

CONSTRUCTION & MAINTENANCE LOOKING FORWARD

QUEBEC



HIGHLIGHTS 2023–2032

Quebec's construction market experienced another strong year of overall growth in 2022.

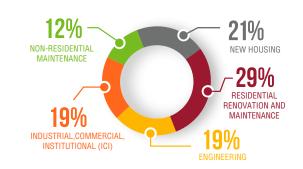
Although residential investment stepped down off the peak it set in 2021, pulled back by the effects of rising interest rates on new-housing construction, the sector nonetheless reported a strong year in 2022. The outlook for the residential sector sees new-construction investment declining as renovation and maintenance work climbs in response to an aging housing stock. Employment contracts by 10,700 workers (-10%) by 2032 compared to the 2022 peak.

The provincial non-residential construction sector, meanwhile, continues to experience growth, driven by a post-COVID private-sector recovery, and by higher levels of public-sector investment in the health care, education, public-transit, and engineering-construction sectors. Employment demands are expected to peak in 2023 and be sustained into 2024, before receding in line with the timing of major projects and then growing again after 2028. Non-residential employment is mostly unchanged by the end of the forecast period.

Overall, construction employment steps down from a 2022 peak of more than 215,000 workers, declining through to 2028 before sustaining itself at those levels in the later years of the forecast period. The industry must remain focused on hiring and training to meet near-term demands, as well as replacing an estimated 48,200 workers, or 21% of its current labour force, that are expected to retire by 2032.



DISTRIBUTION OF CONSTRUCTION EMPLOYMENT IN 2022, QUEBEC



HIGHLIGHTS

- Total construction employment declines to 210,700 workers in 2023 (-2%), and then continues to contract by another 3% by 2032, with declines concentrated in residential construction.
- As the province's housing market is constrained by lower population growth, housing starts contract annually across the forecast period, declining by 43% over 2022 levels. Renovation investment, meanwhile, increases by 21%.
- Major public-transportation infrastructure projects in Montreal and Quebec City help to sustain non-residential employment at elevated levels through 2032. Non-residential employment ends the decade down a modest 700 workers (-1%) below 2022 levels.

BuildForce's LMI System

BuildForce Canada uses a scenario-based forecasting system to assess future construction labour requirements in the heavy industrial, residential, and nonresidential construction markets. This labour market information (LMI) system tracks 34 trades and occupations. To further improve the robustness of the system, BuildForce consults with industry stakeholders, including owners, contractors, and labour groups, to validate the scenario assumptions and construction project lists, and seeks input from government on related analysis. The information is then distilled into labour market condition rankings to help industry employers with the management of their respective human resources.

QUEBEC CONSTRUCTION OUTLOOK

Quebec is a unique construction market in which labour force development is carried out in cooperation with the Commission de la construction du Québec (CCQ), which in turn is entrusted by the provincial government to enforce the *Act Respecting Labour Relations, Vocational Training and Workforce Management* in the province's construction industry.

In addition to administering social benefits plans, the CCQ ensures compliance with collective agreements and strives to ensure that labour markets maintain balance. Labour force development and training is carried out collectively with labour unions, employers' groups, and provincial government partners to ensure that the supply of workers is adequate to meet known construction demands to avoid under or overtraining with the trades and occupations under its authority.

The 2023–2032 Construction and Maintenance Looking Forward outlook for Quebec anticipates further near-term growth for the province's construction sector supported by continued high levels of investment in the non-residential sector, and, in particular, among key public-transportation, education, health care, industrial, roadwork, and other infrastructure projects, including major tunnel projects.

After experiencing strong growth in 2021 due to an influx of international migrants to the province, investment in Quebec's residential construction sector stepped back by 3% in 2022 with a notable decline (-11%) in housing starts. That trend is expected to

continue again in 2023 as the post-pandemic population growth slows and lowers housing starts across the forecast period. A decline of 18% in new-construction investment more than offsets a small gain in renovation output. Residential investment remains largely unchanged across the remainder of the forecast period, as small contractions in new housing are offset by small gains in the renovation segment. Total residential employment declines from its peak by 10,700 workers across the decade. Reductions in new housing (-16,500) more than offset gains in renovation (+4,600) and maintenance (+1,200) activity.

Non-residential construction will rise to a near-term investment peak in 2023 with the overlap of major public-transportation infrastructure projects in Montreal and Quebec City, increased investment in highway and bridge infrastructure, the start of several health- and education-sector projects, and a general recovery in consumer and business confidence. Investment moderates thereafter, in line with the completion of these projects. Non-residential employment sustains its peak of more than 108,000 workers into 2024, before contracting to as few as 104,400 by 2028 and ending the decade 700 workers (-1%) below 2022 levels.

