving with increased transportation capacity.

Natural gas prices in North America increased significantly in 2022 after the war in Ukraine started. Alberta producers responded with higher drilling and production, reaching 11.0 billion cubic feet per day (Bcf/d). This increase represents a 12 per cent annual growth from the 9.8 Bcf/d in 2021. Natural gas prices have moderated since the beginning of 2023 due to three factors. Firstly, the relatively milder winter in 2023 resulted in lower natural gas demand in Canada and the U.S. Secondly, natural gas production growth in the U.S. has been robust, leading to reduced demand for Canadian exports. And thirdly, the inventories in both countries are at above-average levels, weighing on both the North American benchmark price Henry Hub and the Alberta benchmark Alberta Energy Company trading prices (AECO-C).

Power generation has become a significant support to Alberta natural gas demand. The improved pipeline transportation capacity should also provide a lift to the AECO-C prices with the North Corridor expansion to the primary Nova Gas Transmission Limited (NGTL) system which was completed and came into service in Q2 2023. The AECO-C prices should average $2.6/GJ in 2023 before gradually increasing to $4.1/GJ by 2028 as supply expands. The price discount between AECO-C and Henry Hub should ease as transportation capacity continues to improve.

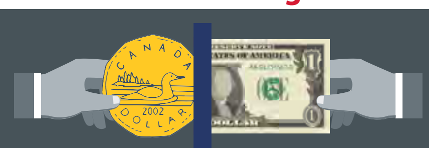
The exchange rate should average U.S.$0.76 per CAD$ between 2023 and 2028. Exchange rate stability relative to the 2019 to 2022 average should support trade, as trading partners benefit from increased price certainty. For the oil and gas industry, growth in crude oil exports to U.S. markets alongside a stable dollar would translate into steady cashflows for businesses in and around the oil and gas industry and support a strong economy.

Energy Prices



The WCS **oil price** and the AECO-C **natural gas price** would soften from the 2022 spike but remain strong enough to attract capital investment and support economic growth.

Canada/U.S. Exchange Rate



U.S.$ for 1 C$

2024-2028 Average	**0.76**	2022	**0.77**
2023	**0.75**	2021	**0.80**

A relatively **stable and subdued** Canadian dollar relative to the U.S. dollar should help avoid higher price volatility for imported consumer goods and support Canadian exports.

GDP Growth Comparison

In 2023, the **real GDP growth rate** for the regional economy would remain robust and exceed the provincial, Canadian, U.S. and global economic performance.

Calgary CER	**3.1%**
Alberta	2.9%
Canada	1.4%
U.S.	1.9%
World	3.0%

2. Non-residential and business fixed investment levels should decline in 2023 after the 2022 surge as businesses continue to exercise caution in the face of uncertainty and elevated financing costs, while housing investment remains resilient driven by strong apartment construction

After the surge in 2022, total investment in the Calgary Economic Region is forecast to decline in 2023, before gradually recovering between 2024 and 2028. Similarly, investment in Alberta's economy should also decrease in 2023, though at a relatively milder pace.

The elevated financing costs and tight credit conditions have been weighing on investment intentions. The Bank of Canada has taken a series of monetary policy measures to combat persistent inflationary pressures, including raising interest rates and quantitative tightening. The annual average prime lending rate increased from 2.4 per cent in 2021 to 4.2 per cent in 2022 and is expected to increase further to 7.0 per cent in 2023. This is a record high in the past two decades. High borrowing and construction costs are the key factors holding back investment in both Calgary and Alberta.

