



CONSTRUCTION & MAINTENANCE LOOKING FORWARD



NATIONAL SUMMARY

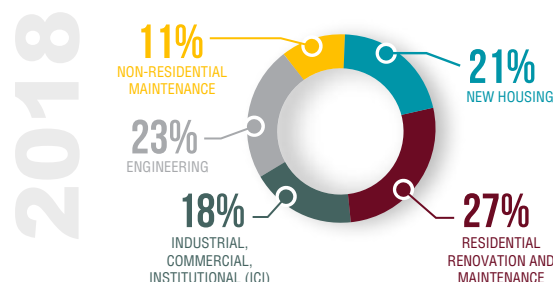
HIGHLIGHTS 2018–2027

Sustaining workforce capacity to meet future demands while facing the need to replace one quarter of a million retiring workers, or 21 percent of the current workforce, presents a significant challenge for industry, despite the slower growth outlook.

Construction activity in Canada in 2018 follows a strong year for new housing construction across most provinces, alongside rising infrastructure and ICI (industrial, commercial, and institutional) building construction demands. Over the coming year, further growth may be hindered by softer housing starts and major project completions, but new demands driven by major energy, public transportation, and other infrastructure investments continue to strengthen and supplant demands related to the remnants of completed resource extraction mega-projects.

Construction demands are expected to edge slightly higher between 2018 and 2021, but the outlook for individual provinces is mixed. Most Atlantic and central provinces are likely to see demands weaken, while Alberta recovers from the impacts of lower global oil prices. At the same time, Ontario and British Columbia continue to build to peaks of enduring expansions. Slower population growth limits construction expansion over the latter half of the decade, but employment requirements are sustained at high levels by infrastructure renewal, rising industrial maintenance, and residential renovation activity.

DISTRIBUTION OF CONSTRUCTION EMPLOYMENT IN 2018, CANADA



HIGHLIGHTS

- The 2018–2027 outlook scenario projects construction activity to plateau following two decades of almost uninterrupted growth during which the workforce doubled.
- Canada's strong service sector leads to steady demand for commercial building construction, while planned institutional and other infrastructure work also adds to ICI building construction employment requirements. Across the scenario period, ICI building construction adds 21,300 non-residential jobs.
- The slowing pace of population growth is expected to limit the long-term residential outlook translating into fewer new housing starts, but there will be a steady increase in demand for renovation and maintenance work, and an ongoing need for new skilled workers to replace those retiring.
- Industrial maintenance work (heavy industrial and non-residential buildings) rises steadily across the decade, with larger than normal demands expected in 2018 in Alberta and New Brunswick.
- The expected retirement of 255,000 skilled construction workers, or 21 percent of the current workforce, is the dominant driver of hiring requirements over the coming decade for both residential and non-residential construction.

10-YEAR WORKFORCE OUTLOOK FOR CANADA



**AVERAGE
UNEMPLOYMENT
RATE** **7.6%**

BuildForce's LMI System

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

NATIONAL CONSTRUCTION OUTLOOK

Construction activity in Canada is approaching a new plateau following two decades of almost uninterrupted growth during which the workforce doubled. The resource expansion that propelled the rapid pace of growth over the last decade in many provinces, has given way to a new period in which demands are sustained at high levels by infrastructure renewal, stable residential demands, and steady increases in ICI building construction and maintenance work, while industry grapples with responses to the anticipated retirement of one quarter of a million skilled workers over the coming decade.

In 2018, construction activity is expected to soften across most provinces as the pace of new residential activity recedes and many large resource-expansion-era projects are largely completed. This year's anticipated slowdown is likely to help ease some short-term labour market pressures in British Columbia, Ontario, and Prince Edward Island, where rising demand requirements have recently outpaced the available local workforce for several trades and occupations. Further losses in resource-driven markets such as Alberta and Newfoundland and Labrador are expected to raise local unemployment, but there are signs of a broader recovery ahead in Alberta – not the case in Newfoundland and Labrador, where employment is likely to contract a further 20 percent until 2024.