By the end of the forecast period, overall construction employment is anticipated to contract by just under 11,400 workers. Recruiting challenges will be deepened by the expected retirement of an estimated 48,200 workers.

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

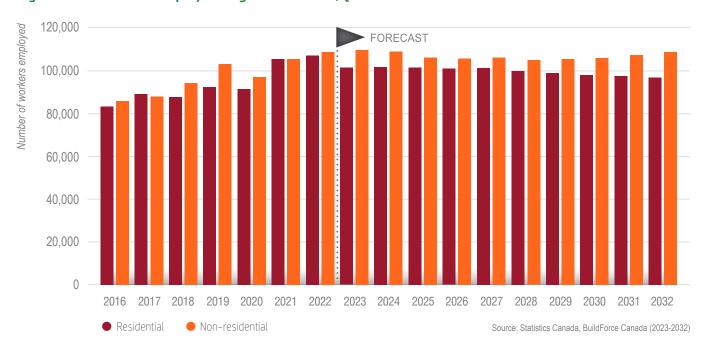


Figure 1: Construction employment growth outlook, Quebec

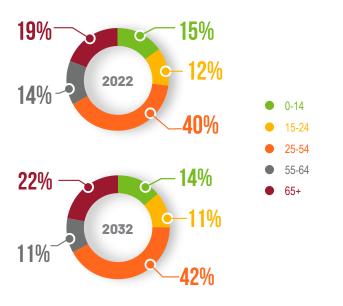


Figure 2: Population age distribution, Canada

Source: BuildForce Canada

DEMOGRAPHICS: CANADA'S AGING POPULATION CREATES WORKFORCE CHALLENGES

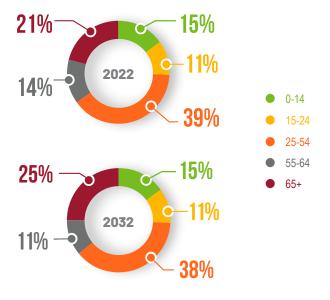
Across the country, the share of the labour force aged 65 and over, who are mainly retired, has increased from 15% in 2012 to 19% in 2022. As Figure 2 shows, it is projected to grow again – to 22% – by 2032.

The labour force will be further challenged by a dwindling pool of youth. The group of people aged 15 to 24 years – i.e., people who are poised to enter the labour force – is shrinking as a percentage of the national population. This cohort was 13% in 2012, dropping to 12% in 2022, and is projected to fall to 11% by 2032.

These trends will create challenges for all industries, including construction, as it pertains to labour force recruitment.

There is good news, however. New federal immigration targets, announced in November 2022, call for the addition of 465,000 permanent residents in 2023, 485,000 in 2024, and a further 500,000 in 2025. These new targets should support further growth in the core working-age group of 25–54 years and may help moderate labour market pressures over the next decade. They will also require domestic industries to improve their recruitment of newcomers to supplement their traditional domestic recruitment programs.





Source: BuildForce Canada

AN AGING POPULATION SUPPORTED BY IMMIGRATION

Quebec's demographics follow a similar trend. Figure 3 shows youth aged 15 to 24 years will remain unchanged at 11% of the province's population between 2022 and 2032. Meanwhile, the proportion of those aged 65 and older, and who are mostly retired, is projected to grow from 21% to 25% over the same period.

Given this trend, Quebec's fertility rate is expected to remain low. The province's natural rate of population growth¹ has been in decline since 2009. It is expected to reach zero in 2030, before turning negative in 2031 as the population continues to age.

Quebec has historically benefitted from high levels of net migration. Levels peaked in 2018 and 2019, before being curtailed by the COVID-19 pandemic. Immigration returned to post-pandemic levels in 2022, due in part to a large influx of non-permanent residents, many in the form of students resuming in-person studies. Although it is unlikely Quebec will experience similar jumps in immigration in the remaining years of the forecast period, based on historical settlement levels, the province is expected to receive approximately 60,000 newcomers through the medium term. This will be driven in part by revised federal immigration targets.

¹ The 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.

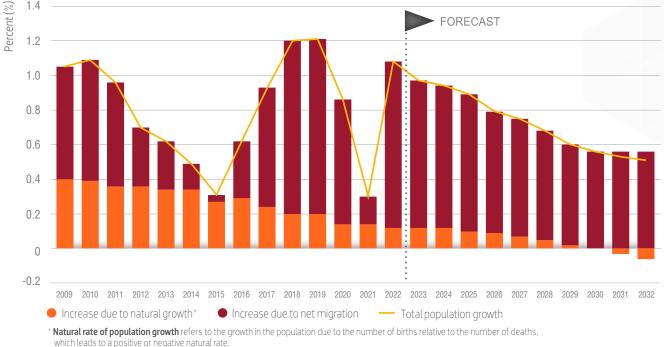


Figure 4: Sources of population growth (%), Quebec

Source: Statistics Canada, BuildForce Canada (2023-2032)

As a combination of these factors, Quebec's rate of population growth is expected to climb down from just about 1% in 2022 to just above 0.5% by 2032.

