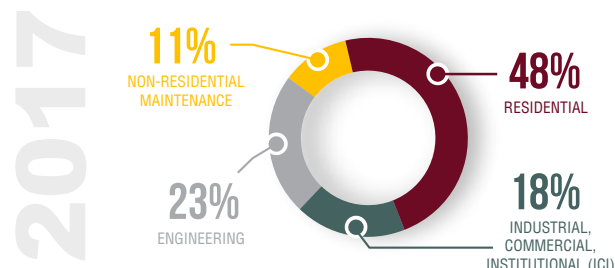


# NATIONAL SUMMARY

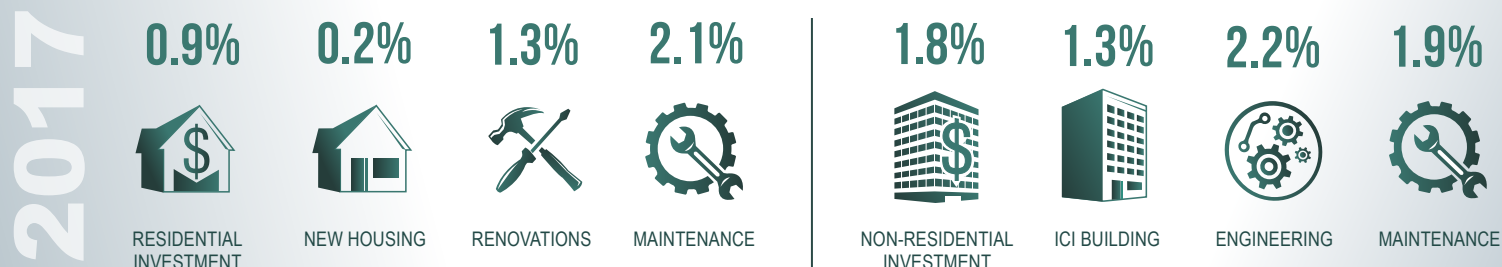
## HIGHLIGHTS 2017–2026

Construction activity in Canada is expected to edge slightly higher in 2017 following small declines over the past two years, but growth is uneven as many construction markets across the country continue to move in different directions. Looking forward, total construction employment is mostly unchanged across the 2017–2026 scenario period; down 2 percent in 2026 compared to 2016, with larger declines anticipated in residential (down 7 percent) that are partially offset by moderate gains in non-residential (up 3 percent). While changes in employment vary significantly by province, there is an overall trend to slower growth over the long term. Sustaining workforce capacity, while addressing an aging workforce – more than 20 percent of workers expected to retire over the next decade – may become increasingly difficult. As population growth slows and fewer youth are available to enter the workforce, construction must compete against other industries that are facing similar demographic challenges.

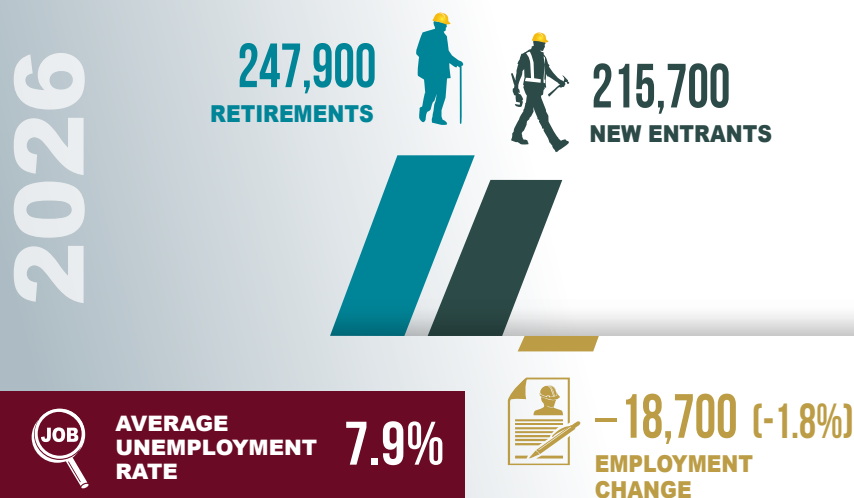
### DISTRIBUTION OF CONSTRUCTION EMPLOYMENT IN 2017, CANADA



### 2017 SECTOR INVESTMENT GROWTH OUTLOOK FOR CANADA (% change)



### 10-YEAR WORKFORCE OUTLOOK FOR CANADA



### HIGHLIGHTS

- The 2017–2026 outlook scenario projects moderate declines in total construction employment across the period, but gains are uneven between sectors and across provinces.
- Near-term employment gains to 2021 are strongest in British Columbia, Ontario and New Brunswick, while Newfoundland and Labrador and Alberta lag. Over the long term, most provinces trend down, returning to total employment levels more consistent with the start of the scenario period.
- The slowing pace of population growth limits the long-term residential outlook translating into declines in new housing that is partially offset by renovation and maintenance work.
- Ongoing and proposed non-residential projects provide a modest boost to total employment over the near term, but this slows as projects wind down.
- An aging workforce and expected retirements continue to be a key driver of labour demand requirements across the scenario period for both residential and non-residential construction.