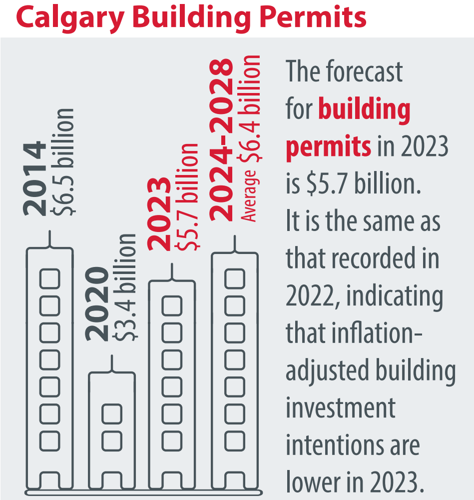
Two industries are expected to contribute the most to the aggregate business fixed investment decline in Calgary this year: transportation and warehousing, and utilities, both with a double-digit pace of decrease in capital investments. The slowdown in the transportation and warehousing sector is mainly caused by the rising cost of transportation equipment and slowing demand growth in both Canada and the U.S. The utilities industry in Calgary is expected to see reduced investment and employment in 2023 with elevated business costs, before a rebound in 2024 and the rest of the forecast period. In comparison, there are industries that have shown resilience in investment growth this year, including the manufacturing and professional, scientific, and technical services (PSTS) industries. After the drawback during the COVID-19 pandemic restrictions, the manufacturing sector is expected to see strong business fixed investment in 2023, contributing to the certainty and stability of local supply chains and enhancing capacity and access to other markets. Calgary's PSTS industry should also expect solid growth in 2023, driven by the increasing demand from the energy sector and the momentum in tech sector growth. Going forward, businesses should continue to exercise caution in the face of uncertainty, high financing costs, and increasing construction and utilities cost pressures.

Despite the overall weakness in residential investment in Alberta, housing investment in Calgary has been relatively strong (contrary to the Spring 2023 Economic Outlook expectations – a notable update) in 2023. After reaching a record high of 14,800 units in 2022, total housing starts in Calgary maintained its robustness in the first three quarters of 2023, driven by higher building construction investment intentions on apartments. There has been a shift in housing preferences towards apartments as the higher interest rate environment continues to challenge homeownership and affordability. Investment in purpose-built rental apartment construction increased solidly in Calgary, to respond to the surging population growth from international and interprovincial net migration. In comparison, non-residential building investment intention is expected to decline in 2023, due to rising interest rates and labour shortages in the construction sector.

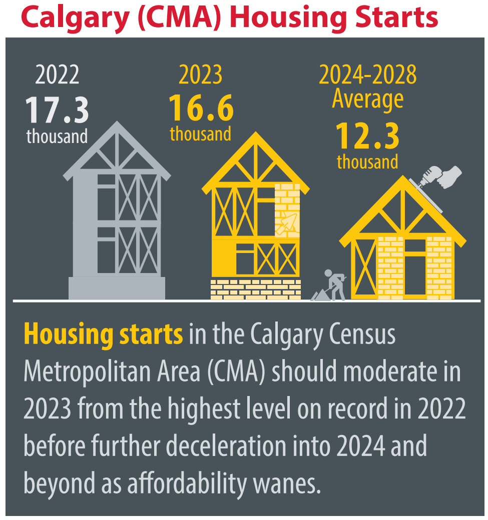
With increased residential building investment intentions and a slowdown in housing demand, the pace of house price appreciation is expected to moderate in 2023. Calgary buyers are looking towards apartments as a significant option in housing needs as buyers shift away from purchasing single-family homes and other relatively more expensive housing types.

In 2023, the total value of building investment intentions in Calgary is expected to be $5.7 billion. Though the nominal value remains unchanged from the $5.7 billion observed in 2022, the real value should decrease more given the elevated construction inflation. Almost three of every four investment dollars in new buildings is expected to be directed at residential property construction in 2023. Building construction investment intentions should gradually increase between 2024 and 2028, averaging $6.4 billion annually, as solid population growth and slightly lower borrowing costs emerge over the forecast horizon.

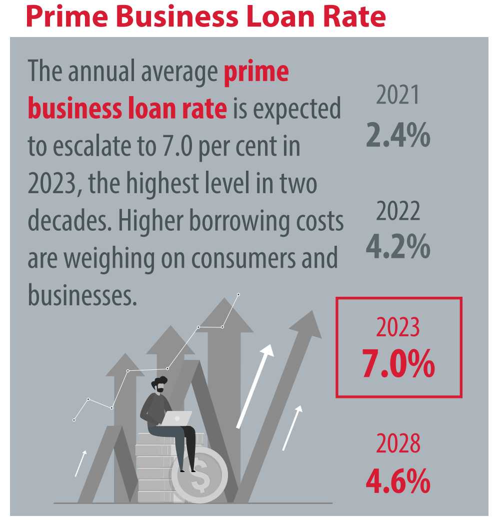
Calgary Building Permits



Calgary (CMA) Housing Starts



Prime Business Loan Rate



3. Strong population growth and labour market performance should increase economy-wide earnings and boost consumer spending, though elevated inflation and interest rates should weigh on consumption

The population growth in Alberta has been exceptionally strong in 2023, with the fastest population growth in the country. International net migration has remained robust, bolstered by net inflows of both permanent residents and non-permanent residents, including newcomers from Ukraine, temporary foreign workers, and international students. The interprovincial net migration to Alberta has also been higher than earlier expected. Between 2022 July 1 and 2023 June 30, more than 46,000 people moved into the province from the rest of Canada. The relatively lower cost of living and better housing affordability in Alberta compared to other major Canadian cities, as well as the strong economic performance, have contributed to the interprovincial population growth. Higher net migration levels should further boost Alberta's economic activity, support consumption and residential investment in the provincial and CER economies and help mitigate the labour market tightness.