Figure 4 shows the various factors affecting population growth in Quebec over the forecast period.

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 entrants², and net mobility³.

BuildForce assesses market conditions for 34 construction trades and occupations using a ranking system that combines measures of the change in employment, unemployment, net mobility, and adjustments based on industry input. The rankings reflect residential and non-residential market conditions unique to the province based on current and proposed construction activity. In addition, assumptions on provincial economic and population growth, new entrants to the labour force, and migration patterns (interprovincial and international) are built into the forecast scenario and included in the ranking assessment.

The rankings for some trades are suppressed due to the small size of the workforce (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 in residential construction, and homebuilding and renovation managers in non-residential construction).

For Quebec, rankings are reported for 25 residential and 32 non-residential trades and occupations.

² 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.

³ 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

Figure 5 shows the renovation and new-housing investment trends for residential construction.

Residential employment reached a peak of more than 105,300 workers in 2021, driven by strong demand for new housing and renovations. High levels of international migration have contributed to low rental vacancy rates in Quebec's key markets, which have propelled a residential up-cycle since 2017. Low interest rates helped to push housing starts to a record high of nearly 68,000 units in 2021. Markets eased in 2022 as interest rates rose. Starts contracted by 7,700 units (-11%), as demand contracted across all unit types, with losses greatest in single-detached homes and apartments. Housing starts are expected to contract across the forecast period as the province's population ages and household formations⁴ contract. This is particularly evident as the share of apartment starts, which are generally the first-choice housing option for new arrivals to Canada, contracts across the forecast period from 72% to 62% by 2032.

Renovation expenditures, which account for a larger share of the residential construction market than new construction, rebounded

strongly in 2021 and sustained only smaller growth in 2022. Activity is expected to continue to increase as the economy expands, driven primarily by the purchase of mature homes in some of the province's largest markets, the aging of the province's overall housing stock, population aging, and the need to upgrade homes to permit aging in place⁵. By the end of the decade, renovation expenditures are expected to be approximately 21% higher than 2022 levels.

Employment in the residential sector reached a peak of nearly 106,900 workers in 2022. Declines are expected to occur almost continuously across the forecast period, and are almost exclusive to the new-housing segment. Across the full forecast period, residential employment is projected to contract by 10,700 workers (-10%), with new housing contracting by 16,500 workers (-37%). The renovation (+4,600 workers; +10%) and maintenance (+1,200 workers +9%) segments report growth.

Note that federal efforts to double the number of new homes built across Canada over the next 10 years were not factored into this analysis.

18,000 Investment (\$2012 million*) FORECAST 16,000 14,000 12,000 10.000 8,000 6.000 4,000 2,000 0 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 New housing Renovation Source: Statistics Canada, BuildForce Canada (2023-2032)

Figure 5: Residential construction investment, Quebec

* \$2012 millions indicates that the investment values are in year 2012 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.

⁴ Household formation refers to the change in the number of households (persons living under one roof or occupying a separate housing unit) from one year to the next. It is the means by which population growth is transformed into demand for new housing.

⁵ Aging in place is defined as required renovations and modifications to enable individuals to continue to live independently and safely in their residence as they age.

RESIDENTIAL RANKINGS, RISKS, AND MOBILITY

Construction labour markets in Quebec are regulated by law and managed cooperatively between the Commission de la construction du Québec (CCQ) and the industry. The labour force is managed with the goal of ensuring that on a trade-by-trade basis, retirements are met by a corresponding increase in recruitment, as required by the economy.

Although the BuildForce Canada ranking system may indicate conditions outside normal labour market conditions, as shown in Table 1, trades and occupations managed by the CCQ should be balanced, as the organization applies the *Act on Labour Relations*, *Vocational Training, and Workforce Management in the Construction Industry (Act R-20).*

Entering the forecast period, Quebec's residential construction market neared all-time highs for housing starts and new-housing investment. Market conditions are strained across every trade and occupation as a result. Construction activity comes off its 2022 peak quickly. Starts contract sharply in 2023 and continue to do so throughout the forecast period. Demand for many new-construction trades adjusts accordingly.

Renovation investment, meanwhile, follows a steady increase over the forecast period, with activity rising almost annually. Demand for renovation-related trades, including those in management functions, remains at or above balanced conditions through 2032.