### BuildForce's LMI System

BuildForce Canada uses a scenario-based forecasting system to assess future labour market conditions in the oil sands and both residential and non-residential construction. This 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.

## NATIONAL CONSTRUCTION OUTLOOK

Construction has been a leading source of employment growth in Canada for more than a decade. Rising construction requirements, driven by an extended resource expansion, alongside steady population growth and significant infrastructure investments added half a million construction jobs over the past 15 years. The pace of growth slowed after 2013, as a sharp decline in the price of oil and other commodities slowed resource development expansion, cancelling or delaying plans for numerous oil and gas and mining sector projects. In Alberta and other provinces, significant job losses followed, initially concentrated in the oil sands, but quickly spreading across markets as overall economic conditions weakened. As major projects in Western Canada ended or were delayed, workers returned to their home provinces, increasing levels of unemployment in some cases.

Looking forward, activity is expected to soften across most provinces as a projected decline in new residential activity coincides with the winding down of various major projects. Employment requirements in resource-driven markets such as Alberta and Newfoundland and Labrador are expected to continue weakening over the near term as current projects wind down. In other provinces, the anticipated start of, or current planned utility, pipeline, transportation and other infrastructure projects is expected to increase non-residential employment over the near term to 2021. The timing of projects is varied and labour requirements are unevenly distributed across provinces. Key regions where stronger non-residential growth is expected include:

- New Brunswick – pipeline, marine terminal and hydro dam refurbishment projects increase employment demands.
- Ontario – major transit infrastructure projects and nuclear refurbishment projects add to employment opportunities across the scenario period.
- Manitoba – major hydro development and transmission projects sustain employment requirements.
- British Columbia – pipeline, LNG, transportation and mining projects contribute to growth.

Fifteen years of construction expansion has added new housing, industrial and resource capacity across Canada that now requires annual renovation and maintenance work. Steady, but moderate, employment gains in these markets become a more prominent contributor of new jobs and, in many markets, employment added here helps to partially offset job losses in new housing and declines in new resource development projects.

Under the 2017 outlook scenario, an estimated 10,400 total construction jobs are added by 2021, driven primarily by continued non-residential market expansion. Over the latter half of the scenario period, receding housing activity and major project completions return employment back to near-2016 levels in most provinces. Differences across provinces are largely deter-

mined by variations in population demographics, declines in new housing demands and the scheduling of proposed new major non-residential projects.

Despite slower employment growth, demographic trends add to market challenges. As population growth slows there are less youth available to enter the workforce as construction retirements increase over the long term. An estimated 248,000 construction workers, or 21 percent of the 2016 workforce, are expected to retire over the next decade and this represents a significant loss of skilled workers.

Attracting and training young workers during a period of slower growth presents distinct industry challenges. Recruitment may be more difficult in provinces that have experienced significant declines in jobs, which may result in an increased risk of losing workers to other industries or provinces in search of more secure employment opportunities. Failure to sustain recruiting efforts, however, poses significant future risks. Declines in training new workers during past downturns has resulted in renewed market challenges when investment and labour demands cycle back up, even under conditions of more moderate growth. The lag between recruiting, training and developing skilled journeypersons can create a perpetual, cyclical mismatch between workforce requirements and available supply. Industry must continue to track changing conditions, including expansion, expected retirements and new entrants, to remain a step ahead and maintain a long-term sustainable skilled workforce.

Table 1 shows the anticipated changes in employment across provinces for two periods: 2017 to 2021 and 2022 to 2026.