Looking ahead, slowing population growth and further project completions limit the growth for most provinces, but overall declines are modest, while demographic challenges maintain pressure on hiring requirements to replace workers expected to retire over the next decade. British Columbia and Ontario stand out with significant near-term growth prospects. In British Columbia, an expected ramp-up of several planned mining, public transportation, hydro, LNG (liquefied natural gas), and pipeline projects is expected to increase non-residential employment requirements by 25 percent over three years to peak in 2021. Growth in Ontario is more moderate, but sustained over a longer period. Demands driven by major public transportation and infrastructure projects, rising ICI building construction demands, and major nuclear refurbishment work requirements contribute to the addition of 17,200 construction jobs between 2018 and 2023.

The longer-term outlook is positive across most provinces, but the pace of growth is expected to be slower compared to the past decade, and demands continue to shift toward meeting modest increases in infrastructure, sustaining capital, maintenance, and residential renovation requirements. Under the 2018–2027 outlook scenario, total construction employment is mostly unchanged at the end of the scenario period in 2027, as modest gains in non-residential demands outpace small declines in residential.

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 255,000 construction workers, or 21 percent of the 2017 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 construction jobs, with increased risks 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 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, potential for new growth, expected retirements, and the availability of 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: the five years from 2018 to 2022, and the remaining five years from 2023 to 2027.

SECTOR INSIGHTS

The following sections provide sector-specific insights into the non-residential and residential labour markets. The 2018 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.

Table 1: Change in employment across provinces

REGION	% CHANGE 2018–2022	% CHANGE 2023–2027
Total employment – Canada	-0.3%	1.5%
Newfoundland and Labrador	-18.6%	7.5%
Nova Scotia	-4.5%	-0.2%
New Brunswick	-4.9%	0.6%
Prince Edward Island	-0.6%	7.4%
Quebec	-3.4%	2.8%
Ontario	3.4%	0.3%
Manitoba	-7.7%	1.3%
Saskatchewan	-2.7%	5.9%
Alberta	-0.6%	4.9%
British Columbia	0.1%	-1.4%

Source: Statistics Canada, BuildForce Canada

NON-RESIDENTIAL SECTOR

The anticipated timing of major transportation, utility, and other infrastructure projects is expected to nudge non-residential employment up a further 3 percent, or 18,400 workers, to a near-term peak in 2020. Growth is concentrated in Ontario and British Columbia, driven by major nuclear refurbishment, LNG, and energy and transportation infrastructure projects.

Long-term demands should be sustained by steady growth in commercial and institutional building construction, which follows recent population increases and new housing construction in most provinces. Moderate gains in maintenance work should also contribute to more stable levels of employment in most provinces. At the end of the scenario period in 2027, non-residential employment is expected to increase by 5 percent, or 26,700 new jobs.

Despite slower growth over the coming decade, pressures to recruit and train workers are sustained by the anticipated retirement of an estimated 132,700 workers – a challenge made more difficult by a shrinking number of young people available to enter the workforce as population growth slows, and recruitment competition increases from other sectors of the economy that face similar age demographic challenges.

The 2018–2027 outlook scenario reveals several common themes across most provinces:

- Uncertainty surrounding future commodity prices and changing global demands has translated into delays and cancellations of some resource development projects across Canada. As a result, related engineering construction employment is expected to decline by 4 percent across the scenario period, partly offset by planned infrastructure investment.
- ICI building construction demands rise over the near term following recent population growth and a modest manufacturing recovery, but growth is moderate.
- Maintenance work (heavy industrial and non-residential buildings) is on a steady, but moderate increase across the decade, with larger than normal demands expected in 2018 in Alberta and New Brunswick.
- Major public transportation and other infrastructure projects add to employment opportunities across most provinces, with an added boost by provincial and federal government long-term commitments to infrastructure renewal.
- The timing of new major projects is varied and irregular, and these changes drive most of the regional volatility in non-residential employment:
 - Most resource mega-projects in Newfoundland and Labrador are now complete, but further declines in employment are expected to continue over the near term as work on the Muskrat Falls hydro project is completed. The start of a new offshore platform only partly offsets expected employment declines.

