

CONSTRUCTION & MAINTENANCE LOOKING FORWARD

RESIDENTIAL SUMMARY

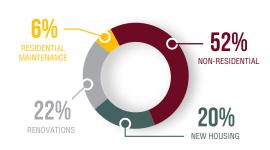
Retirements dominate hiring needs; 118,000 expected to retire by 2026

New workers will be required in residential construction over the 2017–2026 scenario period, despite slowing construction activity, driven by the need to address an aging workforce, where an estimated 118,400 residential construction workers are expected to retire over the next decade. This represents a significant loss of skilled workers. Replenishing exiting workers may become increasingly difficult with slower population growth and fewer young people available to enter the workforce. Residential construction must also compete against other industries that are facing similar demographic challenges.

While there are distinct provincial trends emerging across the scenario period, a common theme of slower growth is evident for both residential and non-residential construction activity. For residential, slower population growth is expected to drive housing starts lower across Canada, while increasing demands for renovation and maintenance work only partially offset new housing declines.

HIGHLIGHTS **2017–2026**

DISTRIBUTION OF CONSTRUCTION EMPLOYMENT IN 2017, CANADA



2017 RESIDENTIAL CONSTRUCTION INVESTMENT, CANADA (\$2007 BILLIONS*)

\$124

(0.9%)

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RESIDENTIAL INVESTMENT \$63

NEW HOUSING

\$65

X

RENOVATIONS

(2.19



MAINTENANCE

10-YEAR RESIDENTIAL OUTLOOK FOR CANADA







-37,400 (-7.3%)

EMPLOYMENT
CHANGE

HIGHLIGHTS

- Expected retirements will be a key source of new job opportunities across Canada, as an estimated 118,400 workers (or 21 percent of the current residential workforce) are expected to retire over the next decade.
- Retirements will be partially offset by first-time new entrants expected to be drawn from the local population aged 30 and younger, estimated at 94,100 over the next 10 years.
- Driven by the decline in new housing, residential construction is expected to see a loss of 37,400 jobs, or a 7 percent decline in employment.
- Declining activity may create a false impression of weak labour markets, when in reality, markets are anticipated to be generally balanced; unemployment rates are expected to decline over the long term as retiring workers exit the residential labour force.
- The largest declines occur in new housing in line with lower population growth and fewer housing starts in most provinces. Moderate, but steady, increases in renovation and maintenance activity partially offset the expected decline in new residential activity.
- Alberta, Manitoba, New Brunswick and Prince Edward Island go through a moderate up-cycle that will drive housing starts and employment up and then down, as demographic trends limit growth over the long term.
- Weaker population growth impacts British Columbia, Quebec, Nova Scotia and Newfoundland and Labrador with lower new housing activity over the scenario period, while housing activity is expected to be sustained near current levels in Ontario and Saskatchewan.

BuildForce's LMI System

BuildForce Canada uses a scenario-based forecasting system to assess future labour market conditions in both residential and non-residential construction. This labour market information (LMI) system tracks measures for 34 trades and occupations. BuildForce consults with industry, including owners, contractors and labour groups, to validate the scenario assumptions and construction project lists, and seeks input from government on related analysis. The system distills labour market conditions into ranks to provide signals to industry employers.

^{* \$2007} billions indicates that the investment values are in year 2007 dollars, that is, adjusted for inflation.

RESIDENTIAL CONSTRUCTION OUTLOOK

Cycles in new housing activity and employment vary by province and across the 2017–2026 scenario period. Weaker population growth, driven by an aging population, is anticipated to have a significant impact on the residential construction sector, as the demand for new housing largely fluctuates with population growth. Slower population growth limits household formation¹ in many provinces and this drives housing starts and residential investment lower. While new housing activity declines, there is growing demand for renovation and maintenance work that partially offsets job losses in new construction.

Even as new housing growth slows, an aging workforce and expected retirements continue to be a key driver of residential labour requirements; an estimated 118,400 residential-sector workers are expected to retire across the scenario period. The effects of an aging workforce may be more severe in some provinces, making attracting new workers a priority in these regions. Figure 1 provides a 10-year outlook on the number of retiring workers and the percent of the 2016 labour force this loss represents.

Declining activity presented in the outlook scenario may create a false impression of weak labour markets, when in reality markets

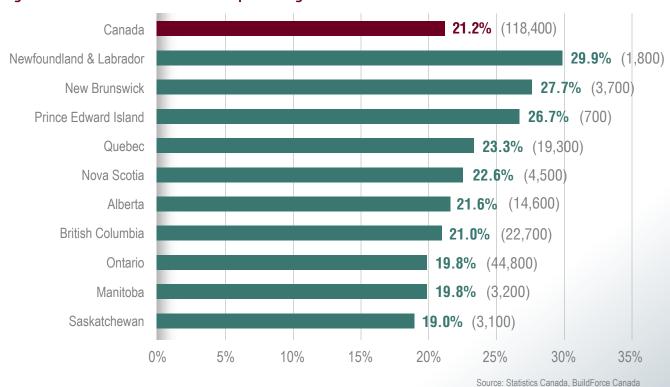
are anticipated to be generally balanced. Contrary to expectations, unemployment rates are expected to decline across the scenario period as retiring workers exit the residential labour force. In many markets across the country, there may be some difficulty finding experienced workers that are needed to build and renovate Canadian homes.

At the national level, housing activity is expected to slow compared to the last decade. Previous periods of strong growth and recruiting challenges are replaced by more sustained levels of activity and mostly balanced labour markets.

Over the past few years, the gap between housing starts and household formation has shrunk as the housing supply catches up to demand driven by changes in population. In the latter part of the scenario period, the gap is anticipated to widen, as demolition and vacancy requirements sustain housing starts above estimated formations.

The annual changes in activity at the national level are not large by historical standards, but the real differences occur at the provincial level, where investment and regional employment demands move in different orders of magnitude and directions. Table 1 shows the anticipated changes in residential employment by province for two periods: 2017 to 2021 and 2022 to 2026.

Figure 1: Cumulative retirements as a percentage of 2016 labour force



¹ 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.

Table 1: Change in residential employment, by province

REGION	/ % CHANGE 2017–2021	/ % CHANGE 2022–2026
Total employment	-2%	-6%
Newfoundland and Labrador	-21%	2%
Nova Scotia	-14%	-5%
New Brunswick	1%	-4%
Prince Edward Island	16%	-10%
Quebec	-8%	-5%
Ontario	-1%	-5%
Manitoba	4%	-4%
Saskatchewan	-3%	-7%
Alberta	15%	-4%
British Columbia	-5%	-11%

Source: Statistics Canada, BuildForce Canada

National residential employment is estimated to decline by 37,400 jobs, or 7 percent across the next decade, with losses concentrated in new housing as population growth slows. Job losses of 46,100 in new housing are partially offset by the creation of 8,700 renovation and maintenance jobs over the 10-year scenario period.

These changing market dynamics may require residential workers to shift across sectors where more regular gains in renovation work offer more steady employment opportunities compared to the more cyclical new residential construction. A key to workforce planning is identifying the potential for mobility of skilled workers across markets.

Across most regions, the outlook scenario demonstrates the potential for workers in new residential construction to move into renovation work as the former market weakens. Alternately, some workers may also seek opportunities in other construction sectors such as on small commercial projects during periods of slower growth. The potential for mobility depends on the qualifications and skills of the workforce.

Adding to market challenges are demographic trends and an aging workforce. Nationally, an estimated 118,400 residential-sector workers are expected to retire across the scenario period. The effects of an aging workforce may be more severe in some provinces, making attracting new workers a priority in these regions. Recruiting across the period may become increasingly difficult as population growth slows and fewer young people are available to enter the workforce, which has the long-term effect of driving unemployment down and leaving a limited pool of local workers. Residential construction will also need to compete against other industries that are facing similar demographic challenges.

Based on historical hiring trends, first-time new entrants expected to be drawn to residential construction from the local population aged 30 and younger is estimated at 94,100 over the next 10 years. With retirements expected to exceed estimated new entrants, industry will need to increase initiatives to engage underrepresented sources of labour, including Indigenous people, women, immigrants and workers from other industries.

Table 2 provides a summary of the estimated changes in the national residential workforce in 2016, the five-year period between 2017 and 2021 and across the full scenario period.

Table 2: Changes in the residential workforce, Canada

RESIDENTIAL WORKFORCE	ADJUSTMENT			
	Employment	-4,500	-7,900	-37,400
Demand	Labour force change	-4,500	-15,300	-47,100
Demana	Retirements	-11,500	-59,300	-118,400
Supply	New entrants	10,300	48,300	94,100
Зарріу	Net mobility	-3,200	-4,300	-22,700

Source: Statistics Canada, BuildForce Canada

PROVINCIAL INSIGHTS

This section describes the investment cycles in new housing and renovations, and the related employment trends and replacement demand driven by expected retirements for each province.

