

APRIL 2025



ALBERTA

CONSTRUCTION & MAINTENANCE LOOKING FORWARD

HIGHLIGHTS
2025-2034



TABLE OF CONTENTS

SUMMARY	3
HIGHLIGHTS	4
ALBERTA CONSTRUCTION OUTLOOK	5
POPULATION TRENDS CREATE WORKFORCE CHALLENGES	7
SECTOR INSIGHTS	9
RESIDENTIAL SECTOR	10
RESIDENTIAL RANKINGS, RISKS, AND MOBILITY	12
NON-RESIDENTIAL SECTOR	13
OIL SANDS CONSTRUCTION	15
NON-RESIDENTIAL RANKINGS, RISKS, AND MOBILITY	17
BUILDING A SUSTAINABLE LABOUR FORCE	18
THE AVAILABLE LABOUR FORCE	18
LABOUR FORCE RECRUITMENT	19
CONCLUSIONS AND IMPLICATIONS	25
ABOUT THE BUILDFORCE CANADA LABOUR MARKET INFORMATION SYSTEM	26



SUMMARY

Construction activity in Alberta recorded a positive year in 2024, with growth reported in the province’s residential and non-residential construction sectors.

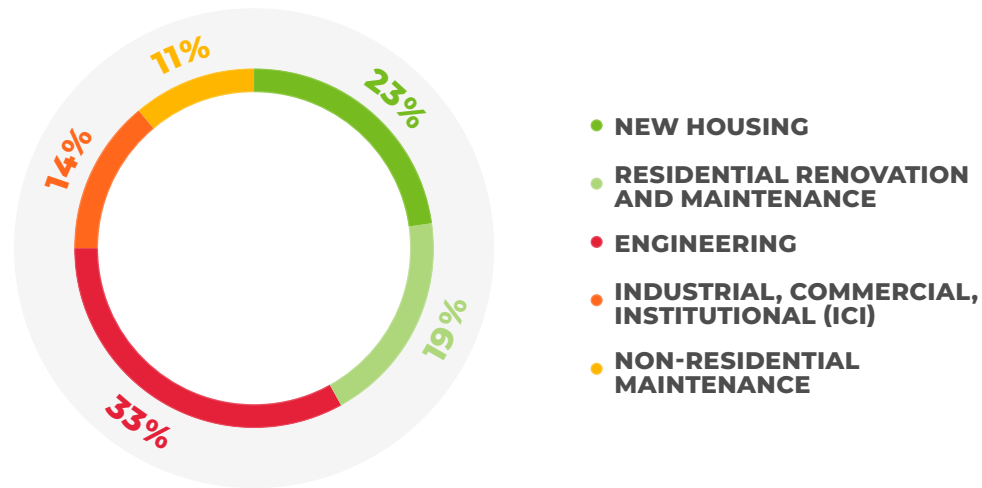
Although activity in residential construction has been constrained by high interest rates and rising construction costs elsewhere in the country, investment levels in Alberta’s residential sector grew across all three segments: new-housing, renovations, and residential maintenance. Meanwhile, activity in the non-residential sector expanded, driven by growth in the construction of industrial, commercial, and institutional (ICI) buildings.

BuildForce Canada’s 2025–2034 outlook for Alberta calls for employment to grow in both sectors across the forecast period. The residential sector benefits from strong short-term growth, driven by expectations of lower interest rates boosting new-housing construction. Later years see this growth slow, replaced by strong demand for residential renovations and maintenance. Residential employment rises to a peak of 8% above 2024 levels by 2026 before retreating to near-2024 levels by 2034.

Non-residential activity, meanwhile, is projected to stabilize through the near term as several major engineering construction projects pass peak activity levels or conclude, which is mostly offset by further increased levels of construction of ICI buildings. In later years, growth is driven by strong gains in the construction of ICI buildings. These factors combine to increase employment 9% above 2024 levels by 2034.

Rising construction demands and projected retirements are expected to create hiring requirements of as many as 59,000 workers in Alberta by 2034. Although the industry is projected to add 43,600 new-entrant workers under the age of 30 over this period, unless this figure increases, the provincial labour force may be short as many as 15,400 workers by 2034.

DISTRIBUTION OF CONSTRUCTION EMPLOYMENT IN 2024, ALBERTA*



10-YEAR WORKFORCE OUTLOOK FOR ALBERTA



* Due to rounding, numbers may not add up to 100%.

HIGHLIGHTS

- Construction employment is projected to grow by more than 11,000 workers over the forecast period. Activity in the non-residential sector drives much of this increase, although residential activity is elevated over the near term.
- Housing starts are expected to reach a forecast peak of 46,400 units in 2025 before moderating to above 40,000 units annually for the remainder of the decade.
- Industrial maintenance (turnaround and shutdowns) adds to labour demands, with spring and fall seasonal requirements.
- The oil sands industry is expected to see growth in new capital investments between 2025 and 2027; sustaining capital investment levels are mostly unchanged to the end of the forecast.
- Growth in the construction of industrial, commercial, and institutional buildings is projected to drive activity in the non-residential sector, with investment increased by more than 37% over the forecast period.

ALBERTA CONSTRUCTION OUTLOOK

NOTE TO READER: *The investment trends and employment projections presented in this report were developed with industry input prior to the emergence of potential trade tensions between Canada and the United States. The forecast therefore does not take into account the possible application of tariffs on Canadian exports to and imports from the United States, nor does it account for any resulting changes in trading patterns between Canada and its other key trading partners.*

Construction investment increased in 2024, with growth reported in both the residential (11%) and non-residential (3%) sectors. The former in particular has been spurred by strong levels of population growth.

Construction industry investment levels are expected to grow in line with the province's positive economic outlook. Investment in the residential sector in particular is projected to increase 11% over the forecast period, with most of this growth expected in 2025, driven initially by strong demand for new housing and, later, residential maintenance and renovation activity. Non-residential investment, meanwhile, is expected to increase by 5% over the forecast period, as strong growth in the construction of industrial, commercial, and institutional (ICI) buildings (37%) offsets a modest contraction of 5% in engineering construction investment levels.