- New Brunswick demands are sustained near current levels to 2020 before current projects wind down. The anticipated start of a major hydro refurbishment project should increase demands later in the scenario period.
- In Alberta, demands are expected to continue to decline in 2018 as existing major oil sands projects near completion. Renewed growth in oil and gas investment is not anticipated until later in the scenario period and expected to remain below previous peak levels of activity.
- In British Columbia, proposed LNG facilities, pipelines, and infrastructure projects increase non-residential employment by 24 percent between 2019 and 2021.
- A smaller rise is expected in Saskatchewan, sustained by rising industrial investment and high levels of highway and bridge work, while in Manitoba, major hydro and transmission project demands step down from record levels of activity.

BuildForce tracks current and proposed major projects, and, with a few exceptions, the list of identified projects declines after 2020, contributing to slower growth employment. Tracking the scheduled start and end dates for major projects is a critical component 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: 2018 to 2022, and 2023 to 2027.

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

REGION	% CHANGE 2018–2022	% CHANGE 2023–2027
Total employment – Canada	2%	2%
Newfoundland and Labrador	-20%	7%
Nova Scotia	-3%	5%
New Brunswick	-7%	2%
Prince Edward Island	8%	8%
Quebec	-1%	7%
Ontario	6%	1%
Manitoba	-9%	2%
Saskatchewan	-5%	-3%
Alberta	-4%	8%
British Columbia	20%	-7%

Source: Statistics Canada, BuildForce Canada

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

NON-RESIDENTIAL WORKFORCE ADJUSTMENT		2017	5 years 2018–2022	10 years 2018–2027
	Employment	5,900	13,200	26,700
Demand	Labour force change	0	12,800	22,400
	Retirements	12,900	65,800	132,700
Supply	New entrants	12,700	62,900	125,800
	Net mobility	100	15,700	29,400
Excess supply/(demand)		(5,900)	(400)	(4,300)

Source: BuildForce Canada

THE AVAILABLE WORKFORCE

The 2017 BuildForce LMI system tracks changes in the non-residential workforce from 2018 to 2027:

- The workforce is estimated to rise by 22,400 workers by the end of the scenario period in 2027.
- An estimated 132,700 workers are lost to retirement and must be replaced – 21 percent of the 2017 labour force.
- Replacement (retirements plus mortality) demand is partially met by an estimated 125,800 first-time new entrants expected to be drawn into the construction workforce from Canada's population aged 30 and younger.
- To meet overall labour requirements, the industry may need to recruit an additional 29,400 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 2017, the five-year period between 2018 and 2022, and across the full scenario period.

National trends across the next decade signal potential market challenges. Near-term increases in demands for workers with specialized skills alongside 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. Further declines in workforce requirements in Alberta and Newfoundland and Labrador may offer a potential source pool. To meet demands, non-residential construction will need to recruit from other industries and likely step up efforts to recruit more women, Indigenous people, and new immigrants as key sources of labour supply.

RESIDENTIAL SECTOR

Residential construction activity was particularly strong in 2017, with higher housing starts and related employment across all provinces except Saskatchewan and Newfoundland and Labrador. Consecutive years of strong growth contributed to the emergence of recruitment challenges in British Columbia and parts of Ontario. The estimated 10 percent rise in starts in 2017 was driven by numerous factors, including an influx of almost 650,000 immigrants between 2016 and 2017, the expectation of new mortgage eligibility rules, other regional regulatory changes, as well as domestic and international market speculation.

Slowing population trends lead new housing demands lower across most provinces over the next 10 years, but related declines are mostly absorbed by rising renovation and maintenance activity. Over the same period, the looming retirement of residential workers maintains pressure on industry to develop new recruitment and training strategies to renew the workforce, as the number of available new entrants is declining.

Momentum is anticipated to carry new housing construction activity into 2018, but the number of new starts is expected to recede in most provinces as population growth slows, and new mortgage eligibility rules may reduce market demand.

The key driver of housing demand over the long term is the change in population and household formations¹ that translate into new housing starts. Stable levels of immigration, alongside declining rates of natural population growth (births less deaths) attributed to Canada's aging population limits new housing construction in many provinces, especially in Atlantic Canada, and particularly in Newfoundland and Labrador where the population is expected to continue to contract.

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 how population growth is transformed into demand for new housing.