A recurring trend across all provinces is the expected growth in renovation and maintenance work and related employment opportunities across the scenario period. The impact of these job gains only partially offsets the expected employment declines in new housing, as slower population growth limits household formation, housing starts and new residential investment over the next decade.

Across the scenario period, total residential employment is expected to decline in most provinces, except Alberta, which is rising from significant declines reported in 2015 and 2016, and Prince Edward Island, a small market area that is expected to see a moderate rise. More significant job losses are expected in Nova Scotia and Newfoundland and Labrador where older populations and slower population growth translate into lower demands for new houses. This compares to Ontario, where steady immigration and population growth sustain demand for new housing.

With an aging population, a key source of job opportunities will be driven by the need to replenish an aging construction workforce. A significant loss of skilled workers is expected over the next decade as a large portion of the current workforce enters retirement age. Initiatives related to training, mentorship and retention will be an industry priority across all regions.

NEWFOUNDLAND AND LABRADOR

Newfoundland and Labrador's construction industry is returning to pre-resource-boom levels, leading to employment losses as labour markets adjust. Despite declining residential activity in the province, industry must still contend with an aging workforce and the anticipated exit of an estimated 1,800 workers, or 30 percent of the current labour force, over the coming decade due to retirements.

Major resource projects drew in workers from outside of the province from 2008 to 2014, creating substantial demand for new housing. Since the peak in 2012, housing starts have been

on a steady decline following the trend in household formation. A housing down-cycle, which began in 2013, resulted in a 50 percent decline in housing starts to 2016.

Across the scenario period, negative natural population growth (births less death) and out-migration contribute to a declining population and lower household formations. Starts are expected to decline a further 40 percent by 2021 and then remain near 1,000 units over the remainder of the scenario period to 2026, reflecting demolition and vacancy requirements.

A shrinking population limits activity in new housing, while an extended economic downturn puts a damper on renovation expenditures. Across the 2017–2026 scenario period, residential employment in the province is expected to decline by 900 jobs, with job losses concentrated in the first half of the scenario period. Figure 2 shows Newfoundland and Labrador's residential construction employment growth by sector.

Table 3 provides a summary of the estimated changes in the province's residential workforce in 2016, the five-year period between 2017 and 2021, and across the full 10-year outlook.

Table 4 shows residential rankings for Newfoundland and Labrador. The slowing pace of declines in residential activity allowed residential labour markets to briefly balance in 2016 for some trades and occupations. As employment losses continue, market conditions weaken between 2017 and 2020. As renovation activity recovers and new housing bottoms out, markets move back toward more balanced conditions by 2021. Later in the scenario period, rising retirements begin to tighten markets for selected trades and occupations.

BuildForce assesses market conditions for 34 construction trades and occupations. The rankings for some trades working in the residential sector are suppressed due to the small size of the workforce (<100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Trades may also be excluded because they typically do not work in the sector being assessed (e.g., boilermakers, millwrights, etc. in residential construction). For Newfoundland and Labrador, residential rankings are reported for 10 trades and occupations.

Employment 7,000 6,000 5,000 4,000 3,000 2,000 1,000 0 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 Maintenance Renovations New housing

Figure 2: Residential construction employment growth outlook, Newfoundland and Labrador

Source: Statistics Canada, BuildForce Canada

Table 3: Changes in the residential workforce, Newfoundland and Labrador

RESIDENTIAL WORKFORCE	RESIDENTIAL WORKFORCE ADJUSTMENT		5 years 2017–2021	10 years 2017–2026
	Employment	-100	-1,000	-900
Demand	Labour force change	-200	-1,500	-1,500
Demana	Retirements	-200	-1,000	-1,800
Supply	New entrants	100	400	800
Suppry	Net mobility	-100	-900	-500

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.



The labour market assessment for some trades is limited by the small size of the workforce (<100 employed). In consultation with the provincial LMI committee, the rank is suppressed because of limited statistical reliability.

Table 4: Residential market rankings, Newfoundland and Labrador

TRADES AND OCCUPATIONS - RESIDENTIAL	2016	2017	2018	2019	2020	2021	/2022	2023	/2024	2025	2026
Carpenters	2	2	2	2	2	3	3	3	3	3	3
Construction managers	3	2	2	2	2	3	3	3	3	4	4
Contractors and supervisors	3	3	2	2	2	3	3	3	4	4	3
Electricians	3	2	2	2	2	3	3	3	3	3	3
Home building and renovation managers	3	2	2	2	2	3	3	4	4	4	3
Painters and decorators (except interior decorators)	2	3	3	3	2	3	3	3	3	3	3
Plasterers, drywall installers and finishers and lathers	2	3	2	2	2	3	3	3	4	3	3
Residential and commercial installers and servicers	2	3	2	2	2	3	3	3	3	3	3
Roofers and shinglers	3	3	3	3	3	3	3	3	3	3	3
Trades helpers and labourers	2	2	2	2	2	3	3	3	3	3	3

NOVA SCOTIA

Nova Scotia's residential labour markets will find a new balance amid market shifts. Long-term declines in new housing activity are expected in anticipation of a shrinking population. As the gap between deaths and births widens, and workers from the local population potentially leave the province in search of job opportunities, population growth is expected to turn negative starting in 2018 and continue on to 2026.

These changes in population dynamics translate into lower demand for new housing. Activity in renovation is also anticipated to decline in the medium term, reflecting weak economic conditions and falling disposable income. Growth in renovation spending resumes post 2021 as economic conditions improve, adding to residential employment.

- Residential employment has fallen 5 percent since the peak in 2014, with declines concentrated in new housing. Further declines of 18 percent are expected over the coming decade.
- Renovation employment gains are expected in the latter part of the scenario period, but declines in the near term outweigh these gains, leading to a moderate decline of renovation jobs across the entire period.
- There is an estimated net loss of 3,000 residential jobs in the province over the 2017–2026 scenario period.
- Retirements from the residential construction sector are estimated at 4,500 workers, or 23 percent of the current residential workforce; a significant loss of valuable skills and experience.

Figure 3 illustrates Nova Scotia's residential employment change by sector.

A shrinking population and declining new housing activity suggest residential construction workers may need to shift their focus to renovation and maintenance work. Currently, approximately half of all residential construction workers make a living in renovation; a number that is expected to increase to more than 60 percent by 2026.

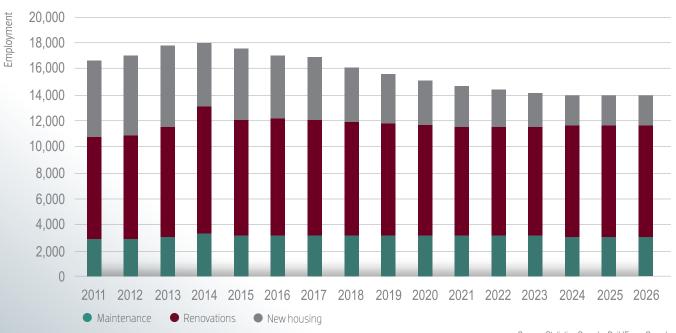
Nova Scotia may face some market challenges even amid declining activity, as industry must address an aging workforce. Focus will need to remain on attracting, training and retaining qualified workers across the scenario period as the number of retirements outpaces the number of youth estimated to enter the provincial residential workforce.

Table 5 summarizes the changes in Nova Scotia's residential workforce in 2016, the five-year period from 2017 to 2021, and the full 10-year outlook.

Table 6 shows residential labour market rankings for Nova Scotia, indicating weakness between 2018 and 2020 as employment requirements fall. Out-mobility and slowing rates of decline contribute to re-balancing market conditions after 2020. Weaker conditions are anticipated for trades and occupations more concentrated in new housing construction. Strengthening renovation demands help balance conditions over the latter half of the scenario period.

BuildForce assesses market conditions for 34 construction trades and occupations. The rankings for some trades working in the

Figure 3: Residential construction employment growth outlook, Nova Scotia



Source: Statistics Canada, BuildForce Canada

residential sector are suppressed due to the small size of the workforce (<100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Trades may also be excluded because they typically do not work in the sector

being assessed (e.g., boilermakers, millwrights, etc. in residential construction). For Nova Scotia, residential rankings are reported for 17 trades and occupations.