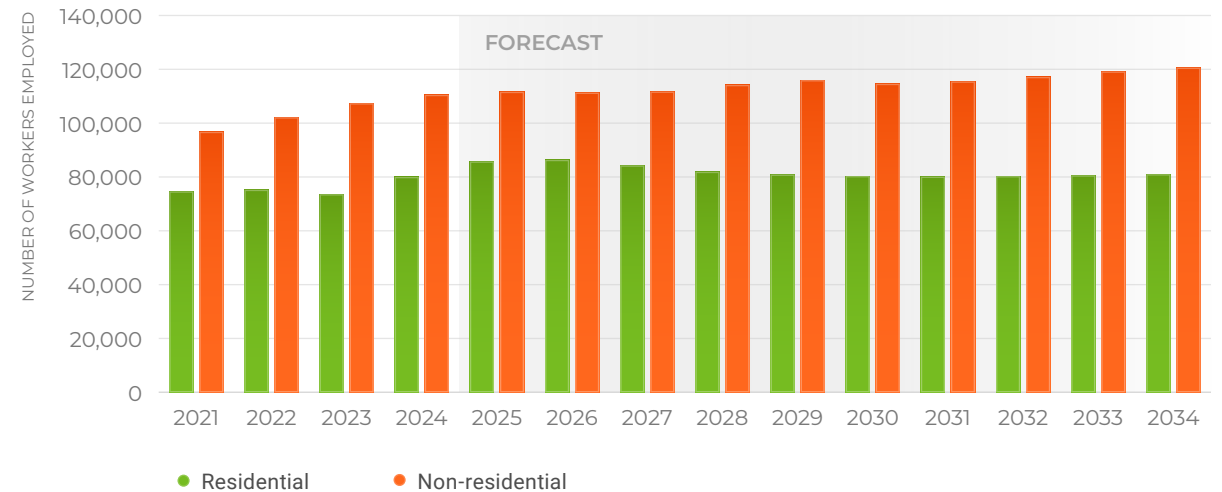


The 2025–2034 *Construction and Maintenance Looking Forward* outlook for Alberta anticipates overall construction employment to increase over the forecast period. Residential employment is projected to rise to a peak of 8% above 2024 levels by 2026, and finish the decade at 1% above 2024 levels. Non-residential employment is projected to increase by 9% across the forecast period, with strong gains in ICI buildings construction (39%).

Figure 1 shows the anticipated change in residential and non-residential employment across the forecast period.

Meeting rising demands and replacing retiring workers will require Alberta’s construction industry to recruit an estimated 59,000 workers over the forecast period, driven largely by the expected retirement of 43,400 workers. While the recruiting of an estimated 43,600 first-time new entrants from the local population is expected to partially offset the impact of these retirements on the labour force, these new workers do not possess the skills and experience of retiring workers, which may compound potential skilled labour shortages locally.

FIGURE 1:
CONSTRUCTION EMPLOYMENT GROWTH OUTLOOK, ALBERTA



SOURCE: Statistics Canada, BuildForce Canada (2025–2034)

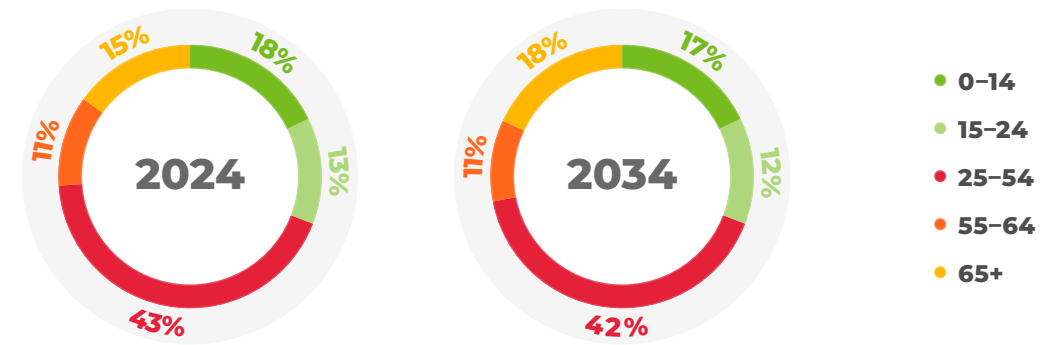
POPULATION TRENDS CREATE WORKFORCE CHALLENGES

Canada is confronting a shift in its population age structure, and although Alberta's population is younger than the national average, the province is also affected by these evolving trends.

As Figure 2 shows, the share of Alberta's population that is aged 65 years or older is projected to rise from 15% in 2024 to 18% by 2034. Meanwhile, the share of people aged 15 to 24 years, and who are about to enter the labour force, is projected to contract slightly – from 13% in 2023 to 12% in 2034.

These population shifts could have significant impacts on the province's economy and construction demands, including housing, commercial, and institutional buildings, as well as infrastructure requirements. Furthermore, the departure of older workers from the labour force can leave experience gaps that cannot easily be replaced in the short term, which may lead to productivity challenges.

FIGURE 2:
POPULATION AGE DISTRIBUTION, ALBERTA*



* Due to rounding, numbers may not add up to 100%.

SOURCE: BuildForce Canada

Alberta's natural rate of population growth* has remained consistently positive, albeit declining, and is expected to remain so through the forecast period.

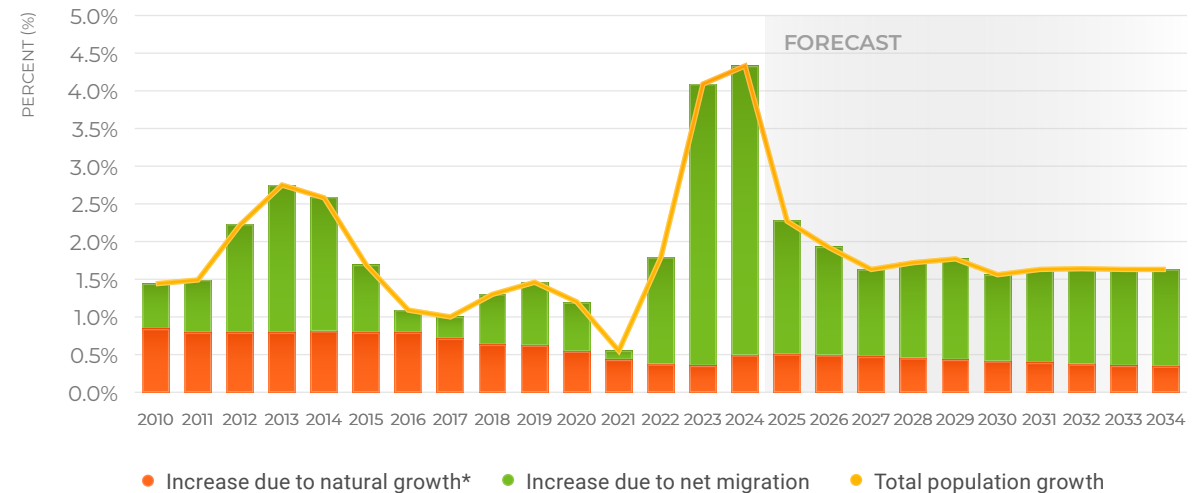
The province saw consecutive years of record population growth in 2023 and 2024 as it welcomed large numbers of migrants both from abroad and from elsewhere in Canada. This trend pushed the province's population growth rate to above 4% in both years. This trend is, however, unlikely to continue.

Amendments to the federal government's immigration levels plan should reduce the annual number of permanent and non-permanent residents admitted to Canada between 2025 and 2027. Despite this fact, population growth in Alberta over this period is expected to remain in line with historical norms, given the relative affordability of the province's housing market and strength of its economy and labour markets, which should continue to contribute to positive net interprovincial migration.