The City's estimate for the local population as of 2023 April 1 is 1,389,200, representing an annual population growth rate of 3.0 per cent over 2022. The population estimates for the city represent the population as of April 1 of a given year, consistent with the former City of Calgary civic census. With higher-than-expected population growth from net international and interprovincial migration in Alberta, it is possible that the population estimate for Calgary in 2023 was at the lower bound of the forecast. However, with the discontinuation of Calgary's civic census in 2019, it is premature to estimate to what level the higher provincial population growth should cascade to Calgary's annual population estimate. The Corporate Economics team will continue to monitor the changes and reflect the updated forecast in the Spring 2024 Economic Outlook as more statistics become available for the annual population estimate.

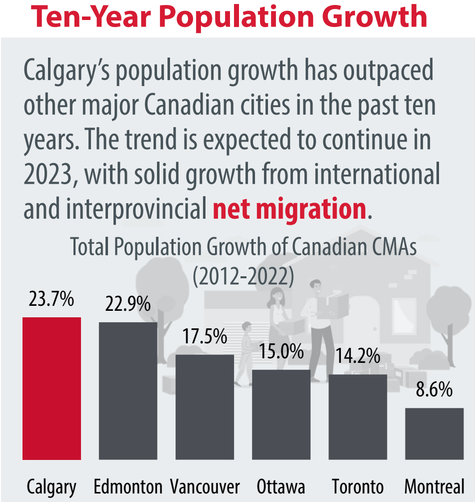
It should be noted that the population surge is unlikely to be sustainable. The net migration from international and interprovincial sources is expected to decelerate in 2024 and the rest of the forecast period. With the Canada-Ukraine Authorization for Emergency Travel program coming to an end, the number of new non-permanent residents is expected to decline next year. The net migration from foreign students should also subside in 2024, with educational services in the province reaching capacity. Net migration is expected to stabilize at a level slightly higher than its historical average between 2024 and 2028.

Job creation is expected to moderate to 2.8 per cent in 2023 after a blistering 7.3 per cent in 2022. That represents an addition of 26,100 net new jobs in the CER in 2023. The slowdown in job creation is partly the result of a shift from mitigating the labour force shortage to matching the right skills between job seekers and employers. In line with investment growth, the two industries that should experience the fastest pace of job growth are manufacturing and the professional, scientific, and technical services industries. Business, building and other support services should also expect higher employment in 2023. Job losses are expected for sectors with a decline in investment intentions, including utilities, retail trade and educational services. Between 2024 and 2028, the average annual rate of job growth should decelerate to 2.3 per cent.

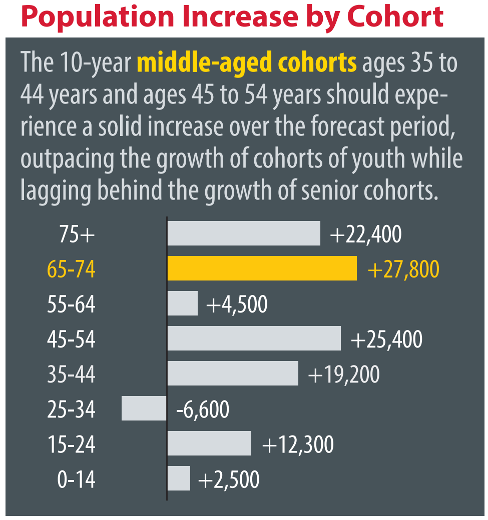
The overall employment growth alongside real wage increase should boost economy-wide earnings and consumer spending in 2023. The significant population growth should also provide a solid base for the labour market and consumer spending. Personal consumption spending is the main contributor to local GDP growth, representing about three out of every five dollars of economic activity in Calgary. However, the elevated inflation and rising interest rates have been a drag on household spending, especially on large ticket items. Rising debt servicing costs and the worsening indebtedness of Calgarians should dampen real consumer spending in 2024.