Table 5: Changes in the residential workforce, Nova Scotia

RESIDENTIAL WORKFORCE	ADJUSTMENT	2016	5 years 2017–2021	10 years 2017–2026
	Employment	-500	-2,400	-3,000
Demand	Labour force change	-600	-3,300	-4,400
Demand	Retirements	-500	-2,500	-4,500
Supply	New entrants	400	1,700	3,100
Supply	Net mobility	-400	-2,500	-3,000

Source: BuildForce Canada

Table 6: Residential market rankings, Nova Scotia

TRADES AND OCCUPATIONS – RESIDENTIAL	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Bricklayers	3	3	2	3	3	3	3	3	3	3	3
Carpenters		3	2	2	2	3	3	3	3	3	3
Construction estimators	2	3	2	2	2	2	3	3	3	3	3
Construction managers	2	3	2	2	2	2	3	3	3	3	3
Contractors and supervisors	3	3	3	3	3	3	3	3	3	3	3
Electricians	2	3	2	2	2	3	3	3	3	3	3
Floor covering installers	2	3	3	3	3	3	3	3	3	3	3
Heavy equipment operators (except crane)	3	3	2	2	3	3	3	3	3	3	3
Home building and renovation managers		3	3	4	3	3	3	3	3	3	3
Painters and decorators (except interior decorators)	3	3	3	3	3	3	3	3	3	3	3
Plasterers, drywall installers and finishers and lathers		3	2	3	3	3	3	3	3	3	3
Plumbers	2	3	2	3	3	3	3	3	3	3	3
Residential and commercial installers and servicers	3	3	3	3	3	3	3	3	3	3	3
Roofers and shinglers		3	3	3	3	3	3	3	3	3	3
Sheet metal workers	2	3	2	2	2	2	3	3	3	3	3
Trades helpers and labourers	2	3	2	2	2	3	3	3	3	3	3
Truck drivers	3	3	2	2	2	3	3	3	3	3	3

NEW BRUNSWICK

Following three years of declining population, 2016 marked the beginning of renewed population growth for New Brunswick. Rising immigration and retention of the local population is expected to drive a modest up-cycle in population growth to 2021 before growth trends downward for the remainder of the scenario period.

The start of a mild housing up-cycle raises residential employment between 2018 and 2021. Housing construction cycles back down after 2022 due to an aging population and declines in household formations, though renovation activity strengthens. By the end of the scenario period, total residential employment remains relatively unchanged compared to 2016, with renovation and maintenance work accounting for more than 75 percent of total residential activity in the province.

- The short-term growth is driven primarily by the province's relatively stable economic conditions to 2021, as proposed major development projects are expected to fuel economic growth.
- While 400 jobs in new housing are created between 2018 and 2021, new housing employment is anticipated to contract by 650 workers from 2021 to 2026.
- Total new housing, renovation and maintenance employment declines by 400 jobs across the 2017–2026 scenario period.

Figure 4 shows the employment trends by sector in New Brunswick's residential construction industry.

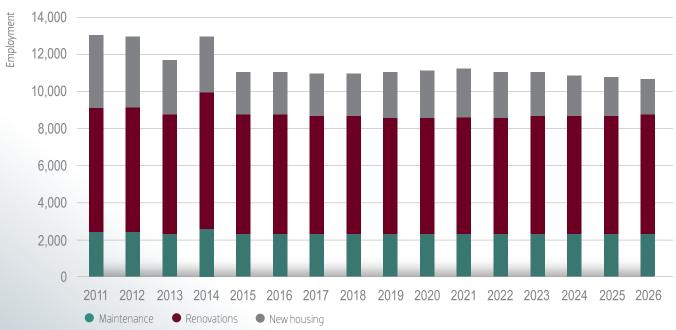
Recruiting challenges during peak periods may still be a source of concern, as replenishing a retiring workforce will be critical over the next decade. Retirements are estimated at 3,700 workers, or 28 percent of the province's current residential workforce. This is a significant loss of experienced workers that will need to be replaced.

Table 7 summarizes the changes in New Brunswick's residential workforce in 2016, the five-year period from 2017 to 2021, and the full 10-year outlook.

Table 8 shows rankings for New Brunswick's residential labour markets, which were still recovering in 2016 from recent declines, moving toward more balanced conditions in 2017 and then remaining generally balanced across most of the scenario period. Conditions for construction managers, which have an older age profile, are expected to tighten with the anticipated rise in new housing activity between 2018 and 2020. With rising renovation activity, the market strengthens for renovation managers, tightening conditions in the latter half of the scenario period.

BuildForce assesses market conditions for 34 construction trades and occupations. The rankings for some trades working in the residential sector are suppressed due to the small size of the workforce (<100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Trades may also be excluded because they typically do not work in the sector being assessed (e.g., boilermakers, millwrights, etc. in residential construction). For New Brunswick, residential rankings are reported for 16 trades and occupations.

Figure 4: Residential construction employment growth outlook, New Brunswick



Source: Statistics Canada, BuildForce Canada

Table 7: Changes in the residential workforce, New Brunswick

RESIDENTIAL WORKFORCE A	RESIDENTIAL WORKFORCE ADJUSTMENT		5 years 2017–2021	10 years 2017–2026
	Employment	100	100	-400
Demand	Labour force change	-800	-600	-1,400
Demand	Retirements	-400	-1,900	-3,700
Supply	New entrants	200	1,200	2,300
Suppry	Net mobility	-600	200	0

Table 8: Residential market rankings, New Brunswick

TRADES AND OCCUPATIONS – RESIDENTIAL	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Bricklayers	3	3	3	3	3	3	3	3	3	3	3
Carpenters	3	3	3	3	3	3	3	3	3	3	3
Construction estimators	2	2	3	3	3	3	3	3	3	3	3
Construction managers	3	3	4	4	4	3	3	3	3	3	3
Contractors and supervisors	2	3	3	3	3	3	3	3	3	3	3
Electricians	2	3	3	3	3	3	3	3	3	3	3
Floor covering installers	2	3	3	3	3	3	3	3	3	3	3
Heavy equipment operators (except crane)	3	3	3	3	3	3	3	3	3	3	3
Home building and renovation managers	3	3	3	3	3	3	3	4	4	4	4
Painters and decorators (except interior decorators)	3	3	3	3	3	3	3	3	3	3	3
Plasterers, drywall installers and finishers and lathers	2	3	3	3	3	3	3	3	3	3	3
Plumbers	2	2	3	3	3	3	3	3	3	3	3
Residential and commercial installers and servicers	2	3	3	3	3	3	3	3	3	3	3
Roofers and shinglers	2	3	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

PRINCE EDWARD ISLAND

A steady recovery of Prince Edward Island's new housing market is anticipated over the next five years. Driven by increasing immigration, growth in the population is expected to drive household formation and housing starts to a peak in 2022.

- Increased new housing is expected to generate more than 350 residential jobs from 2017 to 2022.
- In the latter part of the scenario period, slower population growth leads to moderate declines in new housing spending and employment.
- Renovation and maintenance activity is relatively unchanged across the outlook period, with employment remaining near current levels
- By the end of the scenario period there is a modest net gain of nearly 100 residential jobs.

Retirements are estimated at 700 over the next decade, or 27 percent of the current residential labour force. Figure 5 shows Prince Edward Island's change in residential employment by sector.

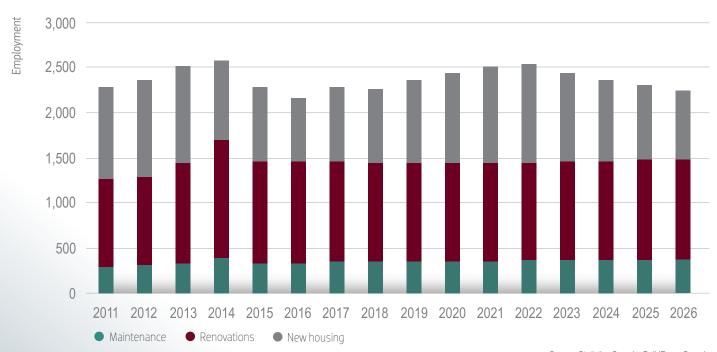
Recruiting during peak periods may pose some challenges as the province will need to cope with the retirement of a large portion of the workforce.

Table 9 captures the estimated changes in Prince Edward Island's residential workforce in 2016, the five-year period between 2017 and 2021, and across the full scenario period.

Table 10 shows residential rankings for Prince Edward Island. Labour markets are generally balanced across the scenario period, signalled by a rank of 3. Market conditions for trades concentrated in new housing were weak in 2016 as activity declined, but are expected to tighten in 2017 with rising housing starts. Market conditions loosen over the latter half of the scenario period as housing cycles down.

BuildForce assesses market conditions for 34 construction trades and occupations. The rankings for some trades working in the residential sector are suppressed due to the small size of the workforce (<100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Trades may also be excluded because they typically do not work in the sector being assessed (e.g., boilermakers, millwrights, etc. in residential construction). For Prince Edward Island, residential rankings are reported for 7 trades and occupations.