The "2" ranking for glaziers and ironworkers reflects a decline in employment following the large inflows of workers that were required to meet the significant increase in multi-unit housing (e.g., apartments and high-rise units) demands over the last few years. These are projected to contract from peak levels over the medium term to 2028.

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. Established patterns of recruiting and mobility are sufficient to meet job requirements.
4	Workers meeting employer 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.

TRADES AND OCCUPATIONS – RESIDENTIAL	202	2/2023	5/2024	2025	5/2020	5/2027	2028	3/2029	9/2030	0/2031	1/203
Bricklayers	4	3	3	3	3	3	3	3	3	3	3
Carpenters	4	2	3	3	3	3	3	3	3	3	3
Concrete finishers	4	3	3	3	3	3	3	3	3	3	3
Construction estimators*	4	3	4	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	4	3	3	3	3	3	3	3	3	3	3
Contractors and supervisors*	4	3	4	3	3	3	3	3	3	3	3
Electricians	4	3	3	3	3	3	3	3	3	3	3
Floor covering installers	4	3	4	3	3	3	3	3	3	3	3
Glaziers	4	3	2	2	2	2	2	3	3	3	3
Heavy equipment operators (except crane)	4	3	3	3	3	3	3	3	3	3	3
Heavy-duty equipment mechanics	4	3	4	3	3	3	3	3	3	3	3
Home building and renovation managers*	4	3	4	4	4	4	4	4	4	4	4
Insulators	4	2	3	3	3	3	3	3	3	3	3
Ironworkers and structural metal fabricators	4	3	2	2	2	2	2	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	3	3	3	3	3	3	3	3	3	3
Plumbers	4	3	4	3	3	3	3	3	3	3	3
Refrigeration and air conditioning mechanics	4	3	4	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	3	4	3	3	3	3	3	3	3	3
Tilesetters	4	3	3	3	3	3	3	3	3	3	3
Trades helpers and labourers	4	2	3	3	3	3	3	3	3	3	3
Truck drivers	4	3	3	3	3	3	3	3	3	3	3

Table 1: Residential market rankings, Quebec

Note: although the BuildForce Canada rankings system may indicate conditions outside normal labour market conditions, trades and occupations managed by Commission de la construction du Québec (CCQ) should be balanced as the organization applies the *Act on Labour Relations, Vocational Training, and Workforce Management in the Construction Industry (Act R-20).*

* Trades and occupations marked with an asterisk fall outside the jurisdiction of the CCQ and will follow ebbs and flows in the labour market. Source: BuildForce Canada

NON-RESIDENTIAL SECTOR

Non-residential activity in Quebec rose to a near-term peak in 2022. Activity should be sustained into 2023, driven by public-transportation, education, health care, utility, industrial, roadwork, and other infrastructure project requirements, particularly in Montreal and Quebec City. Employment in both years exceeds 108,000 workers, with demand pronounced in the

industrial, commercial, and institutional (ICI) and engineeringconstruction sectors. Employment cycles down through 2028 as demands recede, before returning to growth through the end of the forecast period. By 2032, non-residential employment contracts by 700 workers (-1%) over 2022 levels. As shown in Figure 6, investment levels rose to a peak in 2022. Growth is expected to be largely unchanged in 2023 and 2024, driven by major public-transit projects, including ongoing work on Montreal's Réseau express métropolitain, Montreal's Blue Line extension, Quebec City's transit network, as well as several major investments in education, health care, hospitals, and new public-infrastructure investments. As these transit projects wind down, investment in the ICI and engineering-construction sectors chart different paths. Engineering-construction investment follows the ebbs and flows of remaining major projects and contracts by 3% through 2032. ICI-sector investment, meanwhile, sustains steady growth across most of the forecast period, adding 10% by 2032.

Engineering-construction employment peaked at more than 41,500 workers in 2022 and is expected to recede to 2028 with the wind down of major transit works in Montreal and Quebec City. By 2032, employment is down by more than 1,600 workers (-4%) over 2022 levels.

ICI-building construction, which saw a strong rebound in 2021, showed further growth in 2022 and is expected to do so again in 2023 and 2024, driven by elevated investments in health care and education infrastructure. Employment recedes to 2028 as projects wind down and finishes the decade essentially unchanged from 2022 levels.