The average annual unemployment rate should stay above 6.0 per cent until 2024 before trending downwards from 2025. That's because job growth in the next two years would only slightly exceed labour force growth. As a result, the CER unemployment rate should exceed the Alberta and Canadian average without new policy developments that encourage faster job growth.

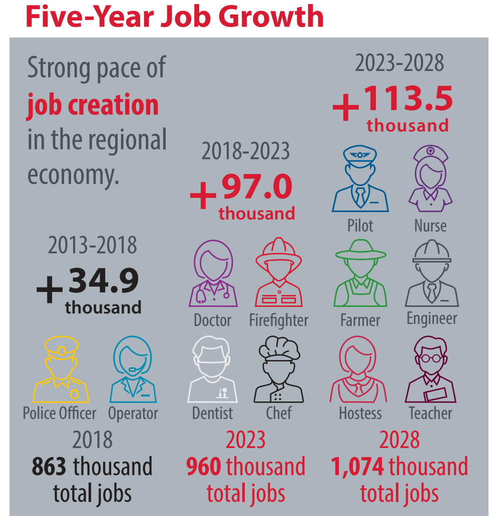
Ten-Year Population Growth



Population Increase by Cohort



Five-Year Job Growth



4. Inflation should continue to decelerate, but there are signs of persistency in inflationary pressures and weakening of the downward momentum

Consumer prices in Calgary are growing at a much lower pace in 2023, with the base year effects easing as the large price increases from 2022 drop from the year-over-year calculation. After a 7.2 per cent increase in 2022, the annual average inflation growth in Calgary is expected to moderate to 3.9 per cent in 2023.

Multiple factors have contributed to the deceleration of inflation growth. The supply chain constraints that originated during the pandemic and deteriorated after the Russian-Ukraine war have improved significantly since the beginning of 2023. Compared to last year, energy prices are lower, and input costs have moderated. The impact of the Bank of Canada's tightening monetary policy actions over the past year will continue to work its way through the economy and put downward pressure on inflation.

Though inflation continues to come down, there are signs of persistency in inflationary pressures and weakening of the downward momentum. Firstly, demand continues to outpace supply as consumption spending has been strong in Calgary. Strong inflows of newcomers to Calgary support the growth in demand for goods and services, and the pent-up demand for services continues to recover from the impact of the COVID-19 pandemic. Secondly, housing prices have been more robust than earlier expected, with a tight housing supply caused by low inventory and subdued new listings, and a relatively strong housing demand. Thirdly, core inflation excluding food and energy has also been stubborn, especially in service sectors, due to the tight labour market despite signs of easing, robust consumer demand, and elevated inflation expectations. While goods price inflation is expected to ease further, service price inflation should moderate at a more gradual pace.

For Calgary consumers, slower increases in the cost of living in 2023 provide some relief from the sharp increase in 2022. The sources of 2023 consumer price inflation in order of the magnitude of their expected contribution to inflation are:

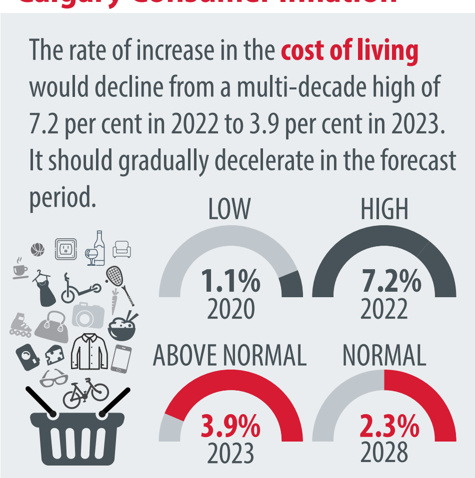
- Positive shelter inflation (26 per cent of the consumer basket): shelter prices accelerate as electricity prices in Alberta surged, driving up household energy costs. The sharp increase in electricity prices is attributable to a surge in the regulator-approved 'Regulated Rate Option' for electricity prices, which hit a record this summer (four to six times higher than what was observed from 2018 to 2020).
- Positive food inflation (16 per cent of the consumer basket): although the price growth for groceries has slowed in 2023 on a year-over-year basis, food price levels remain elevated. The food production and supply chain has been impacted by geopolitical turmoil, extreme weather events, and labour shortages. The deceleration of food price growth will be a gradual process.
- Negative transportation inflation (18 per cent of the consumer basket): overall gasoline and diesel prices should decline in 2023 compared to last year because of lower global oil prices resulting from supply outpacing demand.
- A relatively stable Canadian dollar relative to the U.S. dollar should help avoid higher prices for imported consumer goods and services because of the exchange rate.