Figure 5: Residential construction employment growth outlook, Prince Edward Island



Source: Statistics Canada, BuildForce Canada

Table 9: Changes in the residential workforce, Prince Edward Island

RESIDENTIAL WORKFORCE	ADJUSTMENT	2016	5 years 2017–2021	10 years 2017–2026
	Employment	-100	300	100
Demand	Labour force change	-100	300	0
Jemana	Retirements	-100	-300	-700
Supply	New entrants	0	300	500
эчрргу	Net mobility	-100	400	200

Table 10: Residential market rankings, Prince Edward Island

TRADES AND OCCUPATIONS - RESIDENTIAL	2016	2017	2018	2019	2020	2021	2022	/2023	/2024	2025	2026
Carpenters	2	3	3	3	3	3	3	2	2	3	3
Contractors and supervisors	3	3	3	3	3	3	3	3	2	3	3
Electricians	2	4	3	4	4	4	3	2	2	2	2
Home building and renovation managers	3	3	3	3	3	3	3	3	3	3	3
Painters and decorators (except interior decorators)	3	3	3	3	3	3	3	3	3	3	3
Residential and commercial installers and servicers	3	3	3	3	3	3	3	3	3	3	3
Trade helpers and labourers	2	4	3	4	4	4	3	2	2	2	2

Source: BuildForce Canada

QUEBEC

Over the next decade, residential construction in Quebec will see a growing demand for renovation and maintenance work, while new housing activity continues on a steady downward trajectory. Currently, more than half of the workers employed in the province's residential sector are concentrated in renovation work; a number that is expected to increase to two-thirds by 2026.

Since the recent peak in 2010, housing starts have declined 30 percent due to weaker population growth and an aging population, resulting in less demand for new housing. This downward trend extends over the 2017–2026 scenario period with a marked deceleration after 2021. Renovation activity, however, is tied to an older housing stock and rises across the period.

- Employment losses are anticipated in new housing, with employment declines across the scenario period.
 - The more stable renovation sector posts modest employment gains, but this only partially offsets the decline in new housing.

- There is an estimated net loss of almost 10,000 residential jobs over the scenario period.
- An estimated 19,300 residential workers, or 23 percent of the current workforce, are expected to retire across the scenario period.

Figure 6 summarizes the change in residential employment by sector in Quebec.

Replacement demands due to retirements will dominate hiring requirements over the next 10 years. A significant portion of Quebec's population is entering the age bracket of 65 and older over the upcoming decade, while the share of the population in their prime working years (25 to 54 years of age) is expected to decline.

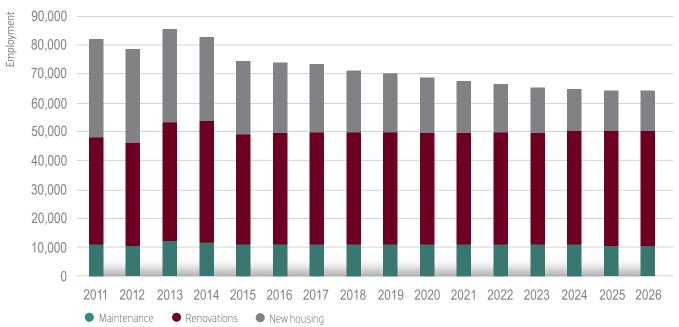
Table 11 summarizes the changes in Quebec's residential workforce in 2016, the five-year period from 2017 to 2021, and the full scenario period.

Table 12 shows residential rankings for Quebec with generally balanced labour markets across the scenario period, signalled by a rank of 3. The continuing, but moderate, declining trend in residential employment is partially offset by rising retirements.

BuildForce assesses market conditions for 34 construction trades and occupations. The rankings for some trades working in the

residential sector are suppressed due to the small size of the workforce (<100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Trades may also be excluded because they typically do not work in the sector being assessed (e.g., boilermakers, millwrights, etc. in residential construction). For Quebec, residential rankings are reported for 29 trades and occupations.

Figure 6: Residential construction employment growth outlook, Quebec



Source: Statistics Canada, BuildForce Canada

Table 11: Changes in the residential workforce, Quebec

RESIDENTIAL WORKFORCE	ADJUSTMENT	2016	5 years 2017–2021	10 years 2017–2026
	Employment	-700	-6,100	-9,800
Demand	Labour force change	-3,600	-8,100	-12,800
Demand	Retirements	-1,900	-9,800	-19,300
Supply	New entrants	1,400	6,600	13,100
Suppry	Net mobility	-3,100	-4,900	-6,600

Table 12: Residential market rankings, Quebec

TRADES AND OCCUPATIONS - RESIDENTIAL	2016	/ 2017	2018	2019	/ 2020	2021	/2022	2023	/2024	2025	2026
Bricklayers	3	3	3	3	3	3	3	3	3	3	3
Carpenters	3	3	3	3	3	3	3	3	3	3	3
Concrete finishers	3	3	3	3	3	3	3	3	3	3	3
Construction estimators	2	3	2	3	3	3	3	3	3	3	3
Construction managers	3	3	2	3	3	3	3	3	3	3	3
Contractors and supervisors	3	3	3	3	3	3	3	3	3	3	3
Crane operators	3	3	3	3	3	3	3	3	3	3	3
Electrical power line and cable workers	3	3	3	3	3	3	3	3	3	3	3
Electricians	3	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	3	3	3	3	3	3	3	3	3	3	3
Gasfitters	3	3	3	3	3	3	3	3	3	3	3
Glaziers	3	3	3	3	3	3	3	3	3	3	3
Heavy equipment operators (except crane)	3	3	3	3	3	3	3	3	3	3	3
Heavy-duty equipment mechanics	3	3	3	3	3	3	3	3	3	3	3
Home building and renovation managers	3	3	3	3	3	3	3	3	3	3	3
Insulators	3	3	3	3	3	3	3	3	3	3	3
Ironworkers and structural metal fabricators	3	3	3	3	3	3	3	3	3	3	3
Painters and decorators (except interior decorators)	3	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	3	3	3	3	3	3	3	3	3	3	3
Refrigeration and air conditioning mechanics	3	3	3	3	3	3	3	3	3	3	3
Residential and commercial installers and servicers	3	3	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	3	3	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	3	3	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

ONTARIO

Since the 2008–2009 recession, Ontario's housing market has rebounded quickly. The expansion period that began in 2010 is expected to reach a peak in 2017 and then is sustained near historically high levels of activity for most of the next decade. Driven primarily by immigration, population growth is anticipated to stabilize, averaging 1 percent growth per year over the scenario period. Steady population growth translates into stable housing starts, which are expected to average 76,000 units per year. Total residential employment declines by 12,300 workers, or 6 percent across the full 10-year outlook, with job losses concentrated in new housing, as population growth slows by the end of the scenario period. Employment in renovation is sustained at elevated levels, while maintenance employment rises by 550 workers, or 2 percent by the end of the scenario period.

Figure 7 summarizes the change in residential employment by sector in Ontario.

Ontario's residential construction activity is expected to plateau over the next decade with activity sustained well above historical levels. Even with growth slowing across the period, industry will need to remain focused on replacing workers expected to retire over the next decade. The aging workforce in Ontario translates into retirements estimated at 44,800 workers, or 20 percent of the current residential construction workforce. This significant loss of workers will outpace the expected rate of entry of youth into residential construction.

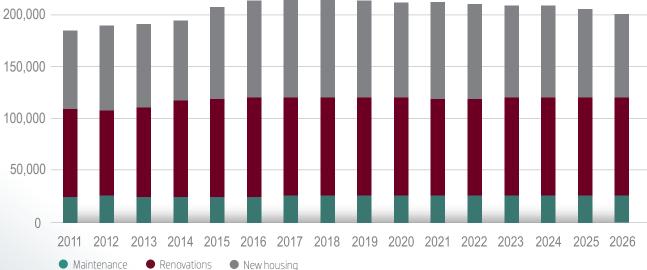
Table 13 shows the changes in Ontario's residential workforce in 2016, the five-year period from 2017 to 2021, and the full 10-year outlook.

Combined, the Greater Toronto Area and Central Ontario regions account for more than three-quarters of Ontario's residential construction labour market. Dynamics in these regions shape the overall provincial trends.

• In Central Ontario, activity in new housing is expected to increase in 2017 and then be sustained near current levels, while demand for renovation and maintenance work continues steady, but moderate, growth.

250,000 200,000

Figure 7: Residential construction employment growth outlook, Ontario



Source: Statistics Canada, BuildForce Canada

Table 13: Changes in the residential workforce, Ontario

RESIDENTIAL WORKFORCE	ADJUSTMENT	2016	5 years 2017–2021	10 years 2017–2026
	Employment	6,100	-2,500	-12,200
Demand	Labour force change	4,200	400	-10,200
Jemana	Retirements	-4,200	-22,300	-44,800
Supply	New entrants	4,300	20,400	39,100
pp.y	Net mobility	4,100	2,200	-4,500

- Slower population growth and aging demographics in Eastern
 Ontario translate into declining demand for new housing,
 generating some residential job losses across the scenario period.
- Another year of accelerated residential activity and employment growth is expected in the Greater Toronto Area. An estimated 3,500 residential jobs are expected to be created in 2017, with gains in new housing, renovation and maintenance. The 2017 peak is followed by steady, but moderate, employment declines as new housing activity slows.
 - By the end of the scenario period there is a modest loss of residential jobs compared to 2016, with declines in new housing partially offset by renovation and maintenance work, which continue to create jobs across the scenario period.
- Slower economic activity and weak population growth have caused residential employment in **Northern Ontario** to decline by nearly 50 percent since a 2011 peak. Later in the scenario period, however, new resource development is anticipated to bring in workers from outside the region, fuelling a moderate housing up-cycle from 2020 to 2025 and increased employment opportunities.
- A moderate housing up-cycle is anticipated in Southwest
 Ontario, driven by improved economic conditions. Modest gains
 in housing starts continue over the near term, and then cycle
 down after 2022 as population growth slows. Steady growth in
 renovations partially offsets new housing employment declines
 in the latter half of the scenario period.