Although coming off peak levels, population growth in Alberta is anticipated to average close to 2% annually across the forecast period.

Figure 3 shows the various factors affecting population growth in Alberta over the forecast period.

FIGURE 3:
SOURCES OF POPULATION GROWTH (%), ALBERTA



* Natural rate of population growth refers to the growth in the population due to the number of births relative to the number of deaths, which leads to a positive or negative natural rate.

SOURCE: Statistics Canada, BuildForce Canada (2025–2034)



SECTOR INSIGHTS

The following sections provide sector-specific insights into the provincial residential and non-residential labour markets.

The BuildForce LMI system tracks supply and accounts for the change in the available labour force, including retirements, new entrants¹, and net mobility². For Alberta, rankings are reported for 25 residential and 32 non-residential trades and occupations.

¹ **New entrants** are measured by applying the traditional proportion of the provincial labour force that enters the construction industry. The projected estimate across the forecast period assumes that the construction industry can recruit this group in competition with other industries.

² **Net mobility** refers to the movement of labour in and out of the local construction industry labour force. In-mobility captures the movement into the labour force of out-of-province industry workers and/or workers from outside the industry. Many members of this group will move quickly out of the provincial labour force as work declines, referred to as out-mobility.

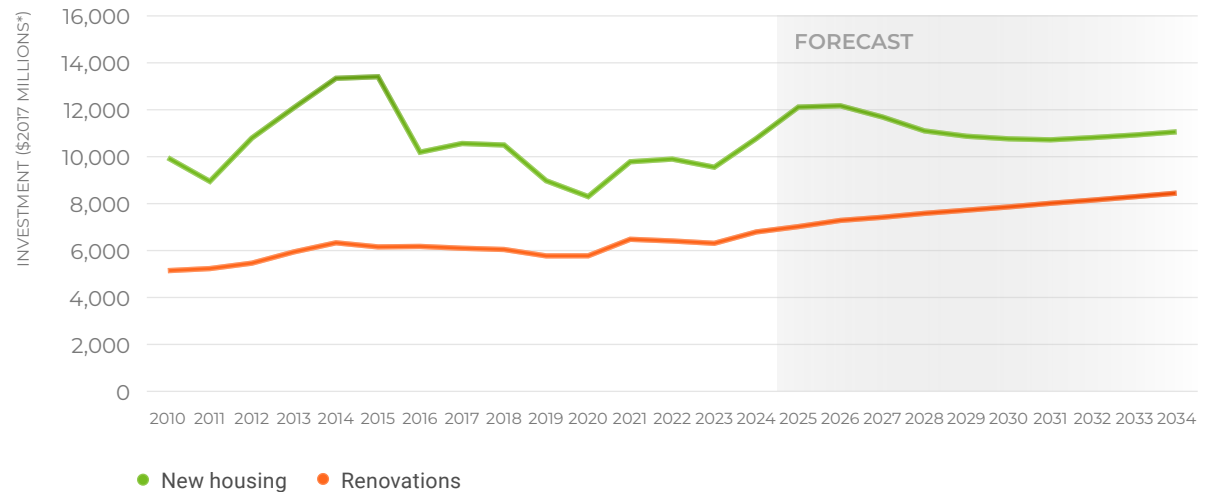
RESIDENTIAL SECTOR

Investment in Alberta's residential construction sector increased in 2024 with renewed growth in new-housing construction and a further increase in activity in the residential renovations sector.

The outlook calls for residential investment levels to rise to a peak in 2026, driven by strong gains in new-housing activity, as demand for new housing is further increased by anticipated lowering interest rates, strong levels of pent-up consumer demand, and the comparatively lower cost of housing compared with other provinces. Thereafter, new-housing investment is projected to moderate as population growth slows. Meanwhile, demand for residential renovations and maintenance activity is projected to rise steadily through the outlook period as buyers purchasing older homes invest in upgrades and repair aging assets. (See Figure 4.)

By the end of the decade, residential investment is projected to rise by 11% compared to 2024 levels, with growth greatest in renovations (24%).

FIGURE 4:
RESIDENTIAL CONSTRUCTION INVESTMENT, ALBERTA



* \$2017 millions indicates that the investment values are in year 2017 dollars (base year), that is, adjusted for inflation. This is used to calculate the real physical year-to-year change of the value of construction, factoring out growth (increase in value) due to increases in prices.

SOURCE: Statistics Canada, BuildForce Canada (2025–2034)

Residential employment is expected to follow a similar trend to investment levels. Employment rises to a peak of 8% above 2024 levels by 2026, driven by growth in new-housing construction and renovations and maintenance. It moderates between 2027 and 2030 as employment related to new-home construction slows, and finishes the scenario at 1% above 2024 levels.

Table 1 summarizes the estimated percent change in residential employment by sector across three periods: the short term (2025–2027), the medium term (2028–2030), and the long term (2031–2034).

Note that this analysis is based on existing trends and market forces and does not take into account aspirational public-sector initiatives to increase the housing supply. Direct government interventions such as tax incentives and subsidies are, however, factored into the forward analysis as they have a more immediate impact on prevailing market forces and consumer behaviour.

**TABLE 1:
CHANGES IN RESIDENTIAL EMPLOYMENT
BY SECTOR, ALBERTA**

SECTOR	% CHANGE 2025–2027	% CHANGE 2028–2030	% CHANGE 2031–2034
Total residential employment	5%	-5%	1%
New housing	5%	-11%	-1%
Renovations	6%	3%	3%
Residential maintenance	4%	3%	3%

SOURCE: Statistics Canada, BuildForce Canada (2025–2034)

RESIDENTIAL RANKINGS, RISKS, AND MOBILITY

Based on currently known demands, industry recruitment, and retirement estimates, the following ranks apply to the 25 covered trades in the province. See Table 2.

MARKET RANKINGS

- 1** | Workers meeting employer qualifications are available in local markets to meet an increase in demand at the current offered rate of compensation and other current working conditions. Excess supply is apparent and there is a risk of losing workers to other markets.
- 2** | Workers meeting employer qualifications are available in local markets to meet an increase in demand at the current offered rate of compensation and other working conditions.
- 3** | The availability of workers meeting employer qualifications in the local market may be limited by large projects, plant shutdowns or other short-term increases in demand. Employers may need to compete to attract needed workers. Establish patterns of recruiting and mobility are sufficient to meet job requirements.
- 4** | Workers meeting qualifications are generally not available in local markets to meet any increase. Employers will need to compete to attract additional workers. Recruiting and mobility may extend beyond traditional sources and practices.
- 5** | Needed workers meeting employer qualifications are not available in local markets to meet current demand so that projects or production may be delayed or deferred. There is excess demand, competition is intense and recruiting reaches to remote markets.