**Table 1: Change in employment across provinces**

| REGION                           | % CHANGE<br>2017–2021 | % CHANGE<br>2022–2026 |
|----------------------------------|-----------------------|-----------------------|
| <b>Total employment – Canada</b> | <b>1%</b>             | <b>-3%</b>            |
| <b>Newfoundland and Labrador</b> | <b>-43%</b>           | <b>25%</b>            |
| <b>Nova Scotia</b>               | <b>-6%</b>            | <b>0%</b>             |
| <b>New Brunswick</b>             | <b>9%</b>             | <b>2%</b>             |
| <b>Prince Edward Island</b>      | <b>12%</b>            | <b>-5%</b>            |
| <b>Quebec</b>                    | <b>0%</b>             | <b>-1%</b>            |
| <b>Ontario</b>                   | <b>2%</b>             | <b>-3%</b>            |
| <b>Manitoba</b>                  | <b>-1%</b>            | <b>0%</b>             |
| <b>Saskatchewan</b>              | <b>-1%</b>            | <b>-10%</b>           |
| <b>Alberta</b>                   | <b>-2%</b>            | <b>1%</b>             |
| <b>British Columbia</b>          | <b>7%</b>             | <b>-8%</b>            |

Source: Statistics Canada, BuildForce Canada

## SECTOR INSIGHTS

The following sections provide sector-specific insights into the non-residential and residential labour markets. The 2017 BuildForce LMI system provides an overview of market drivers and detailed occupational demand- and supply-side analysis of labour market conditions in each sector for 34 trades and occupations tracked by BuildForce.

### NON-RESIDENTIAL SECTOR

Non-residential construction emerges as the primary source of employment growth, adding 18,700 new jobs across the scenario period. Demands are driven largely by regional infrastructure projects alongside steady growth in industrial, commercial and institutional (ICI) non-residential building, proposed new major engineering projects and growing maintenance requirements.

The 2017–2026 outlook scenario reveals several common themes across most provinces:

- Commercial building construction continues to rise, but the pace of growth slow.
- Institutional building investment is modest or lower from 2017 to 2026, as government spending is restrained.
- Industrial buildings cycle up and down with moderate changes across the period in most provinces.
- Maintenance work (heavy industrial and non-residential buildings) is on a steady but moderate increase across the decade.
- The timing of new major projects is varied and irregular and these changes drive most of the regional volatility in non-residential employment:
  - The completion of projects in Newfoundland and Labrador return employment requirements to the pre-expansion levels of the early 2000s.
  - In Alberta, major industrial and engineering-related employment remains on a downward trend, but the pace of declines slows over the near term. Growth resumes across all sectors after 2023 with renewed oil sands investment.
  - In British Columbia, proposed LNG (liquefied natural gas) facilities, pipelines and mining projects drive labour demands up 33 percent to an expected peak in 2021.
  - A smaller rise is expected in Saskatchewan, with fluctuations across the period as some projects wind down and new projects start. Employment is sustained near current levels across most of the scenario period.
- Utilities, public transportation and other infrastructure projects add to employment opportunities across most provinces, with an added boost by federal government's long-term infrastructure plan. Sustaining capital and industrial maintenance expenditures are expected to rise steadily across the period, becoming a more prominent source of construction jobs later in the decade.
- Sustaining capital<sup>1</sup> and industrial maintenance<sup>2</sup> expenditures are expected to rise steadily across the period, becoming a more prominent source of construction jobs later in the decade.

BuildForce tracks current and proposed major projects and, with a few exceptions, the list of identified projects declines after 2021, contributing to the overall drop in employment. Assumed start and end dates for major projects are a critical part of the scenario analysis in defining provincial employment demands as projects ramp up to peak and then wind down.

Table 2 shows the anticipated percent change in non-residential employment by province for two periods: 2017 to 2021 and 2022 to 2026.

**Table 2: Change in non-residential employment, by province**

| REGION                    | % CHANGE<br>2017–2021 | % CHANGE<br>2022–2026 |
|---------------------------|-----------------------|-----------------------|
| Total employment – Canada | 3%                    | 0%                    |
| Newfoundland and Labrador | -50%                  | 38%                   |
| Nova Scotia               | 5%                    | 6%                    |
| New Brunswick             | 18%                   | 8%                    |
| Prince Edward Island      | 9%                    | 0%                    |
| Quebec                    | 7%                    | 2%                    |
| Ontario                   | 6%                    | -1%                   |
| Manitoba                  | -3%                   | 2%                    |
| Saskatchewan              | 0%                    | -11%                  |
| Alberta                   | -11%                  | 4%                    |
| British Columbia          | 24%                   | -5%                   |

Source: Statistics Canada, BuildForce Canada

<sup>1</sup> **Sustaining capital** refers to the periodic addition (or replacement) of capital, which is required to maintain operations at existing levels.

<sup>2</sup> **Maintenance** refers to the process of maintaining equipment, including routine or on-stream work and turnaround/shutdown work, where an operating unit may be temporarily taken out of production.