Table 14 summarizes Ontario's residential employment by region.

Tables 15 through 19 show residential rankings for Ontario's five regions: Central, Eastern, Greater Toronto Area (GTA), Northern and Southwest. Market rankings are unavailable at the provincial level.

BuildForce assesses market conditions for 34 construction trades and occupations. The rankings for some trades working in the

Table 14: Changes in residential employment, by region, Ontario

REGION	/ % CHANGE 2017–2021	/ % CHANGE 2022–2026
Total residential employment — Ontario	-1%	-5%
Central Ontario	0%	-5%
Eastern Ontario	-4%	-11%
Greater Toronto Area	-2%	-3%
Northern Ontario	0%	6%
Southwest Ontario	3%	-9%

Source: Statistics Canada, BuildForce Canada

residential sector are suppressed due to the small size of the workforce (<100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Trades may also be excluded because they typically do not work in the sector being assessed (e.g., boilermakers, millwrights, etc. in residential construction). At the regional level, residential rankings are reported as follows:

- Central Ontario 26 trades and occupations
- Eastern Ontario 20 trades and occupations
- Greater Toronto Area 27 trades and occupations
- Northern Ontario 11 trades and occupations
- Southwest Ontario 18 trades and occupations

Table 15 shows residential labour market rankings for **Central Ontario**. Tighter rankings for selected trades in 2016 and 2017 reflect consecutive years of rising labour demands related to new housing construction. Labour markets return to balanced conditions

after 2017 as the pace of new housing slows. Over the scenario period, steady levels of renovation activity contribute to maintaining balanced labour markets, signalled by a rank of 3.

Table 15: Residential market rankings, Central Ontario

TRADES AND OCCUPATIONS – RESIDENTIAL	2016	2017	2018	2019	2020	2021	/2022	2023	2024	2025	2026
Bricklayers	3	3	3	3	3	3	3	3	3	3	3
Carpenters	3	3	3	3	3	3	3	3	3	3	3
Concrete finishers	3	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	3	3	3	3	3	3	3	3	3
Contractors and supervisors	3	3	3	3	3	3	3	3	3	3	2
Electricians	3	3	3	3	3	3	3	3	3	3	2
Elevator constructors and mechanics	3	4	3	3	3	3	3	3	3	3	2
Floor covering installers	3	3	3	3	3	3	3	3	3	3	2
Gasfitters	3	3	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	3	3	3	3	3	3	3	3	3	3
Home building and renovation managers	4	4	3	3	3	3	3	3	3	3	3
Insulators	3	3	3	3	3	3	3	3	3	3	2
Ironworkers and structural metal fabricators	3	3	3	3	3	3	3	3	3	3	3
Painters and decorators (except interior decorators)	3	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	3	3	3	3	3	3	3	3	3	3	2
Refrigeration and air conditioning mechanics	3	3	3	3	3	3	3	3	3	3	2
Residential and commercial installers and servicers	3	3	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	3	3	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	2
Truck drivers	3	3	3	3	3	3	3	3	3	3	2
Welders and related machine operators	3	3	3	3	3	3	3	3	3	3	2

Table 16 shows residential rankings for **Eastern Ontario**. Generally balanced labour market conditions, signalled by a rank of 3, reflect stable demands for new housing construction and steady levels of renovation activity anticipated over the near

term. Labour markets begin to weaken in 2018 as new housing construction slows, but the slow pace of decline sustains mostly balanced markets over the latter half of the scenario period. Weaker conditions persist for trades and occupations more concentrated in new housing construction.

Table 16: Residential market rankings, Eastern Ontario

TRADES AND OCCUPATIONS - RESIDENTIAL	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Bricklayers	3	3	3	3	3	3	3	3	3	3	3
Carpenters	3	3	3	3	3	3	3	3	3	3	3
Concrete finishers	3	3	3	3	3	3	3	3	3	3	3
Construction estimators	3	3	2	3	3	3	3	3	3	3	3
Construction managers	4	3	2	3	3	3	2	2	2	2	2
Contractors and supervisors	3	3	3	3	3	3	3	3	3	3	3
Electricians	3	3	3	3	3	3	3	3	3	3	3
Floor covering installers	3	3	3	3	3	3	3	3	3	3	3
Heavy equipment operators (except crane)	3	3	3	3	3	3	3	3	3	3	3
Home building and renovation managers	3	3	3	3	3	3	3	3	3	3	3
Insulators	3	3	3	3	3	3	3	3	3	3	3
Painters and decorators (except interior decorators)	3	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	3	3	2	3	3	3	3	3	3	3	3
Residential and commercial installers and servicers	3	3	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	3	3	2	3	3	3	3	3	3	3	3
Tilesetters	3	3	2	3	3	3	3	3	3	3	3
Trades helpers and labourers	3	3	2	3	3	3	3	2	3	3	3
Truck drivers	3	3	3	3	3	3	3	3	3	3	3

Table 17 shows residential rankings for the **Greater Toronto Area**. Recent high levels of new housing and renovation activity sustain tighter labour market conditions for several trades in 2016 and 2017. Conditions for trades and occupation more concentrated in

new housing weaken between 2020 and 2022 as housing starts decline, but by 2023, steady levels of renovation activity help contribute to more balanced market conditions, signalled by a rank of 3.

Table 17: Residential market rankings, Greater Toronto Area

TRADES AND OCCUPATIONS - RESIDENTIAL	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Bricklayers	4	3	3	3	3	3	3	3	3	3	3
Carpenters	4	3	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	4	3	3	3	2	3	3	3	3	3
Construction managers	4	4	3	3	2	2	2	3	3	3	2
Contractors and supervisors	4	4	3	3	3	2	3	3	3	3	3
Crane operators	4	4	3	3	2	2	3	3	3	2	2
Electricians	4	3	3	3	3	2	3	3	3	3	2
Elevator constructors and mechanics	4	4	3	3	3	2	3	3	3	3	2
Floor covering installers	4	4	3	3	3	2	3	3	3	3	3
Gasfitters	4	4	3	3	3	2	3	3	3	3	3
Glaziers	4	4	3	3	3	2	3	3	3	2	2
Heavy equipment operators (except crane)	4	3	3	3	2	3	3	3	3	3	3
Home building and renovation managers	4	4	3	3	2	2	2	3	3	3	3
Insulators	4	3	3	3	3	3	3	3	3	3	3
Ironworkers and structural metal fabricators	4	4	3	3	3	2	3	3	3	3	2
Painters and decorators (except interior decorators)	3	3	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	4	3	3	3	2	3	3	3	3	3
Refrigeration and air conditioning mechanics	4	4	3	3	3	2	3	3	3	3	3
Residential and commercial installers and servicers	3	3	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	3	3	3	3	3	3	3	3	3	3
Tilesetters	4	4	3	3	3	2	2	3	3	3	3
Trades helpers and labourers	3	3	3	3	3	3	3	3	3	3	3
Truck drivers	4	3	3	3	3	3	3	3	3	3	3
Welders and related machine operators	4	4	3	3	3	2	3	3	3	3	3

Table 18 shows residential rankings for **Northern Ontario**. Over the near term, labour market conditions, signalled by a rank of 3, are generally balanced, but are expected to tighten for selected trades and occupations at the peak of the housing up-cycle between

2021 and 2023. Adverse trends in population growth dictate falling residential activity in the latter half of the scenario period, driving weaker conditions in 2026.

Table 18: Residential market rankings, Northern Ontario

TRADES AND OCCUPATIONS - RESIDENTIAL	2016	2017	2018	2019	2020	2021	2022	2023	/2024	/2025	2026
Bricklayers	3	3	3	2	3	3	4	3	3	3	2
Carpenters	3	3	3	2	3	4	4	4	3	3	2
Construction managers	3	4	4	2	2	4	4	4	3	3	2
Contractors and supervisors	3	3	3	3	3	3	3	3	3	3	3
Floor covering installers	3	3	3	3	3	3	3	3	3	3	3
Home building and renovation managers	3	3	3	3	3	4	4	4	3	3	3
Painters and decorators (except interior decorators)	3	3	3	3	3	3	3	3	3	3	3
Plasterers, drywall installers and finishers and lathers	3	3	3	2	3	3	4	3	3	3	2
Residential and commercial installers and servicers	3	3	3	3	3	3	3	3	3	3	3
Roofers and shinglers	3	3	3	3	3	3	3	3	3	3	3
Trades helpers and labourers	3	3	3	2	3	4	4	4	3	3	2

Source: BuildForce Canada

Table 19 shows residential rankings for **Southwest Ontario**. Labour market conditions, signalled by a rank of 3, are generally balanced over the scenario period. Conditions for some trades and

occupations tighten between 2017 and 2020 with peak levels in new housing demands. Labour markets weaken as new housing cycles down in the latter half of the decade.