TABLE 2:
RESIDENTIAL MARKET RANKINGS, ALBERTA

TRADES AND OCCUPATIONS – RESIDENTIAL	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Bricklayers	4	4	3	3	3	3	3	3	3	3	3
Carpenters	4	4	3	3	3	3	3	3	3	3	3
Concrete finishers	4	4	3	3	3	3	3	3	3	3	3
Construction estimators	4	4	3	3	3	3	3	3	3	3	3
Construction managers	4	4	3	3	2	3	3	3	3	3	3
Contractors and supervisors	4	4	3	3	3	3	3	3	3	3	3
Electricians	4	4	3	3	3	3	3	3	3	3	3
Elevator constructors and mechanics	4	4	3	3	3	3	3	3	3	3	3
Floor covering installers	4	4	3	3	3	3	3	3	3	3	3
Gas fitters	4	4	3	3	3	3	3	3	3	3	3
Glaziers	4	4	3	3	3	2	3	3	3	3	3
Heavy equipment operators (except crane)	4	4	3	3	3	3	3	3	3	3	3
Heavy-duty equipment mechanics	4	4	3	3	3	3	3	3	3	3	3
Home building and renovation managers	4	4	4	3	3	3	3	3	3	3	3
Insulators	4	4	3	3	3	3	3	3	3	3	3
Painters and decorators (except interior decorators)	4	4	3	3	3	3	3	3	3	3	3
Plasterers, drywall installers and finishers, and lathers	4	4	3	3	3	3	3	3	3	3	3
Plumbers	4	4	3	3	3	3	3	3	3	3	3
Refrigeration and air conditioning mechanics	4	4	3	3	3	3	3	3	3	3	3
Residential and commercial installers and servicers	4	4	3	3	3	3	3	3	3	3	3
Roofers and shinglers	4	3	3	3	3	3	3	3	3	3	3
Sheet metal workers	4	4	3	3	3	3	3	3	3	3	3
Tilesetters	4	4	3	3	3	2	3	3	3	3	3
Trades helpers and labourers	4	4	3	3	2	3	3	3	3	3	3
Truck drivers	4	4	3	3	3	3	3	3	3	3	3

SOURCE: BuildForce Canada

NON-RESIDENTIAL SECTOR

Non-residential construction activity has been elevated in recent years, driven by strong growth in engineering construction since 2020 and in the construction of industrial, commercial, and institutional (ICI) buildings since 2022. Investment grew again in 2024, largely due to strong gains across the ICI buildings sector.

Figure 5 shows the projected outlook for ICI buildings and engineering-construction investment.

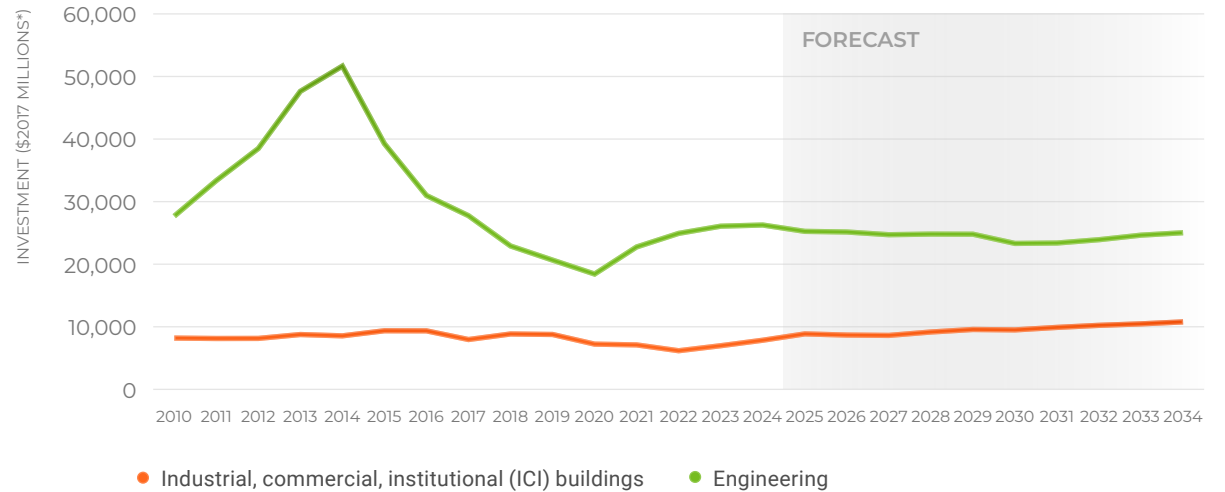
The outlook calls for the two components to chart diverging trends for much of the decade.

Engineering construction investment levels, which have been elevated, recede as some major projects pass peak activity levels or end, including the Strathcona refinery expansion, Air Products Hydrogen Energy Complex, Telus network investments, and several roads, highways, and bridges projects. Investment levels are sustained into 2029 driven by Dow Chemicals Path2Zero, Shell/Atlas carbon capture and the proposed Yellowhead Pipeline projects before dipping again with the winding down of work on light rail projects in Calgary and Edmonton.

Note that a positive final investment decision on Pathways Alliance’s proposed carbon capture and storage megaproject, not included in this scenario, would significantly alter these investment projections.

Meanwhile, investment in ICI buildings construction is projected to increase across the forecast period. In the short term, growth is supported by work on a significant volume of major commercial building projects underway (i.e., the Calgary Arena and the Calgary Arts Commons) and healthcare and education buildings (i.e., investments by Alberta Health Services in Red Deer, Norwood, Camrose, and Calgary). Investment steps down slightly between 2026 and 2027 with the conclusion of several industrial building projects, before growing into the end of the decade in response to the needs of a growing population.

FIGURE 5:
NON-RESIDENTIAL CONSTRUCTION INVESTMENT, ALBERTA



* \$2017 millions indicates that the investment values are in year 2017 dollars (base year), that is, adjusted for inflation. This is used to calculate the real physical year-to-year change of the value of construction, factoring out growth (increase in value) due to increases in prices.

SOURCE: Statistics Canada, BuildForce Canada (2025–2034)

Combined, these factors elevate non-residential construction employment levels to 9% above 2024 levels by 2034, with gains most notable in the construction of ICI buildings (39%).

Table 3 summarizes the estimated percent change in non-residential employment by sector across three periods: the short term (2025–2027), the medium term (2028–2030), and the long term (2031–2034).