**Table 3: Changes in the non-residential workforce, Canada**

| NON-RESIDENTIAL WORKFORCE ADJUSTMENT |                     | 2016    | 5 years<br>2017–2021 | 10 years<br>2017–2026 |
|--------------------------------------|---------------------|---------|----------------------|-----------------------|
| Demand                               | Employment          | -3,500  | 18,300               | 18,700                |
|                                      | Labour force change | -7,200  | 11,900               | 12,100                |
|                                      | Retirements         | -12,600 | -63,600              | -129,400              |
| Supply                               | New entrants        | 12,500  | 60,700               | 121,600               |
|                                      | Net mobility        | -7,200  | 14,900               | 20,000                |

Source: BuildForce Canada

## THE AVAILABLE WORKFORCE

The 2017 BuildForce LMI system tracks changes in the non-residential workforce from 2017 to 2026:

- The labour force is estimated to rise by 12,100 workers; a 3.4 percent increase at the end of the period by 2026.
- An estimated 129,400 workers are lost to retirement and must be replaced; 21 percent of the 2016 labour force.
- Replacement demand is partially met by an estimated 121,600 first-time new entrants that may be drawn into the workforce from Canada's population aged 30 and younger.
- To meet overall labour requirements, the industry may need to recruit another 20,000 workers from other industries or from outside of Canada.

Table 3 provides a summary of the estimated changes in the national non-residential workforce in 2016, the five-year period between 2017 and 2021 and across the full scenario period.

National trends across the coming decade signal potential market challenges. Current weakness followed by expected increases in retirements, slower population growth and fewer youth available to enter the workforce poses risks, even under more moderate long-term growth expectations. The ability of mobility to fill the gap depends on the availability of workers with portable experience, skills and qualifications across construction markets and provinces, and their willingness to move to find work. To meet demands, non-residential construction will need to recruit from other industries and step up efforts to recruit more women, Indigenous people, and new immigrants as key sources of labour supply.

## RESIDENTIAL SECTOR

The key driver of housing demand is the change in population through its connection to household formations<sup>3</sup> that translate into new housing starts requirements. In the absence of significant change in immigration, 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 years of the scenario period. While the trend is lower, there are distinct cycles across provinces, but lower population growth dominates and residential employment declines across the scenario period:

- 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, which is only partially offset by steady, but moderate, increases in renovation activity.
- Near-term housing requirements strengthen in Alberta and Manitoba, following declines in 2015 and 2016. While Alberta increases, it remains well below 2014 peak levels of activity and employment.

**Table 4: Change in residential employment, by province**

| REGION                    | % CHANGE<br>2017–2021 | % CHANGE<br>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

<sup>3</sup> **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 5: Changes in the residential workforce, Canada**

| RESIDENTIAL WORKFORCE ADJUSTMENT |                     | 2016    | 5 years<br>2017–2021 | 10 years<br>2017–2026 |
|----------------------------------|---------------------|---------|----------------------|-----------------------|
|                                  | Employment          | -4,500  | -7,900               | -37,400               |
| Demand                           | Labour force change | -4,500  | -15,300              | -47,100               |
|                                  | Retirements         | -11,500 | -59,300              | -118,400              |
| Supply                           | New entrants        | 10,300  | 48,300               | 94,100                |
|                                  | Net mobility        | -3,200  | -4,300               | -22,700               |

Source: BuildForce Canada

- Housing activity is expected to moderate in Canada's two largest residential markets: British Columbia and Ontario.
- The most significant declines are expected in Atlantic Canada, where age demographics are significantly older and slowing economic growth is expected to result in out-migration and negative population growth. The largest declines are in Newfoundland and Labrador and Nova Scotia from 2017 to 2021.

Table 4 shows the anticipated changes in residential employment by province for two periods: 2017 to 2021 and 2022 to 2026.

### THE AVAILABLE WORKFORCE

The 2017 BuildForce LMI system tracks workforce changes for residential construction:

- The labour force is projected to decline by 47,100 workers, or 8 percent, across the scenario period, driven by declines in new housing employment.
- Expected retirements are estimated 118,400 workers; 21 percent of the 2016 labour force.
- Industry is expected to draw 94,100 first-time new entrants into the workforce from the local population aged 30 and younger, partially offsetting expected retirements.
- Out-mobility is estimated at 22,700, as workers potentially leave the residential workforce for work in other sectors or industries.

Table 5 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.