Table 19: Residential market rankings, Southwest Ontario

TRADES AND OCCUPATIONS - RESIDENTIAL	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Bricklayers	3	3	3	3	3	3	3	3	3	3	3
Carpenters	3	3	3	3	3	3	3	3	3	3	3
Concrete finishers	3	3	3	3	3	3	3	3	3	3	3
Construction estimators	3	3	3	3	3	3	3	2	3	3	3
Construction managers	3	4	3	3	4	3	2	2	2	3	3
Contractors and supervisors	3	3	3	3	3	3	3	3	3	3	3
Electricians	3	3	3	3	3	3	3	3	3	3	3
Floor covering installers	3	3	3	3	3	3	3	3	3	3	3
Heavy equipment operators (except crane)	3	3	3	3	3	3	3	3	3	3	3

continued on next page

Table 19: Residential market rankings, Southwest Ontario (continued)

TRADES AND OCCUPATIONS – RESIDENTIAL	2016	2017	2018	2019	2020	2021	2022	2023	/2024	2025	2026
Home building and renovation managers	3	4	4	3	4	3	3	3	3	3	3
Painters and decorators (except interior decorators)	3	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	3	3	3	3	3	3	3	3	3	3	3
Residential and commercial installers and servicers	3	3	3	3	3	3	3	3	3	3	3
Roofers and shinglers	3	3	3	3	3	3	3	3	3	3	3
Tilesetters	3	3	3	3	3	3	3	2	2	3	3
Trades helpers and labourers	3	3	3	3	3	3	3	2	2	3	3
Truck drivers	3	3	3	3	3	3	3	3	3	3	3

MANITOBA

Manitoba's construction workforce has grown significantly to meet increased activity over the past decade, attracting new workers and drawing unemployment down to historically low levels. Growth in natural resources, hydroelectric projects and an overall strong economy provided the backdrop for solid population growth, fuelling a residential construction expansion. A key driver was immigration into Manitoba to meet growing job opportunities across the economy. Between 1998 and 2013, the number of immigrants coming to the province increased from an estimated 1,600 to more than 14,000 people. Housing starts peaked in 2013 at double the level reported in the early 2000s.

A modest down-cycle followed the 2013 peak, with both household formation and housing starts declining in 2014 and 2015 as population growth slowed. Activity was mostly unchanged in 2016. Increased housing starts are expected to drive a modest up-cycle between 2017 and 2020. Later in the scenario period, housing is expected to cycle down again, driven by slower population growth and lower levels of immigration.

- Residential employment gains of 1,000 jobs, concentrated in new housing construction, are anticipated to the peak in 2020.
- As population growth slows in the latter part of the scenario period, gains in employment are reversed, with a modest housing down-cycle anticipated to cause the loss of an estimated 1,000 jobs from 2021 to 2026.
 - Growing demands for renovation and maintenance work partially offset declines in new housing.
- Following moderate cycles, total residential employment is mostly unchanged at the end of the scenario period compared to 2016.
- An estimated 3,200 workers, or 20 percent of the current residential construction workforce, are expected to retire over the next decade

Figure 8 summarizes Manitoba's residential employment change by sector.

Attracting and retaining new workers will be an industry priority, as the residential sector will need to replenish a retiring workforce. While Manitoba enjoys a young population compared to other provinces, an estimated 3,200 workers, or 20 percent of the current residential construction workforce, are expected to retire over the next decade. The young population translates into new entrants offsetting labour force declines due to retirements.

Table 20 shows the changes in Manitoba's residential workforce in 2016, the five-year period from 2017 to 2021, and the full 10-year outlook.

Table 21 shows residential rankings for Manitoba. Labour markets in 2016 were mostly more balanced, signalled by a rank of 3, and are expected to remain generally balanced across most of the scenario period. Conditions for trades more heavily involved in new construction weaken with the expected moderate down-cycle starting in 2021 and 2022.

BuildForce assesses market conditions for 34 construction trades and occupations. The rankings for some trades working in the residential sector are suppressed due to the small size of the workforce (<100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Trades may also be excluded because they typically do not work in the sector being assessed (e.g., boilermakers, millwrights, etc. in residential construction). For Manitoba, residential rankings are reported for 17 trades and occupations.

18,000 16,000 12,000 10,000 8,000 4,000 2,000 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026

Figure 8: Residential construction employment growth outlook, Manitoba

Source: Statistics Canada, BuildForce Canada

Table 20: Changes in the residential workforce, Manitoba

Renovations

Maintenance

RESIDENTIAL WORKFORCE	ADJUSTMENT	2016	5 years 2017–2021	10 years 2017–2026
	Employment	100	500	-100
Demand	Labour force change	300	600	-200
Demana	Retirements	-300	-1,600	-3,200
Supply	New entrants	300	1,600	3,200
эчри	Net mobility	300	600	-200

New housing

Table 21: Residential market rankings, Manitoba

TRADES AND OCCUPATIONS - RESIDENTIAL	2016	2017	2018	2019	2020	/ 2021 _/	/2022	/2023	/2024	2025	2026
Bricklayers	3	3	3	3	3	3	3	3	3	3	3
Carpenters	3	3	3	3	3	2	3	3	3	3	3
Concrete finishers	3	3	3	3	3	3	3	3	3	3	3
Construction estimators	3	3	3	3	3	3	3	3	3	3	3
Construction managers	3	4	3	3	3	2	2	3	3	3	3
Contractors and supervisors	3	3	3	3	3	3	3	3	3	3	3
Electricians	3	3	3	3	3	3	3	3	3	3	3
Floor covering installers	3	3	3	3	3	3	3	3	3	3	3
Home building and renovation managers	4	3	3	4	3	3	3	3	3	3	3
Painters and decorators (except interior decorators)	3	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	3	3	3	3	3	3	3	3	3	3	3
Residential and commercial installers and servicers	3	3	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	3	3	3	3	3	2	3	3	3	3	3
Trades helpers and labourers	3	3	3	3	3	2	2	3	3	3	3
Truck drivers	3	3	3	3	3	3	3	3	3	3	3

SASKATCHEWAN

The recent natural resources boom gave rise to substantial growth in Saskatchewan. From the mid 1980s to the mid 2000s, Saskatchewan reported net population declines. The rise of resource-development-driven growth over the last decade reversed this trend, with workers being brought in from outside of the province and immigration seeing significant increases. The shift in population growth, driven by strong in-migration, benefitted the residential construction sector with rising housing demands.

As commodity prices fell over the last few years, the resource boom and economic growth slowed. While the province continues to have positive net in-migration, housing starts have tapered off at relatively high levels, averaging 5,000 units from 2017 to 2026, well below the 2012 peak when starts neared 10,000 units.

 Strong population growth and rising household formations propelled the housing market to peak in 2012.

- The down-cycle began in 2014 as commodity prices fell.
- Housing starts remain near 2010 levels across most of the scenario period before falling after 2023.
- An estimated 3,100 residential workers are expected to exit the workforce due to retirements.

Residential construction activity is sustained near current levels over the scenario period, with modest declines in both new housing and renovation investment over the medium term. Overall job losses total 1,400 across the 2017-2026 scenario period, with larger losses concentrated in the latter part of the decade, reflecting slower population growth and declines in new housing.

Figure 9 shows the residential employment change by sector in Saskatchewan.

While hiring requirements for new housing and renovation decline, industry may still be faced with moderate recruiting challenges as a significant share of the current workforce is expected to retire over the next decade.

20,000 18,000 16,000 14,000 12,000 10,000 8,000 6,000 4,000 2,000 0 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 Maintenance Renovations New housing

Figure 9: Residential construction employment growth outlook, Saskatchewan

Source: Statistics Canada, BuildForce Canada

Table 22: Changes in the residential workforce, Saskatchewan

RESIDENTIAL WORKFORCE	DJUSTMENT	2016	5 years 2017–2021	10 years 2017–2026
	Employment	-600	-400	-1,400
Demand	Labour force change	-900	-800	-1,700
Demand	Retirements	-300	-1,500	-3,100
Supply	New entrants	300	1,500	2,900
эцррцу	Net mobility	-900	-700	-1,500

Source: BuildForce Canada

Table 22 shows the changes in Saskatchewan's residential workforce in 2016, the five-year period from 2017 to 2021, and the full 10-year outlook.

Table 23 shows residential rankings for Saskatchewan. Labour markets that were still recovering in 2016 move toward more balanced conditions in 2017, signalled by a rank of 3, and remain generally balanced across most of the scenario period. Conditions for trades more heavily involved in new construction weaken briefly with the expected down-cycle starting in 2023.