**TABLE 3:
CHANGES IN NON-RESIDENTIAL EMPLOYMENT
BY SECTOR, ALBERTA**

SECTOR	% CHANGE 2025–2027	% CHANGE 2028–2030	% CHANGE 2031–2034
Total non-residential employment	1%	3%	5%
Industrial buildings	6%	7%	18%
Commercial and institutional buildings	11%	15%	11%
Heavy industrial	1%	-1%	-5%
Other engineering	-1%	-6%	12%
Roads, highways and bridges	-26%	10%	7%
Non-residential maintenance	2%	1%	2%

SOURCE: Statistics Canada, BuildForce Canada (2025–2034)

OIL SANDS CONSTRUCTION

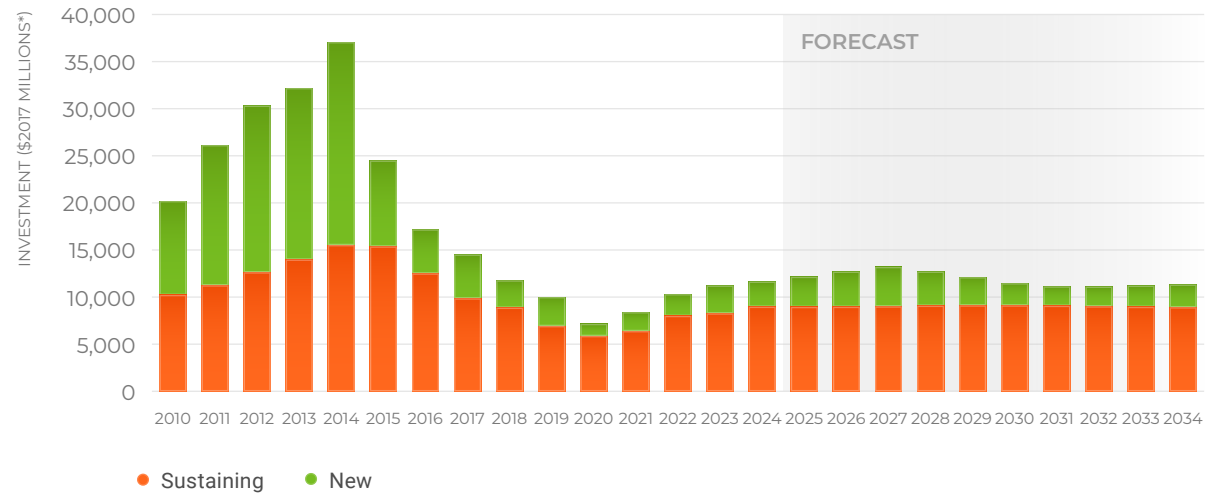
Since the downturn in oil prices in 2015, the oil and gas sector dramatically reduced its capital spending programs through 2020. As a result, the sector placed a greater focus on sustaining capital spending to maintain existing productive capital stock during this period. Since 2020, however, investments in new capital returned to growth driven by improvements to the price of crude oil.

As Figure 6 shows, sustaining capital investment levels are generally expected to rise to 2029, with greater gains reported in later years as levels of new capital investment rise between 2025 and 2027.

New capital investment has recovered in recent years, from the lows of 2020, and is anticipated to make further gains through to 2027 as the production of raw in-situ bitumen in particular is projected to see stronger growth through this period.

As new capital investments recede in later years, sustaining capital investment levels are mostly unchanged to the end of the forecast, accounting for approximately three-quarters of total oil sands capital investment.

FIGURE 6:
ALBERTA OIL SANDS INVESTMENT – CONSTRUCTION, MACHINERY, AND EQUIPMENT (MILLIONS OF 2017 DOLLARS*)



* \$2017 millions indicates that the investment values are in year 2017 dollars (base year), that is, adjusted for inflation. This is used to calculate the real physical year-to-year change of the value of construction, factoring out growth (increase in value) due to increases in prices.

SOURCE: Statistics Canada, BuildForce Canada (2025–2034)

Unique to the oil sands sector is the volatility of shutdown/turnaround maintenance work, which, depending on the number and types of projects scheduled, can generate significant market challenges, driven by distinct seasonal peak demands within a year for periods of weeks or months.

Major shutdown/turnaround maintenance requirements add to industry labour demands, with the largest requirements concentrated during spring and fall peak periods. Demand requires workers with industrial experience and specialized skills within a trade or occupation, including:

- boilermakers
- bricklayers (refractory)
- carpenters (industrial scaffolders)
- crane operators (all terrain)
- insulators
- ironworkers
- millwrights (industrial)
- pipefitters
- supervisors
- welders (alloy)

Meeting seasonal peak demands for industrial maintenance work over the near term may be challenged by large industrial capital projects in Alberta and limited provincial mobility as many provinces are already experiencing high or sustained levels of construction activity, as well as major industrial maintenance work in other regions.



NON-RESIDENTIAL RANKINGS, RISKS, AND MOBILITY

Based on currently known demands, industry recruitment and retirement estimates, the following ranks apply to the 32 covered trades in the province. See Table 4.

TABLE 4:
NON-RESIDENTIAL MARKET RANKINGS, ALBERTA

TRADES AND OCCUPATIONS – NON-RESIDENTIAL	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Boilermakers	3	3	3	3	3	3	3	3	3	3	3
Bricklayers	4	4	3	3	3	3	3	3	3	3	3
Carpenters	4	3	3	3	3	3	2	3	3	3	3
Concrete finishers	3	4	3	3	3	3	2	3	3	3	3
Construction estimators	4	3	3	3	3	3	3	3	3	3	3
Construction managers	4	3	3	3	3	3	3	3	3	3	3
Construction millwrights and industrial mechanics	3	4	3	3	3	3	2	3	3	3	3
Contractors and supervisors	4	4	3	3	3	3	3	3	3	3	3
Crane operators	3	3	4	3	3	3	2	3	3	3	3
Drillers and blasters	3	4	3	3	3	3	3	3	3	3	3
Electrical power line and cable workers	4	3	3	3	3	3	3	3	3	3	3
Electricians	4	3	3	3	3	3	3	3	3	3	3
Elevator constructors and mechanics	4	3	3	3	3	3	3	3	3	3	3
Floor covering installers	4	4	3	3	3	3	3	3	3	3	3
Glaziers	4	4	3	3	3	3	3	3	3	3	3
Heavy equipment operators (except crane)	3	2	3	3	3	3	3	3	3	3	3

TRADES AND OCCUPATIONS – NON-RESIDENTIAL	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Heavy-duty equipment mechanics	3	3	3	3	3	3	3	3	3	3	3
Industrial instrument technicians and mechanics	4	3	3	3	3	3	3	3	3	3	3
Insulators	4	3	3	3	3	3	3	3	3	3	3
Ironworkers and structural metal fabricators	3	4	3	3	3	3	2	3	3	3	3
Painters and decorators (except interior decorators)	4	3	3	3	3	3	3	3	3	3	3
Plasterers, drywall installers and finishers, and lathers	3	3	3	3	3	3	3	3	3	3	3
Plumbers	4	3	3	3	3	3	3	3	3	3	3
Refrigeration and air conditioning mechanics	4	4	3	3	3	3	3	3	3	3	3
Residential and commercial installers and servicers	4	3	3	3	3	3	3	3	3	3	3
Roofers and shinglers	4	3	3	3	3	3	3	3	3	3	3
Sheet metal workers	4	3	3	3	3	3	3	3	3	3	3
Steamfitters, pipefitters and sprinkler system installers	3	4	3	3	3	3	3	3	3	3	3
Tilesetters	4	4	3	3	3	3	3	3	3	3	3
Trades helpers and labourers	3	3	3	3	3	3	3	3	3	3	3
Truck drivers	3	3	3	3	3	3	3	3	3	3	3
Welders and related machine operators	3	3	3	3	3	3	3	3	3	3	3

SOURCE: BuildForce Canada

BUILDING A SUSTAINABLE LABOUR FORCE

THE AVAILABLE LABOUR FORCE

Rising activity in Alberta’s residential and non-residential sectors over the forecast period, coupled with projected retirements of as many as 43,400 workers, should require the province’s construction industry to recruit and retain some 59,000 workers over the forecast period.