Businesses should expect significant upward pressures on labour costs given the tightness of the labour market within particular industries. Alberta wage inflation is expected to stay high at 2.5 per cent in 2023, before moderating slightly to 2.4 per cent in 2024. The municipal government is not immune to a competitive labour market, which would lead to additional operating cost pressures, putting upward pressure on taxes.

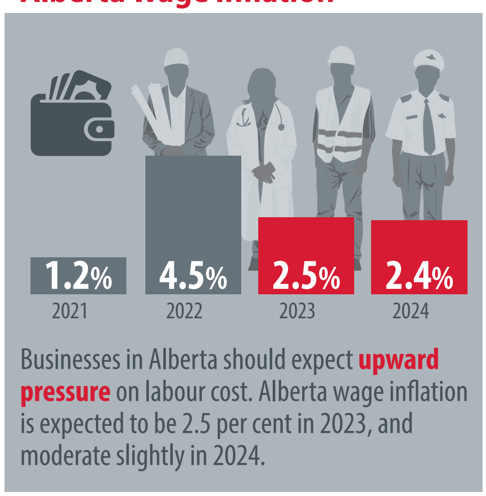
Average housing prices are expected to increase moderately by 1.9 per cent in 2023, driven by strong demand for shelter from population growth and increasing residential building costs. This is an upward adjustment compared to the 2023 Spring Economic Outlook.

The sustained increase in prices for non-residential building construction should increase 6.1 per cent in 2023, reflecting the increase in wages, rising financing costs, and sustained high prices for some underlying construction commodities like concrete, wood, and structural metal above pre-COVID-19 levels. Non-residential building construction inflation measures the cost of private sector capital investment and government investment. It is expected to decelerate in 2024 and through the forecast period.

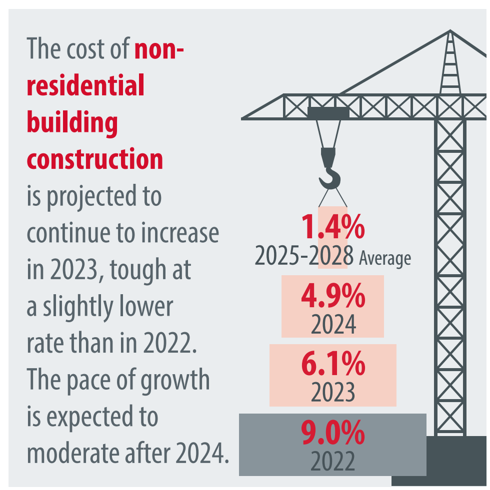
Calgary Consumer Inflation



Alberta Wage Inflation



Non-residential Price Inflation



Executive Summary

Forecast Implications

Averages: Previous vis-à-vis Current City of Calgary Service Plans and Budget Cycle