BuildForce assesses market conditions for 34 construction trades and occupations. The rankings for some trades working in the residential sector are suppressed due to the small size of the workforce (<100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Trades may also be excluded because they typically do not work in the sector being assessed (e.g., boilermakers, millwrights, etc. in residential construction). For Saskatchewan, residential rankings are reported for 16 trades and occupations.

Table 23: Residential market rankings, Saskatchewan

TRADES AND OCCUPATIONS – RESIDENTIAL	2016	2017	2018	2019	2020	2021	2022	2023	/2024	2025	2026
Bricklayers	2	3	3	3	3	3	3	3	3	3	3
Carpenters	2	3	3	3	3	3	3	3	2	3	3
Construction managers	2	3	2	3	3	3	3	2	2	2	3
Contractors and supervisors	2	3	3	3	3	3	3	3	3	3	3
Electricians	2	3	3	3	3	3	3	3	2	3	3
Floor covering installers	2	3	3	3	3	3	3	3	3	3	3
Heavy equipment operators (except crane)	2	3	3	3	3	3	3	3	2	3	3
Home building and renovation managers	2	3	3	3	3	3	3	3	3	3	3
Painters and decorators (except interior decorators)	2	3	3	3	3	3	3	3	3	3	3
Plasterers, drywall installers and finishers and lathers	2	3	3	3	3	3	3	3	2	3	3
Plumbers	1	2	2	3	3	3	3	3	2	2	3
Residential and commercial installers and servicers	2	3	3	3	3	3	3	3	3	3	3
Roofers and shinglers	2	3	3	3	3	3	3	3	3	3	3
Sheet metal workers	1	2	2	3	3	3	3	3	2	2	3
Trades helpers and labourers	2	3	3	3	3	3	3	3	2	2	3
Truck drivers	2	3	3	3	3	3	3	3	2	3	3

ALBERTA

Alberta's housing market was an early casualty of the oil price collapse, with significant investment and employment declines in 2015 and 2016. Since the 2014 peak, employment has contracted by an estimated 25 percent, or 18,600 jobs. Job losses were concentrated in new housing, but were also evident in renovation work as the economy slowed and declining disposable income put a damper on home improvement spending.

The pace of decline slows in 2017 as housing starts and renovation activities stabilize. A partial recovery is expected after 2017 with slowing out-migration. An anticipated increase in household formations and moderate population growth help sustain a modest up-cycle in new housing construction between 2018 and 2022 as overall economic conditions improve.

- A slowing rate of out-migration from the province is expected to provide greater stability to residential employment in 2017 and 2018.
- A recovery in new housing activity is projected to take hold in 2018 and is expected to increase in 2019 as the economy recovers, raising immigration and household formations.
- The residential recovery is projected to add back 10,000 jobs by 2022, but residential employment remains below the 2014 peak.

- Changing demographics limit population growth post 2022, sending new housing activity and employment on a moderate decline across the remainder of the scenario period.
- Job losses total 4,200 from 2023 to 2026, with employment declines concentrated in new housing, while demand for renovation and maintenance work rises steadily across the decade.
- By 2026 there is a net gain of 5,800 residential jobs compared to 2016.

Figure 10 shows the residential employment change by sector in Alberta.

As labour markets adjust to changing demographics, attracting and retaining qualified workers must be among the top priorities for industry stakeholders. Although Alberta enjoys a relatively younger workforce than other provinces, meeting hiring requirements at peak periods may pose further challenges as a larger share of the workforce enters retirement age. Replacement demand in the residential sector is estimated at 14,600 workers, or 22 percent of the current labour force. Alberta's young labour force and its history of attracting out-of-province workers translate into new entrants outpacing retirements and labour force growth across the scenario period.

80.000 **Employment** 70,000 60,000 50,000 40,000 30.000 20,000 10,000 0 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 Maintenance Renovations New housing

Figure 10: Residential construction employment growth outlook, Alberta

Source: Statistics Canada, BuildForce Canada

Table 24: Changes in the residential workforce, Alberta

RESIDENTIAL WORKFORCE A	DJUSTMENT	2016	5 years 2017–2021	10 years 2017–2026
	Employment	-15,600	8,700	5,800
Demand	Labour force change	-11,000	4,000	1,600
	Retirements	-1,400	-6,900	-14,600
Supply	New entrants	1,100	5,400	11,500
	Net mobility	-10,600	5,500	4,700

Source: BuildForce Canada

Table 24 shows the changes in Alberta's residential workforce in 2016, the five-year period from 2017 to 2021, and the full 10-year outlook.

Table 25 shows residential labour market rankings for Alberta. Weak conditions at the start of the scenario period reflect two consecutive years of housing decline in 2015 and 2016. Declines slow in 2017 and labour markets gradually move toward more balanced conditions, signalled by a rank of 3, with the start of a moderate housing up-cycle in 2019; industry will need to recruit back some of the workers lost during the downturn. Conditions

weaken over the long term as population growth slows and the demand for new housing declines.

BuildForce assesses market conditions for 34 construction trades and occupations. The rankings for some trades working in the residential sector are suppressed due to the small size of the workforce (<100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Trades may also be excluded because they typically do not work in the sector being assessed (e.g., boilermakers, millwrights, etc. in residential construction). For Alberta, residential rankings are reported for 25 trades and occupations.

Table 25: Residential market rankings, Alberta

TRADES AND OCCUPATIONS - RESIDENTIAL	2016	5 / 2017	2018	2019	2020	2021	2022	202	3/2024	4 /202	2026
Bricklayers	1	2	3	3	3	3	3	3	3	2	3
Carpenters	1	2	3	3	3	3	3	3	2	2	3
Concrete finishers	1	2	3	3	3	3	3	3	3	3	3
Construction estimators	1	2	2	3	4	3	3	2	2	2	2
Construction managers	1	2	2	3	4	3	3	2	2	2	2
Contractors and supervisors	1	2	2	3	3	3	3	2	2	2	2
Electricians	1	2	2	3	3	3	3	3	2	2	2
Floor covering installers	1	2	2	2	3	3	3	2	2	2	2
Gasfitters	1	2	2	3	3	3	3	2	2	2	2
Glaziers	1	2	2	3	4	3	3	3	2	2	2
Heavy equipment operators (except crane)	1	2	3	3	3	3	3	3	3	2	3
Heavy-duty equipment mechanics	1	2	2	3	3	3	3	3	3	2	3
Home building and renovation managers	1	2	3	3	3	3	3	3	3	2	3
Insulators	1	2	3	3	4	3	3	3	2	2	3
Painters and decorators (except interior decorators)	1	2	3	3	3	3	3	3	3	3	3
Plasterers, drywall installers and finishers and lathers	1	2	3	3	3	3	3	3	3	2	3
Plumbers	1	2	2	2	3	3	3	2	2	2	2
Refrigeration and air conditioning mechanics	1	2	2	3	3	3	3	2	2	2	2
Residential and commercial installers and servicers	1	2	3	3	3	3	3	3	3	3	3
Roofers and shinglers	1	3	3	3	3	3	3	3	3	3	3
Sheet metal workers	1	2	2	3	4	3	3	3	2	2	2
Tilesetters	1	2	2	3	4	3	3	2	2	2	2
TradeS helpers and labourers	1	2	3	3	4	4	3	3	2	2	2
Truck drivers	1	2	3	3	3	3	3	3	3	3	3
Welders and related machine operators	1	2	2	3	3	3	3	2	2	2	2

BRITISH COLUMBIA

Following several years of steady growth that began in 2010, increased housing starts drove residential investment and employment to peak in 2016; total residential investment was up 50 percent compared to 2009.

A housing down-cycle is expected to start in 2017 as population growth slows and new housing declines. Declining new housing activity highlights the growing importance of renovation and maintenance work. It is anticipated that by 2026, nearly 65 percent of the residential workforce will be concentrated in renovation and

maintenance work. While total investment declines from the 2016 peak, it remains well above historical levels of activity.

- Declining new housing activity, driven by slower population growth, translates into a reduction of 22,000 residential construction jobs across the scenario period.
 - Job losses are partially offset by increasing employment in renovation and maintenance work, which adds 6,400 jobs over the next decade.

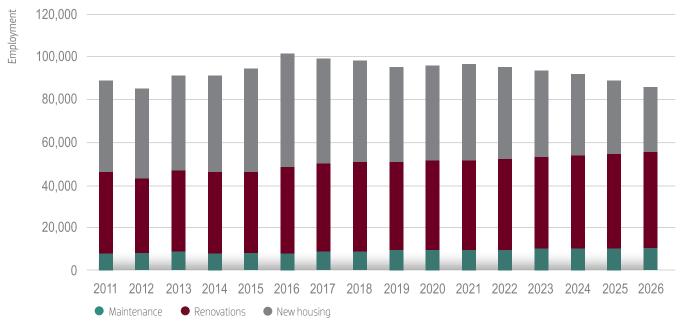
- Employment decline is concentrated from 2022 to 2026, with overall losses totalling 10,000 jobs.
 - Over the same period, renovation and maintenance work continues to grow, adding 2,800 jobs.
- There is a net loss of 15,500 residential jobs across the 2017–2026 scenario period compared to the 2016 peak.