Some of these hiring requirements are projected to be closed by the expected recruitment of an additional 43,600 new-entrant workers under the age of 30 during this period. However, unless these levels increase, the provincial labour force may be short as many as 15,400 workers by 2034.

Keeping pace with recruitment and training will require a combination of strategies, including maintaining local recruitment and training efforts, particularly from groups traditionally under-represented in the construction labour force, the hiring of workers from other industries with the required skills sets, and the recruitment of immigrants to Canada with skilled trades training and/or construction experience.

Figure 7 provides a summary of the estimated changes in the construction labour force across the forecast period.

**FIGURE 7:
CHANGES IN THE CONSTRUCTION LABOUR FORCE, ALBERTA**



* Net mobility refers to the number of workers needed to be brought into the industry from other industries or other provinces to meet rising demands or the number of workers that exit the industry in downturns. Positive net mobility means that industry must attract workers, while negative net mobility arises from an excess supply of workers in the local construction labour force.

Note: Due to rounding, numbers may not add up to the totals indicated.

SOURCE: BuildForce Canada

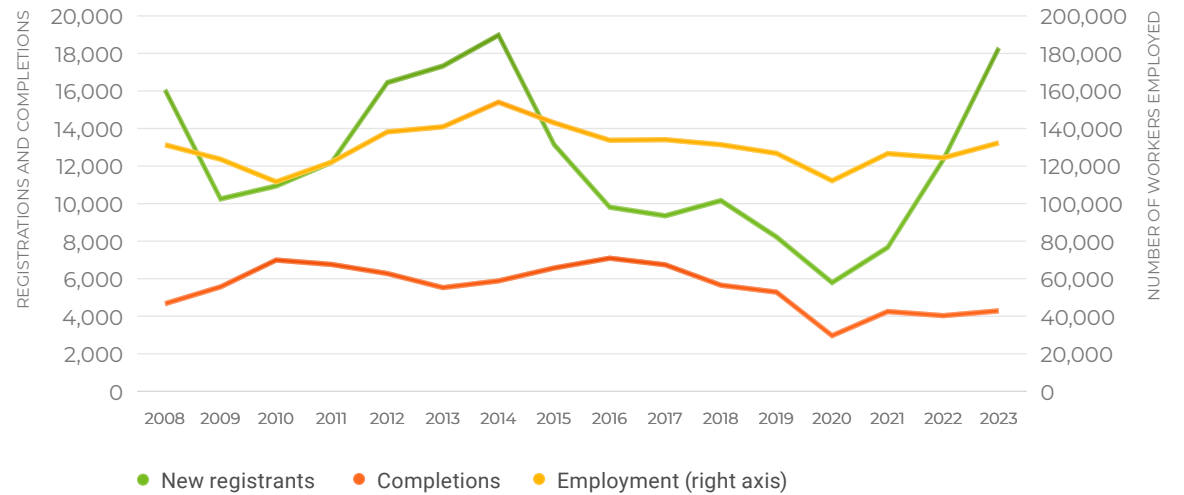
LABOUR FORCE RECRUITMENT

APPRENTICESHIP

The construction industry is dependent on a variety of skilled trades, some voluntary and some compulsory, as well as several skilled trades that fall outside the traditional apprenticeship development systems of the province. As such, while apprenticeship registrations cannot be viewed as a complete measure of industry recruitment, the metric is a useful barometer of industry success in the recruitment of new entrants.

Following the resource expansion that occurred in the middle years of the 2010s, Alberta experienced a steep decline in new apprentice registrations, outpacing the decline in trade employment. The province has seen a strong rebound post-pandemic. In 2023, new registrations increased by nearly 50% from the previous year, approaching levels just shy of the 2014 record. (See Figure 8.) This growth was largely driven by a surge in enrollments in construction electrician and steamfitter/pipefitter programs, which together accounted for roughly half of the overall increase. While overall program completions rose by 6% from the previous year, they remained significantly below the peak levels seen over the last decade.

FIGURE 8:
NEW APPRENTICESHIP REGISTRATIONS, COMPLETIONS,
AND TRADE EMPLOYMENT, ALBERTA



SOURCE: BuildForce Canada

Table 5 provides a trade-by-trade breakdown of the anticipated certification requirements to meet the construction industry’s share of employment and replacement demand over the scenario period. Based on projected new registrations, several trades are at risk of completions not keeping pace with the number of new journeypersons required over the outlook period. Trades within this group include boilermaker, roofer, insulator (heat and frost), bricklayer, carpenter, glazier, and ironworker (reinforcing).

TABLE 5:
ESTIMATED CONSTRUCTION CERTIFICATION DEMAND AND PROJECTED COMPLETIONS BY TRADE, ALBERTA, 2025 TO 2034³

TRADE	TOTAL CERTIFICATION DEMAND – CONSTRUCTION	TARGET NEW REGISTRANTS – CONSTRUCTION	APPRENTICE CERTIFICATION SUPPLY RISK – ALL INDUSTRIES
Boilermaker	946	416	●
Roofer	306	149	●
Insulator (Heat and Frost)	457	254	●
Bricklayer	167	95	●
Carpenter	4,235	2,645	●
Glazier	194	125	●
Ironworker (Reinforcing)	155	115	●
Welder	970	1,014	●
Industrial Mechanic (Millwright)	304	345	●
Construction Electrician	8,601	9,967	●
Tower Crane Operator	51	64	●
Hoist Operator (Boom Truck)	365	499	●
Powerline Technician	211	314	●
Hoist Operator (Wellhead)	449	695	●

TRADE	TOTAL CERTIFICATION DEMAND – CONSTRUCTION	TARGET NEW REGISTRANTS – CONSTRUCTION	APPRENTICE CERTIFICATION SUPPLY RISK – ALL INDUSTRIES
Instrumentation and Control Technician	162	256	●
Ironworker (Structural/Ornamental)	86	143	●
Heavy-Duty Equipment Technician	460	930	●
Steamfitter/Pipefitter	875	1,804	●
Refrigeration and Air Conditioning Mechanic	892	1,845	●
Sheet Metal Worker	437	986	●
Plumber	1,928	5,440	●
Sprinkler Fitter	55	199	●
Heavy Duty Equipment Technician (Off Road)	82	373	●
Gasfitter - Class A	36	167	●
Mobile Crane Operator	92	845	●

- Certifications required exceed projected completions
- Certifications required in line with projected completions
- Projected completions exceed certifications required

³ This analysis does not account for an existing skills mismatch at the 2024 starting point.