At the national level, as activity declines, an estimated 22,700 workers are expected to leave residential construction to seek employment opportunities in other sectors or industries. The largest losses are expected early in the scenario period in 2018 and 2019. Conditions remain mostly unchanged in 2020 and 2021, followed by moderate declines after 2022 as demographic trends continue to reduce new housing demands

## PROVINCIAL INSIGHTS

This section provides brief provincial summaries for the 2017–2026 outlook scenario, highlighting distinct features that drive regional market conditions.

### NEWFOUNDLAND AND LABRADOR

Newfoundland and Labrador is descending from a period of remarkable construction expansion that started in 2004. The decline, brought about by lower commodity prices and the winding down of current major projects, is poised to return construction employment to pre-resource-boom levels from a decade ago. At the same time, as activity slows in other provinces, workers returning from Western Canada add to a growing pool of available workers and contribute to an increase in unemployment.

By the bottom of the down-cycle in 2020, the outlook scenario anticipates that project completions, alongside a prolonged decline in new residential activity, are likely to reduce construction workforce requirements to half of the 2015 peak level. A second wave of projects has been delayed, but is expected to raise labour demands over the latter half of the scenario period.

Meeting the demands of increased activity later in the decade while addressing the needs of replacing an aging workforce may prove challenging. The risk of losing younger workers from the industry as current projects wind down and overall conditions slow, combined with expected retirements, adds to long-term uncertainty of worker availability to meet future needs. BuildForce estimates that the provincial construction industry will see the exit of 5,000 workers due to retirements over the next decade. Attracting and training new workers during and following a downturn to meet demands may pose a formidable challenge.

### NOVA SCOTIA

The height of Nova Scotia's resource expansion has passed, but a measured rise in non-residential building, engineering and maintenance requirements is expected to sustain construction employment near current levels, partially offsetting the decline in residential demands as population growth slows and housing starts

fall. The province's older population demographics may make recruiting young workers to replace expected retirements more challenging than in the past.

Looking across all markets over the coming decade, construction employment is expected to fall by 1,700 jobs, with a loss of 3,000 jobs in residential, which are partially offset by a moderate rise in non-residential employment. The shift from residential to non-residential labour demands will present changing conditions for individual trades and occupations across markets, creating potential mobility opportunities for workers with transferable skills.

The province's older population demographics may make recruiting young workers more challenging due to the expected retirements of 8,200 workers, or 24 percent of the current construction workforce over the next decade, and fewer youth available to enter the labour force. Meeting industry needs may place greater emphasis on mobility, in-migration and international immigration.

## NEW BRUNSWICK

New Brunswick's construction demands are expected to rise over the coming decade driven by mostly stable residential activity and proposed major projects. By the latter half of the decade, construction employment in the province is expected to approach peak levels achieved in 2011. Meeting rising requirements, while contending with expected retirements, a shrinking pool of local youth entering the labour force and the projected decrease in average rates of unemployment may present new opportunities for skilled workers and challenges for industry.

The growth outlook is contingent on the timing of key pipeline, marine terminal, infrastructure and other energy projects, which carry non-residential engineering employment to two distinct peaks: one in 2020 and the second in 2025. The largest overall gains in non-residential employment are anticipated over the next five years as ICI building construction demands rise by 20 percent to a peak level in 2021, driven by increased industrial building investment. These near-term increases in investment contribute to a rise in maintenance work over the latter half of the decade, leaving maintenance-related employment 25 percent higher at the end of the scenario period in 2026.

At the end of the decade, non-residential employment, which surpassed residential in 2016, is the dominant driver of construction employment. Although employment is expected to remain below the previous 2011 peak, managing to recruit and train new workers in sufficient numbers to meet the anticipated requirements, while contending with the projected retirement of 7,600 workers against a shrinking pool of new youth entering the labour force, may pose challenges for industry.

## PRINCE EDWARD ISLAND

Strengthening residential demands reflect rising immigration to Prince Edward Island, while steady increments to ICI building and planned projects add to non-residential requirements, raising construction employment to a peak in 2022. Total construction employment growth slows across the remainder of the scenario period to 2026 as residential activity declines, but non-residential building construction sustains employment above current levels. The province's older population demographics likely make recruit-

ing new young workers more challenging, potentially increasing the reliance on immigration and out-of-province workers to meet growing demands.

## QUEBEC

The outlook for Quebec projects moderate changes in construction employment across the 2017–2026 scenario period, although the residential and non-residential sectors are expected to diverge. Construction employment in the province has been experiencing modest declines since 2013, largely related to a down-cycle in new housing and major project completions. Momentum shifts in 2017 with the start of a modest up-cycle in non-residential activity, which is expected to peak in 2019, while residential continues to track downward. Projected retirements are significant and have recently begun to consistently outpace estimated new entrants. An estimated 45,500 workers are expected to retire across the scenario period, becoming a key focus of recruitment requirements.