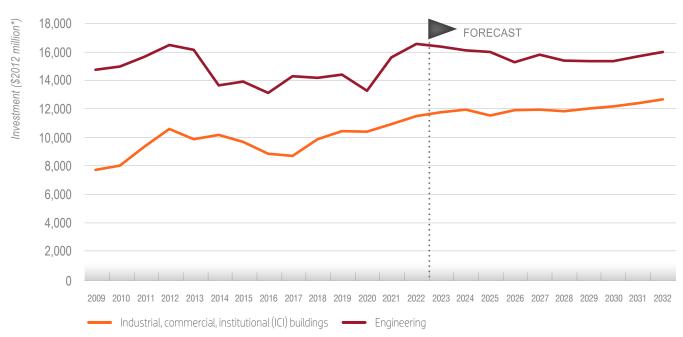
Following a recent surge in non-residential maintenance work, employment declines in the near term before resuming growth post-2025. By 2032, employment is up by 1,000 workers (+4%) compared to 2022 levels. Table 2 summarizes the estimated percent change in non-residential employment by sector across three periods: the short term (2023–2025), the medium term (2026–2028), and the long term (2029–2032).

Table 2: Changes in non-residential employment by sector, Quebec

S	ECTOR	/ % CHANGE 2023–2025	/ % CHANGE 2026–2028	/ % CHANGE 2029–2032
Total non-resi	dential employment	-3%	-1%	3%
	Industrial	-7%	6%	2%
ICI* buildings	Commercial, institutional and government	-1%	-2%	3%
Engineering	Highways and bridges	0%	-13%	-1%
	Heavy industrial	5%	13%	15%
	Other engineering	-10%	-10%	-2%
Mai	ntenance	-2%	2%	4%

Source: Statistics Canada, BuildForce Canada (2023-2032) * industrial, commercial, institutional

Figure 6: Non-residential construction investment, Quebec



* **\$2012 millions** indicates that the investment values are in year 2012 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 (2023-2032)

NON-RESIDENTIAL RANKINGS, RISKS, AND MOBILITY

As shown in Table 3, non-residential employment in Quebec enters the forecast period in a period of growth. Activity in both the ICI and engineering-construction sectors has been increasing steadily since the pandemic years. Labour markets are strained as a result. As activity on the province's major engineering-construction projects slows in 2023, demand for trades in the utility sector eases. Demand, however, remains high for those working in the ICI sector.

By 2025, the pressure eases on many trades, with some projected to be oversupplied. The market returns to mostly balanced conditions into the long term, with the exception of electrical power line and cable workers, and construction managers.

Note that although the BuildForce Canada ranking system may indicate conditions outside normal labour market conditions, trades and occupations managed by the CCQ should be balanced, as the organization applies the Act on Labour Relations, Vocational Training, and Workforce Management in the Construction Industry (Act R-20).

Note, also, that the widespread conversion of ICI buildings to the greater use of electricity for heating and cooling is excluded from this report, as these efforts are still in their early phases and have had only minor impacts on overall construction labour markets. As these efforts accelerate, they will be added to future BuildForce Canada outlook reports.

Table 3: Non-residential market rankings, Quebec

TRADES AND OCCUPATIONS - NON-RESIDENTIAL	202	2 / 2023	3/2024	4 / 202	5 / 202	5/202	7/2028	3/2029	9 / 203	0/203	1/203
Boilermakers	3	3	3	3	3	3	3	3	3	3	3
Bricklayers	3	3	3	3	3	3	3	3	3	3	3
Carpenters	4	4	3	2	3	3	3	3	3	3	3
Concrete finishers	4	3	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	4	3	3	3	3	4	4	4	4
Construction millwrights and industrial mechanics	4	2	3	3	3	3	3	3	3	3	3
Contractors and supervisors*	4	4	3	3	3	3	3	3	3	3	3
Crane operators	4	3	3	2	3	3	3	3	3	3	3
Drillers and blasters	4	3	3	2	3	3	3	3	3	3	3
Electrical power line and cable workers	3	2	3	4	2	4	4	4	4	4	3
Electricians	4	3	3	3	3	3	3	3	3	3	3
Elevator constructors and mechanics	3	3	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	3	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)	4	4	3	2	2	3	3	3	3	3	3
Heavy-duty equipment mechanics	4	3	3	2	3	3	3	3	3	3	3
Insulators	3	3	3	3	3	3	3	3	3	3	3
Ironworkers and structural metal fabricators	4	3	2	2	3	3	2	3	3	3	3
Painters and decorators (except interior decorators)	4	4	3	2	3	3	3	3	3	3	3
Plasterers, drywall installers and finishers, and lathers	4	3	3	2	3	3	3	3	3	3	3