Economic Indicator	Estimate Previous Service Plans and Budget Cycle [2019 to 2022] Annual Average	Forecast Current Service Plans and Budget Cycle [2023 to 2026] Annual Average	Forecast Implications
Assumptions			
World			
Real Gross Domestic Product Growth (%)	2.3	3.1	The average growth of the world GDP is expected to be higher for the current service plans and budget cycle than the previous one. Despite monetary tightening policies and geopolitical shocks, global economic growth is supported by robust household and corporate balance sheets. The resilience in the global market should have a positive impact on consumer confidence and spending in Calgary.
The United States			
Real Gross Domestic Product Growth (%)	1.9	1.6	The U.S. economic growth is expected to slow in this cycle with fiscal policy restraint and reduced spending from pandemic-related savings. This should weigh on the demand for Canadian exports. However, Canada's energy exports are expected to outperform non-energy exports.
Canada			
Real Gross Domestic Product Growth (%)	1.4	1.5	Canada's economy should be supported by rapid population growth and strong household spending. The average rate of economic growth in Canada will be higher in this cycle than in the previous one, supporting interprovincial trade.
Prime Business Loan Rate (%)	3.3	5.8	Interest rates will stay elevated in the current cycle. Higher financing costs should weigh on business investment incentives and household debt levels in Canada.
Exchange Rate (U.S.$ for 1C$)	0.77	0.76	The exchange rate between U.S. and Canadian dollars is expected to remain stable in the current cycle. This should support trade as trading partners benefit from improved price certainty.
Alberta			
Real Gross Domestic Product Growth (%)	0.5	2.3	Compared to the previous cycle, Alberta's economic performance is expected to be significantly stronger during 2023-2026. The City benefits from the Province's robust fiscal situation and strong economy.
Total Employment Growth (%)	1.2	2.2	Alberta should expect strong employment growth and tightness in labour market in this cycle. Employers in Calgary will have a more challenging time finding workers and competing against the rest of the province.
Unemployment Rate (%)	8.1	5.6	A lower unemployment rate in the 2023-2026 cycle leads to reduced demand for social assistance programs from The City as the number of unemployed persons declines.
Housing Starts ('000 units)	29.9	33.0	Strong population growth in Alberta supports the housing demand and residential investment in the current service plans and budget cycle. This should contribute to economic growth within the province.
Inflation Rate - CPI (%)	3.1	2.5	With tightening monetary policies and the pullback in input costs, inflation is expected to moderate in the current cycle. This should reduce pressure on City expenditures.
West Texas Intermediate - WTI (U.S.$/bbl)	64.8	79.1	Crude oil prices have been volatile so far in 2023. This prompts The City to continue to explore countercyclical fiscal policy options to help moderate the impact of price volatility and economic fluctuations. Oil prices will remain elevated in this cycle compared to the previous one.
Western Canadian Select - WCS (U.S.$/bbl)	50.1	64.1	Improved transportation capacity and expanded access to markets should help sustain a stable price difference between the WCS and WTI. This should support energy investment in the province and local economy.
Alberta Natural Gas Price - AECO/NIT ($/GJ)	3.1	3.4	Natural gas prices are expected to average higher in this cycle than in the previous one. This will increase operational costs for businesses and the cost of living for households. Although this will yield higher franchise fees for The City, operating expenditures for some City services will increase.
Industrial Product Price Index (%)	6.6	0.3	Prices for industrial products are expected to decrease from their mid-2022 peak in this service plans and budget cycle, resulting in a lower average of price growth in 2023-2026. This should moderate the inflationary pressures for The City.
Raw Materials Price Index (%)	11.3	-2.3	Raw material prices are expected to decline in this cycle from the price spike experienced in the previous two years, which should reduce cost pressures for businesses.
Alberta Average Annual Wage Rate Growth (%)	1.6	2.4	Higher wage growth in the current cycle will raise incomes and improve affordability. However, it will also increase the labour cost, contributing to the inflationary persistence within the province and The City.

Averages: Previous vis-à-vis Current City of Calgary Service Plans and Budget Cycle