While there are distinct cycles across provinces, lower rates of population growth and slowing levels of new housing construction are a dominant feature across the scenario period:

- New-housing-related employment is expected to decline by 53,200 jobs (21 percent) over the coming decade, which is nearly fully absorbed by rising employment in renovation and maintenance work.
- Over the coming decade, total residential employment is expected to decline by 12,500 jobs, or a modest 2 percent decline from 2017 levels. Declines are concentrated in 2018 and 2019.
- Near-term new housing construction weakens in all provinces except Alberta, where recovery is underway.

Table 4 shows the anticipated changes in residential employment by province for two periods: 2018 to 2022 and 2023 to 2027.

THE AVAILABLE WORKFORCE

The 2018 BuildForce LMI system tracks workforce changes for residential construction:

- Hiring requirements are dominated by the anticipated exit of an estimated 122,100 experienced workers retiring from the workforce over the coming decade.
- First-time new entrants drawn from the local population aged 30 and younger should add 100,400 new workers to the labour force.

Table 5 provides a summary of the estimated changes in the national residential workforce in 2017, the five-year period between 2018 and 2022, and across the full scenario.

Table 4: Change in residential employment, by province

REGION	% CHANGE 2018–2022	% CHANGE 2023–2027
Total employment	-3%	1%
Newfoundland and Labrador	-13%	10%
Nova Scotia	-6%	-4%
New Brunswick	-3%	-1%
Prince Edward Island	-8%	7%
Quebec	-6%	-2%
Ontario	1%	-1%
Manitoba	-5%	0%
Saskatchewan	1%	24%
Alberta	5%	1%
British Columbia	-13%	3%

Source: Statistics Canada, BuildForce Canada

At the national level, the residential industry is confronted by the need to recruit and train more than 100,000 workers to meet the anticipated exit of 122,100 skilled and experienced workers over the coming decade. This challenge is hindered by competition from rising non-residential requirements, competition from other sectors of the economy, and a shrinking pool of young people entering the workforce. The transfer of skills and knowledge is potentially made more difficult by changing building techniques and materials, and the introduction of new technologies driven by consumer demands and carbon emission reduction targets.

Table 5: Changes in the residential workforce, Canada

RESIDENTIAL WORKFORCE ADJUSTMENT		2017	5 years 2018–2022	10 years 2018–2027
Demand	Employment	24,300	-16,400	-12,500
	Labour force change	19,700	-15,100	-15,500
	Retirements	11,800	60,800	122,100
Supply	New entrants	10,800	50,700	100,400
	Net mobility	20,700	-4,900	6,300
Excess supply/(demand)		(4,500)	1,300	(2,900)

Source: BuildForce Canada

PROVINCIAL INSIGHTS

This section provides brief provincial summaries for the 2018–2027 outlook scenario, highlighting distinct features that drive regional market conditions.

NEWFOUNDLAND AND LABRADOR

The industry in Newfoundland and Labrador is expected to enter a period of readjustment back to more traditional levels of activity and employment. The impacts of major projects winding down and a resource development down-cycle take full effect in 2018, with further declines in employment expected to continue over the near term as work on a major hydro project is completed.

Over the 2018–2027 scenario period, total construction employment is expected to dip before returning to near 2017 employment levels by 2027, while rising replacement demands present potential recruitment challenges late in the period. The industry currently employs 16,460 workers, and like most provinces, a large number of retirements in the next 10 years will make labour force management challenging. Over the next decade, the provincial industry is expected to lose 6,100 workers to retirement.

NOVA SCOTIA

Overall construction demands in Nova Scotia are expected to ease in 2018 and over the near term, as current major projects end and new residential demands trend down. A strengthening manufacturing outlook, driven by shipbuilding, is expected to help sustain overall construction employment near current levels over the coming decade.

Institutional building investment, which had been on a downward trend since the peak in 2013, is expected to grow between 2019 and 2020 and then remain fairly stable across the scenario period. Both commercial and industrial building investment should rise moderately across the decade.

Across the 2018–2027 scenario period, total employment is expected to remain mostly unchanged at just slightly lower levels than the current workforce. Despite flat demand, labour markets will be stressed by the retirement of nearly 25 percent of the province's construction workforce, as more than 8,200 workers are expected to retire over the next 10 years.