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TRADES AND OCCUPATIONS – NON-RESIDENTIAL	/2022	2023	2024	202	5/2020	5/2027	2028	/2029	2030	2031	/2032
Plumbers	4	4	3	3	3	3	3	3	3	3	3
Refrigeration and air conditioning mechanics	4	4	3	2	3	3	3	3	3	3	3
Residential and commercial installers and servicers*	5	4	3	3	3	3	3	3	3	3	3
Roofers and shinglers	3	3	3	3	3	3	3	3	3	3	3
Sheet metal workers	4	4	3	3	3	3	3	3	3	3	3
Steamfitters, pipefitters and sprinkler system installers	3	3	3	3	3	3	3	3	3	3	3
Tilesetters	4	4	3	2	3	3	3	3	3	3	3
Trades helpers and labourers	4	4	3	2	3	3	3	3	3	3	3
Truck drivers	4	4	3	3	3	3	3	3	3	3	3
Welders and related machine operators	4	4	3	3	3	3	3	3	3	3	3

Table 3: Non-residential market rankings, Quebec (continued)

Note: although the BuildForce Canada rankings system may indicate conditions outside normal labour market conditions, trades and occupations managed by Commission de la construction du Québec (CCQ) should be balanced as the organization applies the Act on Labour Relations, Vocational Training, and Workforce Management in the Construction Industry (Act R-20).

* Trades and occupations marked with an asterisk fall outside the jurisdiction of the CCQ and will follow ebbs and flows in the labour market. Source: BuildForce Canada

BUILDING A SUSTAINABLE LABOUR FORCE

THE AVAILABLE LABOUR FORCE

Although Quebec's population is increasing, its rate of natural population growth is slowing. Immigration, therefore, is, and will continue to be, a key source of labour supply for the construction sector over the next decade. To keep up with labour market requirements, industry will need to expand its recruitment efforts to include under-represented groups and new immigrants to the province.

It is estimated that Quebec's construction industry will need to recruit 40,100 additional workers across the forecast period to keep pace with labour force growth and to replace almost 48,200 retiring workers, or 21% of the 2022 construction labour force. These hiring requirements should be met by an estimated 43,100 first-time new entrants under the age of 30 from the local population.

Contradictory to the national trend, Quebec's construction labour force increased through the pandemic, adding tens of thousands of new workers. Statistics Canada's Labour Force Survey⁶ data shows Quebec's construction employment and labour force both grew by just over 8% between 2019 and 2022. Neither kept pace with employment gains, however, which rose by 11% over the same period. As a result, its average construction unemployment rate dropped to just under 5% in 2022.

The labour force gains were concentrated in the core working-age group of 25–54 year olds, while the 15–24 age group was mostly unchanged. Those aged 55 and older were down 1.4% compared to 2010.

Figure 7 provides a summary of the estimated changes in the construction labour force across the full 2023–2032 forecast period.

LABOUR FORCE DIVERSIFICATION

APPRENTICESHIP

Apprenticeship is a key source of labour for the construction industry. New registrations in the 26 largest trade programs increased by 21% from 2014 to 2019; a significant increase compared to construction employment, which saw just a 4% increase over the same period. New registrations continued to increase to record-high levels in 2021, following a modest decline in 2020 due to significant training obstacles imposed by COVID-19. The province also reported its highest number of program completions on record in 2021, adding to the supply of skilled labour to meet demand requirements over the forecast period. (See Figure 8.) Carpenter, Construction Electrician, and Steamfitter/Pipefitter trades accounted for more than half of the increases in new registrations in the province.

⁶ Statistics Canada's Labour Force Survey captures the labour force status of all workers within the industry, including those in occupations outside of the direct trades and occupations tracked by BuildForce Canada.

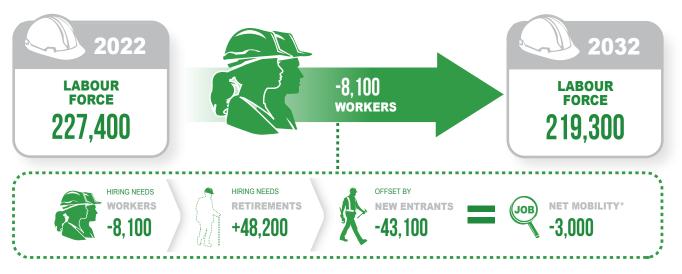


Figure 7: Changes in the construction labour force, Quebec

* 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

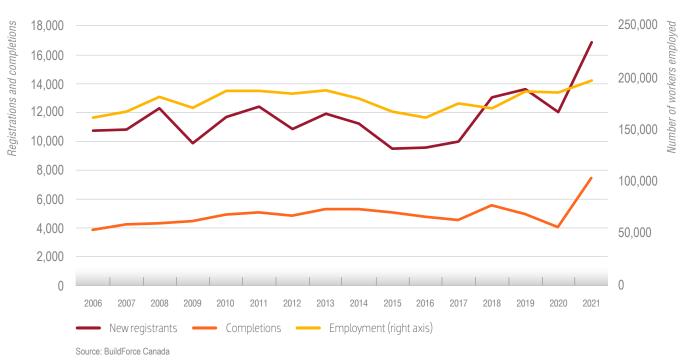


Figure 8: New apprenticeship registrations, completions, and trade employment, Quebec

Table 4 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 may be at risk of undersupplying the number of new journeypersons required by 2032. Trades within this group include Plumber, Heavy Equipment Mechanic, Heavy Equipment Operator, Welder, Mobile Crane Operator, and Industrial Electrician. These trades and occupations fall under the management of the CCQ. Measures are therefore expected to be taken to avoid the creation of any imbalance.