Quebec's population is growing, but natural population growth (births less deaths) is slowing. Immigration will continue to be an important source of labour supply over the next decade. The construction industry will need to draw from immigration and other markets to recruit the needed workforce.

## ONTARIO

The outlook for Ontario projects that the pace of the construction expansion will slow over the coming decade, but continued migration to the province and rising infrastructure requirements are expected to sustain employment near record high levels. Non-residential demand requirements related to major infrastructure projects are poised to become more prominent over the next 10 years, superseding residential as the primary source of construction growth in many regions across Ontario.

New housing construction has risen steadily over the last five years, adding more than 26,000 jobs since 2011. Over 2015 and 2016, new housing investment increased by 25 percent, propelled in large part by condo projects in and around the Greater Toronto Area (GTA). Though the pace is expected to slow, residential building still has momentum in many regions of the province and is expected to drive employment requirements higher in 2017. Activity is expected to stabilize after 2017, adding a projected 386,000 new housing units in the province over the next five years. Steady growth in renovation activity is expected to surpass new housing demands by 2018; a trend that is expected to continue across the remainder of the scenario period.

Non-residential construction is characterised by rising near-term demands related to major infrastructure and transportation projects and modest long-term growth in non-residential building and regional engineering requirements. Major projects, including an international bridge in Windsor, transit projects in the GTA and Ottawa, and major nuclear refurbishments projects in the GTA and Southwestern Ontario help sustain employment across the scenario period.

While the overall pace of growth slows compared to the recent past, sustaining capacity over the latter half of the scenario period will be made more difficult by the expected retirement of 86,000 workers over the decade (20 percent of the current workforce) against slower population growth and fewer youth available to enter the

labour force. Attracting first-time new entrants to the industry will be crucial to offset expected retirements.

## MANITOBA

Construction activity is expected to rise to a new peak level in 2017 following another very strong year of growth in Manitoba. Past the peak, the current non-residential cycle, driven by multi-year hydro development and transmission projects, approaches its end as current projects wind down, while residential continues on a modest up-cycle to 2020. The 2017–2026 outlook describes the rise to a plateau at record levels of construction employment in the province. Maintaining capacity while contending with steadily rising retirements maintains pressure on industry to recruit and train workers.

The start of an up-cycle in new housing in 2017, in response to projected population growth, alongside modest growth in renovation activity, is expected to lead residential employment to peak levels in 2022. Slowing population growth over the latter half of the scenario, however, restricts new housing demands and returns residential employment to current levels by 2026.

Engineering construction is expected to peak in 2017 and then recede modestly between 2018 and 2022. Over the same period, road, highway and bridge work also slows, but offsetting demands rise with the anticipated start of planned mining, pipeline and other infrastructure projects. The brisk pace of non-residential building growth is expected to ease as well, but employment demands are sustained near current levels by a steady, but moderate, rise in government and institutional investment.

Manitoba's construction workforce has grown tremendously to meet expansion demands over the past decade, attracting thousands of workers and drawing unemployment to historical lows. Sustaining the workforce at this high level, while contending with the expected exit of 8,100 retiring workers, will maintain pressure on industry to recruit young workers and require ongoing contributions from both immigration and interprovincial migration.

## SASKATCHEWAN

Construction demands are expected to soften in 2017 and 2018, but employment is sustained at high levels in Saskatchewan. The current pause as commodity prices weakened over the last few years follows a period of extraordinary resource expansion. Looking forward, residential activity regains its footing and a series of planned major projects, including mining, utility and pipeline projects, restores employment to previous high levels by 2021, but declines over the remainder of the scenario period as known projects wind down.

Saskatchewan has cultivated a large, young and skilled workforce trained to meet both residential and non-residential demands. The resource expansion of the last decade pushed rates of construction unemployment well below historical levels and attracted thousands of workers to the province. The province's rising unemployment rates between 2013 and 2016 were attributed to both job losses and workers returning from other provinces as work slowed in those regions. These changing market dynamics created new challenges for Saskatchewan following several years of strong growth.

The current pause in growth provides an opportunity for the labour market to re-calibrate to meet the changing nature of construction

demands as residential activity slows and major projects wind down, combined with the need to address an aging workforce. Maintaining efforts to attract new entrants during periods of slower growth may pose challenges.

## ALBERTA

At the start of the scenario period, low oil prices limit new capital investment and growth in Alberta. The slowdown, which began in 2015, has resulted in the repatriation of the province's thousands of skilled non-resident construction workers to all regions of Canada. Meanwhile continued declines in engineering and residential construction are displacing resident workers, leading many to seek opportunities in other construction markets both within and outside Alberta.