NEW BRUNSWICK

New Brunswick construction demands strengthened in 2017 and are sustained over the near term by ongoing project requirements and stable levels of residential renovation work, but project cancellations have weakened the long-term outlook.

Growth over the 2018–2027 scenario period is constrained by declines in ICI (industrial, commercial, and institutional) building investment and new housing construction, which reflect slowing population growth in the province. Employment is sustained near current levels to 2020 and then declines to 2024 as current projects wind down, before the anticipated start of a major hydro

refurbishment project increases demands later in the scenario period. Meeting rising seasonal peaks for industrial-sector maintenance and shutdown scheduled for the fall of 2018 is expected to create recruiting challenges for several trades and occupations.

New Brunswick's construction industry is contending with an aging workforce and the expected retirement of 28 percent of the current workforce, or 7,100 workers over the next decade, against slower population growth and a shrinking pool of local youth entering the labour force.

PRINCE EDWARD ISLAND

Increased new housing construction in Prince Edward Island, driven by rising levels of immigration to the province, strengthened employment significantly in 2017. Momentum sustains residential activity into 2018, and then accelerating growth in non-residential commercial and institutional building construction drives workforce requirements over the near term as residential activity slows.

Immigration is anticipated to continue to contribute to steady population growth across the 2018–2027 scenario period, sustaining stable residential activity and moderate increases in commercial and institutional building requirements. Across the decade, total construction employment is expected to increase by 4 percent, with gains concentrated in the non-residential sector. Residential employment peaked in 2017 and is expected to return to more historical levels. Industry is expected to lose 22 percent of the current workforce to retirements, or an estimated 1,300 workers.

QUEBEC

Quebec's current construction expansion is expected to crest in 2018 as various non-residential major project demands mount, but new housing construction demands slow.

The 2018–2027 outlook projects further growth in non-residential requirements to 2019, driven by major infrastructure and hydro-related projects. Slowing population growth slows new residential investment and overall construction demands over the long term.

The anticipated retirement of 46,500 workers over the next decade combine to create potential recruiting challenges, even during periods of moderate changes in construction activity.

ONTARIO

Moderate, broad-based growth was sustained in 2017 for a fourth straight year. Parallel increases in both residential and non-residential markets, across most regions in the province, contributed to recruitment challenges not experienced since before the 2008 economic downturn a decade ago. At the same time, an aging workforce and retirements have raised annual recruitment and training requirement needs.

The 2018–2027 outlook sees overall demands continue to strengthen at a moderate pace over the decade, driven primarily by rising public transportation and infrastructure projects across the province, combined with major nuclear refurbishment projects in the Greater Toronto Area and Southwestern Ontario. For the

residential sector, the pace of construction activity may moderate, but to what extent will be largely based on government policies (i.e., immigration levels, interest rates, mortgage rules, etc.) and interprovincial migration. As the workforce ages over the coming decade, an estimated 87,300 workers are expected to retire, or nearly 20 percent of the current construction workforce. Sustaining industry capacity through recruitment and training efforts will remain a high priority for industry leaders.

MANITOBA

The Manitoba construction industry has seen a significant expansion over the past decade, with overall employment levels nearly doubling between 2002 and 2017. Record-high labour market activity drove unemployment rates to below 7 percent for most of the last decade, and over the next 10 years, employment should only decline marginally with the completion of the current number of large non-residential projects.

The 2018–2027 outlook describes a moderate, but broad-based steady decline in construction, though overall employment is sustained at relatively high levels. Overall employment is expected to decline by a modest 2,600 jobs, or by 7 percent by 2027, with the strongest declines anticipated over the next few years. In 2018, major hydro and transmission project demands step down from record levels of activity in 2016, while new housing construction resumes a downward trend, following the surge in 2017.

Maintaining capacity while contending with the retirement of 8,200 workers, or approximately 19 percent of the provincial industry's current workforce, will keep pressure on industry to recruit and train workers to avoid a possible skills gap.

SASKATCHEWAN

The Saskatchewan construction industry has seen significant expansion over the past decade, with overall employment levels more than doubling between 2002 and the 2014 peak. The collapse in oil and gas and commodity prices led to declines to 2016. Construction demands strengthened in 2017 following two consecutive years of declines, but the near-term outlook remains flat. In 2018, gains made in the previous year are largely sustained by industrial investment and high levels of highway and bridge work that are expected to offset declines in new housing construction.