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 boomer generation of workers commences retirement over the next decade, the competition for younger workers will be intense. To help mitigate the impact of this demographic shift, the construction industry must diversify its recruitment. In order to succeed, the industry must increase

Table 4: Estimated construction certification demand and projected target of new entrants by trade, Quebec, 2023 to 2032

Trade	Total certification demand – construction	Target new registrants – construction	Apprentice certification supply risk – all industries		
Plumber	1,311	16,578	•		
Heavy Equipment Mechanic	249	692	•		
Heavy Equipment Operator	1,483	11,453	•		
Welder	333	520	٠		
Mobile Crane Operator	351	437	•		
Industrial Electrician	2,008	7,409	•		
Boilermaker	124	173	٠		
Industrial Mechanic (Millwright)	22	37	٠		
Bricklayer	787	1,549	٠		
Steamfitter/Pipefitter	287	2,420	٠		
Sheet Metal Worker	598	961	٠		
Insulator (heat and frost)	172	319	٠		
Refrigeration and Air Conditioning Mechanic	735	1,258	٠		
Roofer	453	1,031	•		
Concrete Finisher	509	1,236	٠		
Glazier	194	373	٠		
Painter and Decorator	827	1,412	٠		
Construction Electrician	1,450	2,251	٠		
Lather (Interior Systems Mechanic)	236	578	٠		
Drywall Finisher and Plasterer	349	750	٠		
Tile Setter	168	643	•		
Power Shovel Operator	459	791	•		
Carpenter	3,992	7,879	•		
Fitter Welder	64	153	•		
Ironworker (structural/ornamental)	31	76	۲		
Ironworker (reinforcing)	16	38			

Certifications required exceed projected completions

Certifications required in line with projected completions

Projected completions exceed certifications required

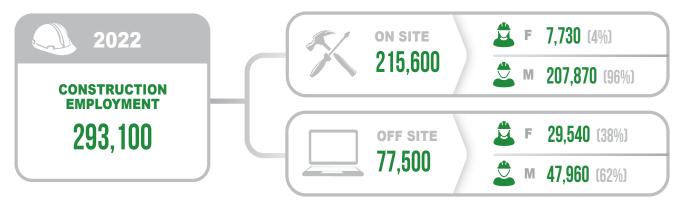
Source: BuildForce Canada

recruitment of individuals from groups traditionally under-represented in the current construction labour force, including women, Indigenous People, and newcomers.

In 2022, there were approximately 37,270 women employed in Quebec's construction industry, of which 21% worked on site, directly on construction projects, while the remaining 79% worked off site, primarily in administrative and management-related occupations. Of the 215,600 tradespeople employed in the industry, women made up 4% (see Figure 9).

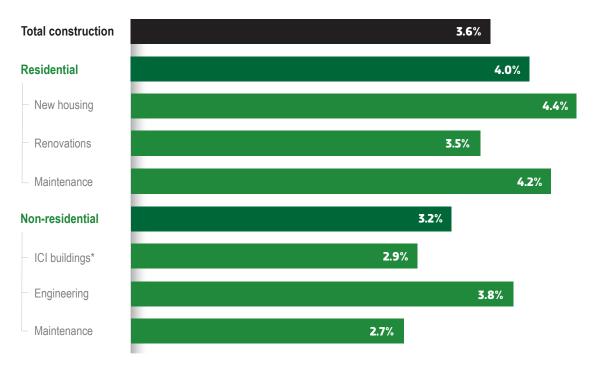
The estimated 7,730 tradeswomen in Quebec are represented across all sectors of construction, but given the nature of construction work in the province, women account for a higher share of total tradespeople (4%) in residential construction. Across sectors, new-housing and residential maintenance construction have the highest representation of women, each accounting for more than 4% of the workforce (see Figure 10). The top five trades and occupations in which women tend to be employed are construction managers (17% of all tradeswomen), trade helpers and labourers (14%), carpenters (12%), painters and decorators (11%), and construction estimators (11%).

Figure 9: Detailed construction employment by gender, Quebec, 2022



Source: BuildForce Canada calculations based on Statistics Canada's Labour Force Survey (LFS) and Census of the Population.