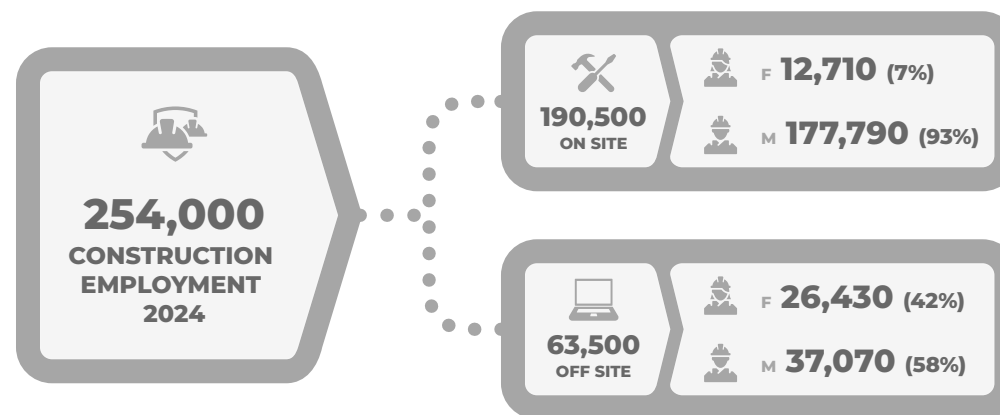
SOURCE: BuildForce Canada

UNDER-REPRESENTED GROUPS OF WORKERS

Due in part to lower fertility rates and smaller family sizes in Canada for more than three decades, the share of younger Canadians available to enter the labour force has been in decline for several years. As the baby boom generation of workers continues retiring throughout the decade, the competition for younger workers will be intense. To help mitigate the impact of this shift in demographics, the construction industry must diversify its recruitment. Specifically, it must increase recruitment of individuals from groups traditionally underrepresented in the current construction labour force, including women, Indigenous People, and immigrants to Canada by raising awareness and working with settlement organizations to promote career opportunities to individuals new to the country.

In 2024, there were approximately 39,140 women employed in Alberta’s construction industry, of which 32% worked on site, directly on construction projects, while the remaining 68% worked off site, primarily in administrative and management-related occupations. Of the 190,500 tradespeople employed in the industry, women made up 7% (see Figure 9).

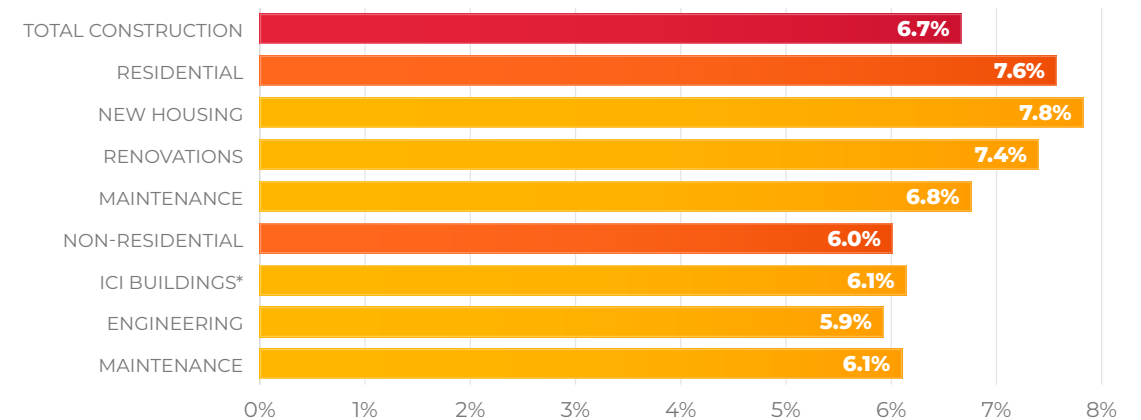
**FIGURE 9:
DETAILED CONSTRUCTION EMPLOYMENT BY GENDER,
ALBERTA, 2024**



SOURCE: BuildForce Canada calculations based on Statistics Canada's Labour Force Survey and 2021 Census of the Population.

The estimated 12,710 tradeswomen in Alberta are represented across all sectors of construction, but given the nature of construction work in the province, women account for a higher share of total tradespeople in residential construction at 7.6%. Across sectors, new housing construction has the highest representation of women, accounting for 7.8% of the workforce (see Figure 10). The top five trades and occupations in which women tend to be employed are trade helpers and labourers (18% of all tradeswomen), construction managers (12%), contractors and supervisors (8%), electricians (8%), and construction estimators (8%).

FIGURE 10:
WOMEN'S SHARE OF TOTAL DIRECT TRADES AND OCCUPATIONS (ON SITE), ALBERTA



* industrial, commercial, institutional

SOURCE: BuildForce Canada calculations based on Statistics Canada's Labour Force Survey and 2021 Census of the Population.

The Indigenous population is the fastest growing population in Canada and therefore presents recruitment opportunities for Alberta’s construction industry. In 2023, Indigenous People made up 3.9% of Canada’s workforce and 5.2% of the national construction workforce. In Alberta, Indigenous People represented 5.7% of the provincial labour force and 6.6% of the construction labour force. Over the past decade, the share of Indigenous People in the province’s construction workforce has increased slightly, up from 5.9% in 2014 (see Table 6). As the Indigenous population continues to grow, the sector must continue its recruitment efforts and invest in initiatives that foster long-term retention.

TABLE 6:
REPRESENTATION OF INDIGENOUS POPULATION IN PROVINCIAL CONSTRUCTION WORKFORCE, ALBERTA

INDUSTRY	INDIGENOUS	NON-INDIGENOUS	TOTAL	INDIGENOUS SHARE OF TOTAL WORKFORCE, %
Construction				
2014	15,600	247,700	263,300	5.9%
2023	16,700	236,000	252,700	6.6%
All Industries				
2014	105,800	2,252,300	2,358,100	4.5%
2023	147,700	2,464,000	2,611,700	5.7%

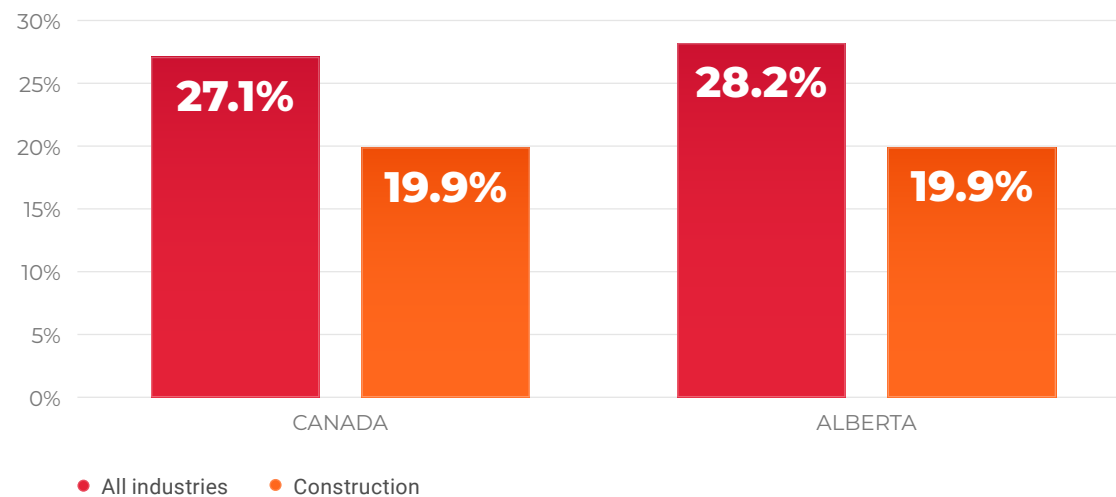
SOURCE: Statistics Canada, Labour Force Survey, Custom Data Request 2023