The 2018–2027 outlook scenario is based on known scheduled and identified major projects and overall construction trends within the province. Over the coming decade, uncertainty surrounding commodity prices continues to impede near-term major project investment, leading engineering construction employment lower through 2021. New planned mining projects are anticipated to raise demands between 2022 and 2024, but much depends on the timing of proposed major projects. As new housing demand recovers later in the period, total construction employment is expected to return to near pre-downturn levels by 2025.

Sustaining the workforce to meet planned and other potential major project demands is predicated on industry's ability to continue to attract and train workers during a period of lower growth. Industry must also contend with the exit of 9,300 workers – approximately 19 percent of the current workforce is expected to retire over the next decade.

ALBERTA

Alberta's construction industry is facing a significant change in the coming decade as new oil sands investment slows, and is mostly unchanged from 2018 through to 2023, well below previous peaks. New job opportunities will shift toward oil sands sustaining capital and maintenance work, diversification, infrastructure, and other construction projects. The industry must replace 20 percent, or 40,000 of the province's 208,600 construction workers due to increasing retirement demands.

Over the 2018–2027 scenario period, non-residential-sector growth should resume at a modest level in 2019, followed by slightly higher growth-rate levels beginning in 2024 as anticipated renewed oil and gas investment returns. Although construction employment is not expected to return to the peak levels achieved in the mid to late 2000s, the need to sustain the workforce in the face of rising retirements, along with moderate population growth and industrial diversification, will keep workforce management issues top of mind for construction industry leaders. Rising to these challenges will be made more difficult given recent declines in construction activity and a significant out-migration of the existing workforce to other industries or to other provinces. Alberta is transitioning back to a stronger reliance on a local provincial workforce to meet future construction demands.

BRITISH COLUMBIA

British Columbia is facing very tight construction labour markets over the coming decade. Unprecedented short-term non-residential construction demands along with sustained levels of residential construction in the lower mainland will place a significant strain on the province's existing workforce. To meet these demands, the non-residential sector alone will need to add 17,000 new workers between 2019 and 2021.

The province is already grappling with recruitment challenges, which will only be exacerbated by the start of these new major projects over the next 12-18 months. In 2018, British Columbia is coming off the largest single increase in construction employment in a decade. Growth, driven by both rising non-residential demands and a ceaseless housing-sector expansion, has whittled unemployment rates to below 5 percent.

A potential slowing in the pace of residential activity in parts of the province and a pause in the start of several new major non-residential projects may provide a temporary reprieve, but with the current number of anticipated project starts scheduled for 2019, demand for non-residential construction hiring should increase by 20 percent and then continue to rise to a peak in 2021. During this timeframe, there is a high potential for recruiting challenges in some selected trades.

The growing rate of retirements (40,800 workers, or approximately 22 percent of the current workforce) and the less than adequate supply of locally available replacement workers will mean the industry will, with increasing regularity, be required to recruit new workers.

REPLENISHING A RETIRING WORKFORCE

Canada-wide, construction activity is slowing down compared to the last decade. Nonetheless, industry must remain focused on attracting, training, and retaining new workers as it grapples with replenishing a retiring workforce. Set against aging demographics, Canada must contend with replacing an estimated 255,000 construction workers expected to retire over the coming decade. The exit of two in 10 construction workers to retirement represents a significant loss of skills and experience that will require industry to proactively approach recruiting strategies.

Demographic shifts will play a significant role in Canada's labour markets over the coming decade, as the country faces an aging population and slower population growth. Across the 2018–2027 scenario period, population growth averages 0.9 percent per year, which lags the 1.1 percent experienced over the previous decade (2008–2017).

Canada's aging population should produce a steady decline in the natural rate of population growth (births less deaths), making immigration a key driver of population growth over the next 10 years. Widening the gap between the number of births and deaths over the long run will only be partly offset by immigration, though not enough to significantly reverse the trend based on current immigration levels. Figure 1 illustrates the components of population growth for Canada.