The pace of overall employment declines is expected to slow in 2017, though non-residential employment losses will likely continue to mount due to both an expected smaller, second wave of employment declines over the near term as current major projects wind down and continued weakness in the oil and gas sector that spreads across all construction labour markets.

A residential recovery is anticipated to take hold in 2019, coinciding with improved economic conditions and increased migration to Alberta. A recovery in non-residential ICI building follows, but a sustained recovery in the oil sands and other engineering-related employment is not expected until later in the scenario period, with investment and employment remaining well below 2014 peak levels.

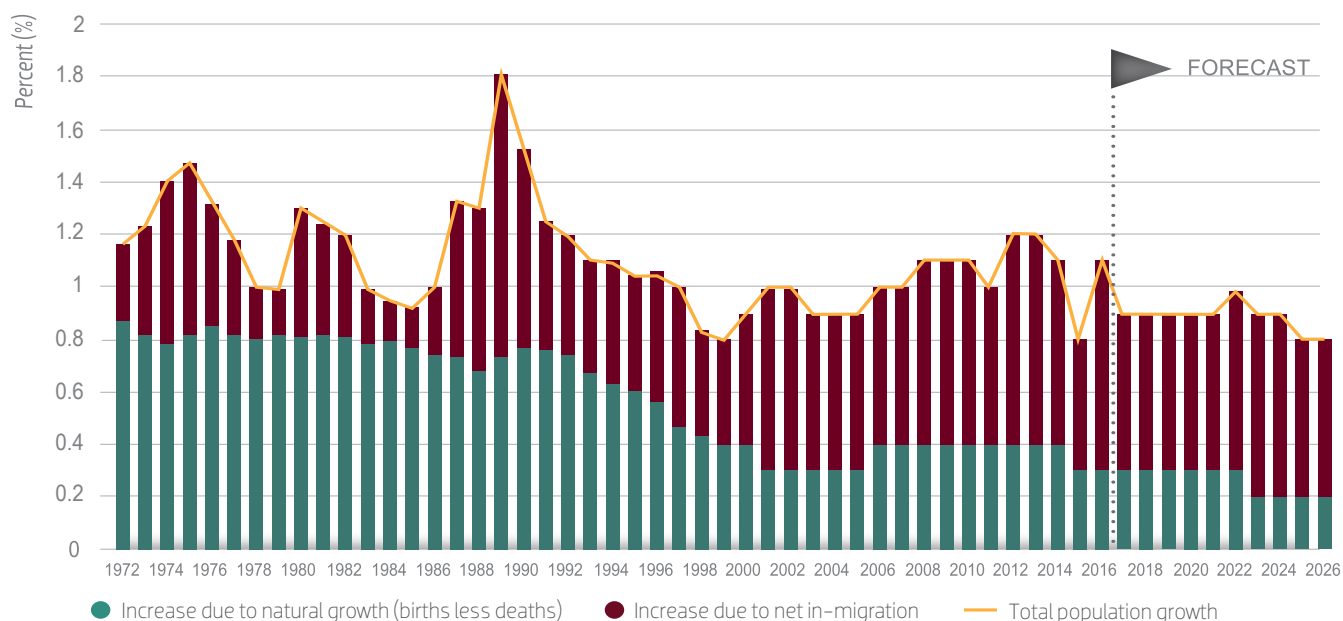
The long-term outlook anticipates higher average rates of unemployment and a transition to a "new normal" for Alberta's construction workforce, with patterns of recruitment more consistent with that of other provinces. Increased labour market slack may provide opportunities for decreased reliance on out-of-province workers, except to meet peak demand requirements and seasonal shutdown/turnaround and maintenance needs that often require specialized skills and experience.

Industry must still contend with replacing an aging workforce. An estimated 36,200 workers are expected to retire over the next decade. Attracting and training young workers during and following a downturn in sufficient numbers to replace these retiring workers may pose a formidable challenge.

## BRITISH COLUMBIA

British Columbia is attracting workers to meet anticipated rising demands as current and proposed non-residential projects rise to a projected peak by 2021. Increased commercial building and rising demands related to utility, transportation, liquefied natural gas (LNG) and pipeline projects present potential recruiting challenges for non-residential construction. Residential activity declines from 2016 peak levels; however, as population growth is expected to slow. After 2021 as major projects peak and wind down, combined with accelerating declines in residential construction, total employment is drawn back toward current levels by the end of the scenario period in 2026.