Figure 10: Women's share of total direct trades and occupations (on site), Quebec



* industrial, commercial, institutional

Source: BuildForce Canada calculations based on Statistics Canada's Labour Force Survey (LFS) and Census of the Population.

The Indigenous population is the fastest growing population in Canada and therefore presents recruitment opportunities for Quebec's construction industry. The province has been successful in maintaining the share of Indigenous People in the construction workforce. In 2021, Indigenous workers accounted for 2.6% of the province's construction labour force, consistent with the share observed in 2016.⁷ This share is slightly higher than the share of Indigenous People represented in the overall labour force (see Table 5). As the Indigenous population continues to expand, recruitment efforts will need to be dedicated to increasing the industry's share of the population into the labour force.

Quebec's construction industry may also leverage newcomers (immigrants) to Canada over the forecast period to meet labour requirements. Due to the declining natural rate of population growth, immigrants are the primary source of labour force growth in the province. Immigrants have been playing an increasingly important role in replenishing the workforce, with the share of immigrants in the workforce increasing from 13% in 2011 to 20% in 2021. While the province has been successful in attracting and integrating immigrants into the labour force, the province's share of immigrants is notably below the share in Canada overall (see Figure 11). The construction labour force share of immigrants was just 8.8% in 2021, which is less than half of the immigrant share in the overall labour force, and significantly lower than the share in Canada's construction industry.

Based on historical settlement trends, the province is expected to welcome 604,640 new international migrants between 2023 and 2032. 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.

Table 5: Representation of Indigenous population in provincial construction workforce, Quebec

Industry		/ Indigenous	/ Non-Indigenous	/ Total	/ Indigenous share of total workforce, %
Construction	2016	6,660	247,395	254,060	2.6%
	2021	7,765	288,275	296,040	2.6%
All industries	2016	82,195	4,071,820	4,154,010	2.0%
	2021	94,350	4,250,560	4,344,910	2.2%

Source: BuildForce Canada calculations based on Statistics Canada's 2021 and 2016 Census of the Population

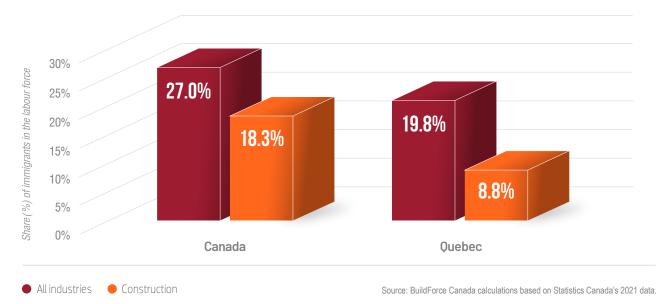


Figure 11: Share (%) of immigrants in the construction labour force, 2021

Statistics Canada, 2021 Census, custom data request

CONCLUSIONS AND IMPLICATIONS

Quebec's construction market experienced another strong year of growth in 2022. Although investment in the non-residential and residential sectors recorded mixed results, with the former rising and the latter contracting slightly, overall investment levels reached a new record high. Activity will step down in 2023, as interest rates curb strong housing activity, but investment should remain at elevated levels through the forecast period.

The outlook for the residential sector sees an almost unbroken series of annual declines in new-housing investment as builders respond to an aging population and as the number of international migrants contracts in later years of the forecast period. By the end of the period, starts contract by more than 25,700 units (-43%) compared to elevated 2022 levels. Renovation and maintenance work, which account for a greater share of employment than new-housing construction, sustain a nearly unbroken series of increases across the decade, but not by enough to offset losses in the new-construction segment. By 2032, residential employment contracts by 12,400 workers (-12%), with losses mostly related to declines in demand for new housing (-18,000 workers).

Non-residential construction leads a broad recovery, with significant gains over the short term, driven by a post-COVID private-sector recovery and by higher levels of public-sector investment in the health

care, education, public-transit, and engineering-construction sectors. Employment demands peak in 2023 and are sustained into 2024 before receding in line with many of these major projects, before growing again, more modestly, after 2028.

Retirements loom large. The province's construction industry must address an aging workforce, with an estimated 48,200 workers, or 21% of its current labour force, expected to retire by 2032.

Meeting demands across the 2023–2032 forecast period will require a combination of strategies that include enhanced local recruitment and training, the recruitment of immigrants, promoting career opportunities to workers with comparable skill sets who have been displaced from other industries, and potentially recruiting out-ofprovince workers during anticipated peak periods over the near term.

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 current industry expectations of economic growth and assumptions about immigration to the province. Any changes to these assumptions present risks and potentially alter anticipated market conditions.

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Canada

APRIL 2023

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