Economic Indicator	Estimate Previous Service Plans and Budget Cycle [2019 to 2022] Annual Average	Forecast Current Service Plans and Budget Cycle [2023 to 2026] Annual Average	Forecast Implications
Forecast			
Calgary Economic Region			
Real Gross Domestic Product Growth (%)	1.0	3.1	Calgary Economic Region should expect solid economic growth in the current service plans and budget cycle, supporting the resilience of the property tax base.
Total Employment ('000 people)	882.7	997.6	Strong job growth will expand the consumer base, increasing demand for housing and goods and services in the region.
Total Employment Growth (%)	2.1	2.5	The employment growth rate is expected to remain strong in this cycle, continuing to create solid demand for City services and infrastructure.
Unemployment Rate (%)	8.4	6.1	Lower unemployment rates in this cycle should increase the competition for skilled workers and reduce the demand for social services that support the unemployed. The tightness in the labour market will cause increasing pressures on labour costs for The City.
Calgary Census Metropolitan Area (CMA)			
Housing Starts ('000 units)	13.4	13.6	Housing investments in the Calgary area are expected to be higher in nominal values in the current service plans and budget cycle. Strong population growth from international and interprovincial net migration should support solid housing starts in Calgary CMA.
Inflation Rate - CPI (%)	3.2	2.7	Consumer price inflation is expected moderate in this cycle. This will not undo the price gains of 2021-2023, and prices will stay at a relatively elevated level compared to two years ago. Moderation of the costs of goods and services helps mitigate the risks of cost overruns and budget adjustments.
Non-Residential Building Price Inflation (%)	3.9	3.3	Non-residential construction costs are expected to continue to rise in this cycle, weighing on non-residential building activities, including The City's infrastructure investment.
City of Calgary			
Demography			
Total Population ('000 people)	1,315.7	1,422.9	A larger total population indicates a higher demand for municipal services and infrastructure. It also means that the residential property tax base would increase.
Total Population Growth (%)	1.6	1.9	Calgary's population growth is expected to be higher in this cycle than the previous one, driven by robust net migration in the forecast period. This could generate additional pressure on certain City services.
Net Migration ('000 people)	11.9	19.2	Calgary has seen strong migration and expects the trend to continue in 2023. This should support consumption and demand for housing and mitigate the labour market tightness in Calgary.
Household Formation ('000 units)	7.5	10.4	The higher household formation in the current cycle supports higher demand for residential spaces, therefore indicating a larger residential tax base and increased demand for City infrastructure and services.
Real Estate			
Residential Market			
Housing Starts ('000 units)	11.5	11.5	Stable residential construction activity in the current cycle should support increases in the residential tax base, development and building permit activity, and demand for the continued expansion of City infrastructure.
Calgary Average Residential MLS Sale Price (%)	2.1	3.1	Home affordability in Calgary will remain challenging for new housing market entrants as housing prices continue to grow in the current cycle. This should increase the supply of new housing units and reduce the pressure on property tax growth for existing homeowners.
Benchmark Home Price Growth (%)	5.1	3.4	Benchmark home price growth should also moderate in this cycle compared to the previous one. This is driven by strong demand for shelter from population growth and increasing residential building costs. The elevated shelter costs should weigh on the affordability for Calgarians.
Total Building Permits ($billions)	4.9	6.1	Higher building permit values in the current cycle will lead to a broader property tax base, higher revenues, and demand for services.

Numbers may not add up due to rounding.

Executive Summary

Forecast Risks

Risks arising from activities in the Rest of the World:

Major factors that could alter actual economic performance include downside pressure on the global gross domestic product (GDP), global supply and demand, and temporarily eased risks to the global financial markets.

1

Global Economic Outlook

The forecast risks remain **tilted to the downside** on the global GDP growth, as the forecast for 2023 and 2024 remains subdued by historical standards. On the upside, global supply chains have significantly improved from the COVID-19 pandemic and the Russian-Ukraine war. The services sector has been resilient, supporting global economic activity. On the downside, elevated inflation persists and tighter credit availability weighs on global debt burdens. The Israel-Hamas war should add more uncertainty to the global economic outlook.

2

Global Supply and Demand

Global production has shown weakness with reduced investment in major advanced economies. The driving factors include deepening geoeconomic fragmentation, weakening consumption of goods from nonservices sectors, persistent inflation, and elevated financing costs. China's recovery after the reopening from COVID-19 restrictions has been weaker than expected. International trade should expect further softness and future geopolitical uncertainties could cause additional volatility in commodity prices.

3

Policy Divergence and Financial Market Volatility

The risks of global financial markets have eased due to the swift reactions earlier this year to contain the debt distress of problematic regional banks in the United States and Credit Suisse. The financial stability of the bank sector has, therefore, improved for the global market. However, tight monetary policies across many countries should put downward pressure on financial stability through higher financing costs and increased credit risks. In 2023 and 2024, global financial markets should continue to remain highly sensitive to inflation news.

Risks from market conditions and policy differences across Canada:

Significant factors that could alter actual economic performance include downside pressure on household wealth and business investment, stronger than expected consumption demand, and environmental policy divergence that creates business investment uncertainty.

4

The Speed of Inflation Deceleration to Normal Levels

Inflation in Canada has remained elevated, though it has been decelerating. The interest rate increases have been part of the monetary policy actions to contain inflationary pressures. This has weighed on household spending and business investment. Though trending down, there is uncertainty in the pace of inflation deceleration to its pre-pandemic levels. **Downside risks exist on Canadian economic activity** if inflation remains elevated for longer. Household wealth and business incentives could further dampen, resulting in larger output losses.

5

Canadian Consumption Demand

The population growth in Canada has been strong due to robust inflows of net migration of permanent and non-permanent residents. This has provided **support to Canadian consumption demand** across a broad range of goods and services. Other factors contributing to the excess consumption demand include the tight labour market, higher pent-up demand from Canadians, and a stronger willingness to spend their accumulated wealth.