Figure 11 shows the change in residential employment by sector in British Columbia.

Recruiting will remain an industry priority, as an estimated 22,700 workers, or 21 percent of the current workforce, are expected to retire across the scenario period. The number of youth entering the workforce only partially offsets the gap left by retiring workers, leading to labour force declines across the decade.

Table 26 shows the changes in British Columbia's residential workforce in 2016, the five-year period from 2017 to 2021, and the full 10-year outlook.

Figure 11: Residential construction employment growth outlook, British Columbia



Source: Statistics Canada, BuildForce Canada

Table 26: Changes in the residential workforce, British Columbia

RESIDENTIAL WORKFORCE ADJUSTMENT		2016	5 years 2017–2021	10 years 2017–2026
	Employment	6,900	-5,200	-15,400
Demand	Labour force change	8,100	-6,400	-16,400
	Retirements	-2,100	-11,400	-22,700
Supply	New entrants	2,100	9,200	17,600
	Net mobility	8,200	-4,200	-11,300

Table 27 shows residential labour market rankings for British Columbia. Tight markets in 2016 reflect the prolonged build-up in residential employment requirements and falling levels of unemployment. Projected declines in 2017 ease labour market pressures, with overall market conditions returning to balance for most trades, as signalled by a rank of 3.

BuildForce assesses market conditions for 34 construction trades and occupations. The rankings for some trades working in the

residential sector are suppressed due to the small size of the workforce (<100 workers) and limited statistical reliability when assessing labour market conditions at the sector level. Trades may also be excluded because they typically do not work in the sector being assessed (e.g., boilermakers, millwrights in residential construction). For British Columbia, residential rankings are reported for 27 trades and occupations.

Table 27: Residential market rankings, British Columbia

TRADES AND OCCUPATIONS - RESIDENTIAL	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Bricklayers	4	3	3	3	3	3	3	3	3	3	3
Carpenters	4	3	3	2	3	3	3	3	3	2	3
Concrete finishers	4	3	3	3	3	3	3	3	3	3	3
Construction estimators	4	2	3	3	3	3	3	3	3	3	3
Construction managers	5	3	3	3	3	3	3	3	3	3	2
Contractors and supervisors	4	3	3	3	3	3	3	3	3	3	3
Crane operators	5	3	3	2	3	3	3	2	2	2	2
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	3	3	3	3	3	3	3	3	3	3
Gasfitters	4	2	3	3	3	3	3	3	3	3	3
Glaziers	4	3	3	3	3	3	3	3	3	3	3
Heavy equipment operators (except crane)	4	3	3	2	3	3	3	3	3	3	3
Home building and renovation managers	4	3	3	3	4	4	3	3	3	3	3
Insulators	4	2	3	2	3	3	3	3	3	2	3
Ironworkers and structural metal fabricators	4	2	3	2	3	3	3	2	2	2	2
Painters and decorators (except interior decorators)	4	3	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	3	3	3	3	3	3	3	3	3
Refrigeration and air conditioning mechanics	4	3	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	2	3	3	3	3	3	3	3
Tilesetters	4	3	3	3	3	3	3	3	3	3	3
TradeS helpers and labourers	4	3	3	2	3	3	3	3	3	3	3
Truck drivers	4	3	3	3	3	3	3	3	3	3	3
Welders and related machine operators	4	3	3	3	3	3	3	3	3	3	3

REPLENISHING A RETIRING WORKFOCE

Canada's construction industry passes a tremendous peak and enters a modest growth period under the 2017–2026 outlook scenario. While growth is expected to slow, attracting and retaining qualified workers remains a top priority for industry stakeholders as markets adjust to changing demographics. An estimated 118,400 residential construction workers are expected to retire over the next decade. This demographic trend represents a significant loss of skilled workers that will require proactive planning.

Canada's population has been rapidly aging, putting a limit on population growth. While death rates continue to rise, birth rates continue on a downward trajectory, leading to a declining natural rate of population growth (births less deaths) across the scenario period. The aging of the population indicates the country may need to depend on immigration as the key driver to population growth. Figure 12 shows the factors contributing to population growth in Canada.

The aging of Canada's population continues to be a source of concern across industries. As the population ages, it may become more difficult to attract and retain new entrants to construction. Table 28 shows the population age distribution in Canada. By 2026, the share of the population in prime working age (25 to 54 years old) is expected to decline and at the same time the share of the population in older age brackets (65 years and over) is expected to increase. This trend indicates that the share of the population that is potentially exiting the labour force is increasing while the share of the population that is potentially entering the labour force is declining.

Labour force participation by older individuals is much lower than for those in their prime working years. As a considerable share of the population moves into the older age brackets, the labour force participation rate (percent of the population 15 years and older in the labour force) is expected to fall steadily.

As the construction industry workforce continues to age, industry stakeholders may need to find alternative sources of labour to fill the gap of retiring workers.

Based on historical hiring trends, Canada's construction industry is expected to draw an estimated 94,100 first-time new entrants from the local population, aged 30 and younger, over the next 10 years. During the scenario period, the retiring workforce exceeds the youth coming into the industry. Such market pressure may

Table 28: Population Age Distribution (%), Canada

AGES	2016	2026
0–14	16.1	16.2
15–24	12.5	9.7
25–54	41.0	40.0
55-64	14.1	13.3
65+	17.9	22.8

Source: Statistics Canada, BuildForce Canada

Figure 12: Sources of population growth, Canada



Source: Statistics Canada, BuildForce Canada (2016–2026)

require industry to acquire workers from outside of the province or from other industries, or find new ways to increase its share of new entrants.

Increasing the number of new entrants may require industry leaders to increase initiatives to engage underrepresented sources of labour, including Indigenous people and women, which presents significant opportunities.

Canada's Indigenous population has the highest rate of population growth and a higher propensity to choose construction as their career choice. An estimated 11 percent of all Indigenous people in the country work in the construction sector; almost 4 percent of total industry employment.

Across the scenario period, Canada's female population is expected to grow faster than their male counterparts. Canada's construction workforce is made up of approximately 11 percent women, of which about 26 percent work directly on construction projects, while the remaining 74 percent work in support or office-related occupations in the industry. This translates into women representing 3.7 percent of Canada's direct construction workforce.

CONCLUSIONS AND IMPLICATIONS

Similar themes and labour market implications are emerging in both the residential and non-residential construction sectors. Major projects in non-residential are peaking and winding down, while in residential, slower population growth is expected to drive housing starts and residential investment lower across Canada. Both sectors are also feeling the effects of demographics and an aging workforce.

This report recognizes the specific trends for residential construction, including rising retirements, cycles in new housing, increased renovation work and the impact of these on the demand and supply of trades and occupations. The outlook scenario shows that Canada's aging population and the related slower growth (or decline) in the natural change in population (births less deaths) is reducing new housing demands, especially in the latter part of

the scenario period. While the trend in residential activity is lower, there are distinct cycles across provinces, but lower population growth dominates, and residential employment declines across the scenario period.

- The largest declines occur in new housing in line with lower population growth and falling housing starts in most provinces.
 Moderate, but steady, increases in renovation and maintenance activity partially offset the expected decline in new residential.
- Residential construction is expected to see a loss of 37,400 jobs, or a 7 percent decline in employment across the scenario period.

These declines give the impression of generally weaker markets, which can be misleading in most regions, as an aging workforce and an estimated 118,400 retirements will keep labour markets balanced as industry looks to replace them.

Maintaining workforce capacity means industry will need to remain focused on efforts related to recruiting, training and retaining young workers. Recruiting across the scenario period may become increasingly difficult, as slower population growth means less young people available to enter the workforce, which has the long-term effect of driving unemployment down and leaving a limited pool of local workers. Residential construction will also be competing against other industries that are facing similar demographic challenges.

Recruiting efforts will need to increase initiatives to engage underrepresented supply sources, including women and Indigenous people, and target new entrants from local sources of labour, new immigrants and workers from other industries to meet residential construction's long-term needs.

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 economic outlook and industry major project assumptions. Any changes to these assumptions presents risks and potentially alters anticipated market conditions.

10-YEAR AVERAGE

0.9%

408.200

307,600

257,700



POPULATION GROWTH



BIRTHS



DEATHS



NET MIGRATION

BY 2026

42



AVERAGE AGE OF CONSTRUCTION WORKFORCE

21%



PERCENT OF CURRENT LABOUR FORCE LOST TO RETIREMENT

FOR THE MOST DETAILED & COMPREHENSIVE CONSTRUCTION LABOUR MARKET DATA IN CANADA, VISIT



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