Immigrants have been playing an increasingly important role in replenishing the workforce in Alberta, with the share of immigrants in the general labour force increasing from 19.8% in 2014 to 28.2% in 2023. The province has been successful in attracting and integrating immigrants into the labour force; however, immigrants remain under-represented in the construction industry. The construction labour force share of immigrants was 19.9% in 2023, which is notably lower than the share in the overall provincial labour force. (See Figure 11).⁴

Based on historical settlement patterns, the province is expected to welcome nearly 574,600 new immigrants between 2025 and 2034. As these individuals will make up an increasing share of the province’s core working-age population, additional recruitment efforts will be required to ensure the construction industry recruits its share of newcomers into the labour force.

FIGURE 11:
SHARE (%) OF IMMIGRANTS IN THE CONSTRUCTION LABOUR FORCE, 2023



⁴Statistics Canada, Labour Force Survey, Custom Data Request 2023.

SOURCE: Statistics Canada. Table 14-10-0083-01 Labour force characteristics by immigrant status, annual



CONCLUSIONS AND IMPLICATIONS

Alberta's construction sector is projected to see increases in investment across the 2025 to 2034 forecast period. Growth is driven principally by activity in the residential construction sector, in the near term, where demand for new housing should rise before moderating after 2026 and being replaced by increased residential renovation and maintenance activity.

Meanwhile, non-residential construction activity also makes positive gains across the forecast period and is driven by gains in the construction of industrial, commercial, and institutional (ICI) buildings.

Construction employment is projected to rise across the forecast period. In the residential sector, employment rises to a peak of 8% above 2024 levels by 2026 before moderating to the end of the forecast period, and ending the decade only marginally (+1%) above 2024 levels.

Employment in the non-residential sector is projected to see growth of 9% across the forecast period. Levels are stable through the near term but increase after 2027 with strong growth in the construction of ICI buildings.

Scheduled heavy-industrial maintenance (turnaround and shutdowns) work add to market challenges across the forecast period, with significant seasonal demands concentrated in the spring and fall of most years, with high demands for selected trades and occupations, including boilermakers, pipefitters, all-terrain crane operators, scaffolders, and specialized welders.

As a result of these trends, and shifting provincial demographics, the industry must contend with replacing an estimated 43,400 workers, or 21% of the current labour force, who are expected to retire over the next 10 years. Meeting these replacement demands, and building new capacity, should require the recruitment and retention of some 59,000 workers between 2025 and 2034.

The industry scenario-based approach developed by BuildForce Canada to assess future labour market conditions provides a powerful planning tool for industry, government, and other stakeholders to better track labour market conditions and identify potential pressure points. The anticipated labour market conditions reflect the current long-term oil price outlook and industry capital investment assumptions. Any changes to these assumptions present risks and potentially alter anticipated labour market conditions.

ABOUT THE BUILDFORCE CANADA LABOUR MARKET INFORMATION SYSTEM

BuildForce Canada's labour market information (LMI) system uses the most advanced and detailed industry model available in Canada to produce a forecast scenario that reflects current and future labour demand and supply information for the residential and non-residential construction sectors, by province.

Updated annually, the system is calibrated to the latest information on global, national, and provincial economic conditions derived from various data sources including Statistics Canada, Canadian financial institutions, the World Bank, the International Monetary Fund, the U.S. Energy Information Administration, the Organisation for Economic Co-operation and Development, and federal and provincial budget plans. Key factors driving the outlook scenario include: economic environment measures such as real GDP growth, inflation, interest rates, exchange rates, commodity prices, and international trading partner trends, and population growth and demographic trends.

Unique to the BuildForce system is the integration of a major projects inventory. This is developed in partnership with provincial LMI committees – networks of industry stakeholders that include labour groups, construction associations, owners, and federal/provincial government departments – and identifies key projects that may distort construction investment trends and market conditions.

Information on economics, demographics, and major projects are combined into a dynamic, multi-sector and multi-factor macroeconomic model to generate a 10-year labour market outlook scenario for the residential and non-residential construction sectors in each Canadian province.

The system incorporates coefficients derived from Statistics Canada's input-output tables to determine industry demands and proprietary coefficients developed by BuildForce Canada to translate residential and non-residential investment data into labour demands for the 34 most common on-site trades and occupations in the construction sector. These account for 75% of the total construction labour force.

For labour supply, the system utilizes Statistics Canada's 2021 Census of Population as a starting point. That data is adjusted to reflect current public-policy and demand factors, and is further refined through consultation with the provincial LMI committees to produce measures of provincial economic and population growth, employment growth, retirements, new entrants to the labour force, and interprovincial and international migration patterns.

Provincial residential and non-residential labour market conditions, by trade and occupation, are assessed based on changes in supply and demand and summarized in the form of tables. For each year, conditions are ranked from a low of 1 (in which excess labour supply is apparent, and there is a risk of losing workers to other markets) to a high of 5 (in which there is excess demand, competition is intense, and recruiting extends beyond local labour markets). Ranks are calculated based on annual employment growth, natural or normal unemployment rates, and changes in supply (i.e., retirements, new entrants, and mobility requirements to meet demands).

Rankings for some trades or occupations may be suppressed in some provinces and regions due to the small size of the workforce (i.e., fewer than 100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Some trades are also excluded because they typically do not work in the sector being assessed (e.g., boilermakers and millwrights typically do not work in residential construction, nor do homebuilding and renovation managers work in non-residential construction).

Finally, to further improve the robustness of the system, BuildForce Canada's outlook scenario is validated by provincial LMI committees.

DEVELOPED WITH INDUSTRY FOR INDUSTRY

For the most detailed & comprehensive construction labour market data in Canada, visit [constructionforecasts.ca](https://www.constructionforecasts.ca)

CUSTOMIZABLE TABLES AND GRAPHS AVAILABLE FOR:

- Data on more than 30 construction trades and occupations by province looking ahead 10 years
- Key economic indicators, construction investment and labour market conditions by province and/or sector
- Macroeconomic and investment data



(613) 569-5552
info@buildforce.ca