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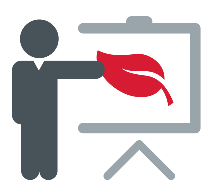

Environmental Policy Coherence vis-à-vis Divergence

Environmental policy divergence exists between municipal, provincial, and federal governments. This will create **uncertainty and ambiguity, therefore, downside risks to business investment**. The heightened tensions should continue to exist between different orders of governments on environmental policy and the pace of policy implementation. The proposed Clean Electricity Regulation is a good example. Uncoordinated incentives from policymakers will drag down the efficiency of green transition and make the future of environmental policy across governments ambiguous.

Risks from potential changes in Alberta provincial economy:

Significant factors that could alter actual economic performance include the uncertainties associated with oil and natural gas prices and exports, migration and its impact on consumption and investment, and labour market balance.

7

Oil and Natural Gas Prices and Exports

Crude oil prices have been volatile so far this year, due to global demand concerns, geopolitical uncertainties, and production cuts in Saudi Arabia. Despite the volatility, the WTI price in 2023 should remain elevated, though softening from the 2022 high. North American natural gas prices have been weaker due to lower demand and above-average inventories. Overall, **the oil and gas sector investment and exports should be robust in the forecast period**, supported by healthy cashflows and improving transportation capacity. The Israel-Hamas war could cause upward pressures and more volatility in energy prices.

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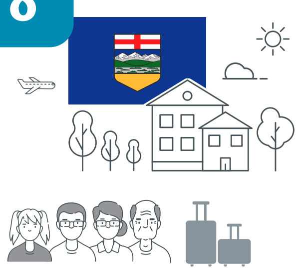

The Level of Net Migration

Alberta's population is increasing at an exceptional pace in 2023, driven by surges in international and interprovincial net migration. The numbers of permanent residents and non-permanent residents are higher, including newcomers from Ukraine, temporary foreign workers and international students. Higher net migration levels beyond those incorporated in the forecast should further boost population growth in Alberta, **support consumption and residential investment in the provincial and CER economies and mitigate the labour market tightness**.

9

Labour Market Balance

Robust population growth from net migration into the province is helping to fill job vacancies and improve employment. However, the net migration spike will not immediately translate into higher labour force participation and employment levels. It will take time to mitigate the discrepancy between skills and jobs. Alberta's tight labour market is expected to see further relief in the forecast period. During the process, the **upward pressure on wages throughout Alberta beyond currently anticipated levels should be gradually mitigated**.

Risks from local and regional private and public sector influences:

The uncertainty associated with a tougher business environment, potential stress on household financial health, weakening momentum on household spending, and wage pressures.

10

Business Environment and Investment

Many Calgary businesses are cautious of the overall business environment and holding back investment. The elevated borrowing costs, tight credit conditions, high construction and labour costs, and the prospect of slowing economic activity are key factors contributing to their current challenges. Though residential investment is strong due to rapid population growth, private (non-residential) investment has declined in 2023. **There are downside risks to Calgary's economic growth if the level of business investment caution persists**.

11

Household Financial Health and Spending

Housing spending in Calgary has been strong, supported by population growth and accumulated household savings. However, its momentum is weakening. Higher interest rates have been working their way through the economy, causing increasing debt-service costs, including mortgages. Households are expected to cut back their discretionary spending as a result. As more households renew their mortgage at higher rates in the near future, **consumption spending growth should moderate over the next year**, especially the demand for goods and services that are interest rate sensitive.

12

Real Disposable Income

Real wage growth in the forecast period is expected to be higher than the tepid growth experienced in 2019-2022. A higher real disposable income should help improve households' purchasing power and affordability. However, higher wages also indicate higher labour costs for both private and public sectors. Wage pressures will weigh on labour contracts and put upward pressure on cost-push inflation. **Avoiding an inflation wage spiral in the local economy will sustain positive economic growth for longer as real disposable income increases**.

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/economy**.

Sources:
Bank of Canada, Calgary Real Estate Board (CREB), Canada Mortgage and Housing Corporation (CMHC), Canadian Real Estate Association (CREA), Conference Board of Canada, Federal Reserve Bank of the U.S., Government of Alberta, Government of Canada, International Monetary Fund (IMF), Organization of the Petroleum Exporting Countries (OPEC), Statistics Canada, Stokes Economics, The City of Calgary, U.S. Energy Information Administration (EIA), World Bank, and others.