Divergence between residential and non-residential labour markets culminates around 2019 when residential job losses are rising while non-residential requirements are expected to exceed the available

**Figure 1: Sources of population growth (%), Canada**

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

local supply for many trades and occupations. Meeting major non-residential project demands, including the construction of a major LNG facility, will require planning to ensure workers with the right skills and experience are available as projects reach peak requirements.

The timing and scale of anticipated non-residential demands pose a potential for recruiting challenges, which may be amplified by low rates of unemployment, demands for specialized skills and experience, and the remote locations of many major projects. In addition, industry must address an aging workforce, with more than 40,000 skilled workers expected to retire over the next decade. Project demands and the loss of skilled workers to retirement are significant and will require a coordinated industry effort to facilitate mobility across sectors and regions to meet peak demands and to encourage new entrants from the local population across the scenario period to offset expected retirements.

## REPLENISHING A RETIRING WORKFORCE

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 248,000 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 migration as the key driver to population growth. Figure 1 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 6 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

**Table 6: 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

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 216,000 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 require the 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 project, while the remaining 74 percent work in support or office-related occupations in the construction industry. This translates into women representing 3.7 percent of Canada's direct construction workforce.

## CONCLUSIONS AND IMPLICATIONS

Canada's construction market today is larger and more diverse, following about two decades of almost uninterrupted expansion. Employment across most regions has declined from recent peak levels, with slower growth expected over the long term. Changing mobility patterns across provinces to meet major project requirements and the challenges of an aging workforce continue to be key themes emerging from the 2017–2026 outlook scenario.

### SLOWER GROWTH

The slowdown in the pace of resource expansion has resulted in significant employment declines in some provinces. Although the largest losses have already occurred, near-term growth in both non-residential and residential markets is likely to remain weak. Residential demands are expected to decline in-line with slowing rates of population growth across most provinces, especially over the long term, with reduced new housing demands. For the non-residential sector, there are pockets of strength where current and proposed projects add to employment opportunities over the near term, but this slows over the long term after 2021 as most projects peak and wind down. By the end of the scenario period, total construction employment declines marginally, down 18,700 jobs, or 2 percent lower compared to 2016. Much of the decline is driven by losses in the residential sector, where employment is projected to decrease by 37,400 jobs, or 7 percent. This is offset by a moderate increase in non-residential employment, which is estimated to increase by 18,700 jobs, or 3 percent compared 2016; well below growth reported over the last decade.

### THE NEXT WAVE OF NON-RESIDENTIAL PROJECTS

While the long-term outlook weakens, the anticipated start of major non-residential projects suggests increased demands in some provinces over the near term to 2021. Most notably these regions include the sustained demands driven by hydro and transmission projects in Manitoba; utility and transportation infrastructure projects increasing demands in Ontario across the scenario period; proposed LNG facilities, and pipeline and trans-

#### 10-YEAR AVERAGE

0.9%



POPULATION  
GROWTH

408,200



BIRTHS

307,600



DEATHS

257,700



NET  
MIGRATION

#### BY 2026

42



AVERAGE AGE OF  
CONSTRUCTION  
WORKFORCE

21%



PERCENT OF CURRENT  
LABOUR FORCE LOST TO  
RETIREMENT

portation projects projected to peak in 2021 in British Columbia; and utility, pipeline and marine terminal work increasing job opportunities in New Brunswick.

Conditions continue to weaken in Alberta and Newfoundland and Labrador over the near term as current projects wind down, with activity remaining well below previous peak levels over the long term. More moderate changes are expected in Saskatchewan, Quebec, Nova Scotia and Prince Edward Island.

## THE DEMOGRAPHICS CONUNDRUM

The coming wave of retirements prognosticated for decades has materialized, and only intensifies over the next decade. The annual year-to-year increase in expected workforce retirements raises recruiting needs, even in provinces where economic growth and construction activity has slowed. Age demographic trends under slower population growth limit the pool of youth available to enter the workforce. The task of attracting new young workers to construction is likely to become increasing more difficult as many industries face similar challenges related to replacing an aging workforce.

With an estimated 248,000 workers expected to retire, maintaining capacity to meet construction workforce needs will require focused efforts on recruiting, training and retaining young workers, even under a slower-growth scenario. As demographic conditions unfold, there is an expected downward trend in provincial levels of unemployment that may lead to less workers being available for mobility. This trend suggests that – even if the full potential of interprovincial mobility is realized – industry will likely still need to expand recruiting efforts for new workers from local sources of labour, from other industries and from new immigrants to meet industry'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.

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