Table 6: Population age distribution (%), Canada

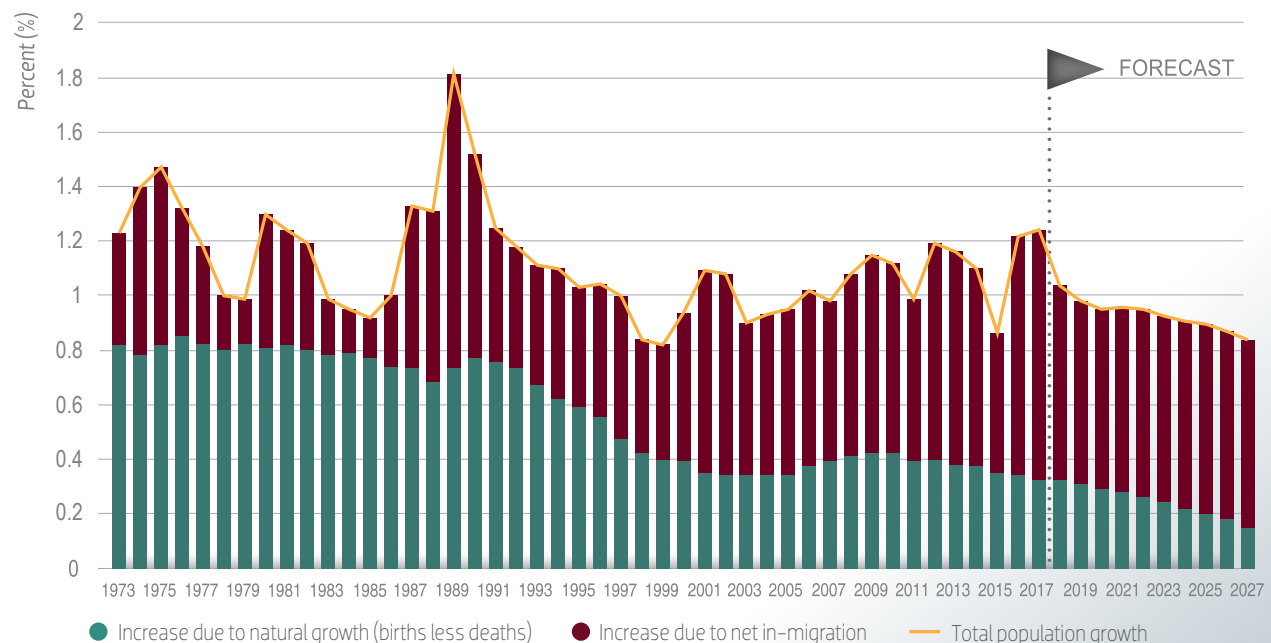
AGES	2017	2027
0–14	16.1	16.0
15–24	12.1	10.5
25–54	41.1	39.7
55–64	13.8	12.4
65+	16.9	21.5

Source: Statistics Canada, BuildForce Canada

Even as Canada's construction industry enters a slower growth period, labour markets may be strained during peak periods. A key driver of employment requirements over the next 10 years will be the country's aging demographics. Over the past decade, the share of the population in the older age bracket (65 years and over) increased significantly, while the share of the population in their prime working age (25–54 years old) has been declining.

Over the next 10 years, the share of the population in the older age bracket is expected to increase substantially, while at the same time, the share of the population in their prime working years is expected to continue declining. Additionally, the share of the population that is potentially available to enter the workforce (15–24 years old) is also in decline, which is likely to result in potential recruitment challenges for the construction sector. Table 6 shows Canada's population age distribution in 2017 and 2027.

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



Source: Statistics Canada, BuildForce Canada (2018–2027)

As a considerable share of the population moves into the older age bracket, the labour force participation rate (percent of the population 15 years and older in the labour force) is expected to fall steadily. Replenishing a retiring workforce may become increasingly difficult, as all industries will compete for a relatively smaller pool of youth.

Sustaining Canada's current construction workforce over the long run may require industry to strengthen initiatives to engage youth and underrepresented groups.

Based on historical hiring trends, Canada's construction industry is expected to draw an estimated 226,000 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 industry to acquire workers from outside of the country or from other industries, or find new ways to increase its share of new entrants. One possible solution is for the construction industry to increase its share of traditionally underrepresented groups in the industry such as Indigenous people and women.

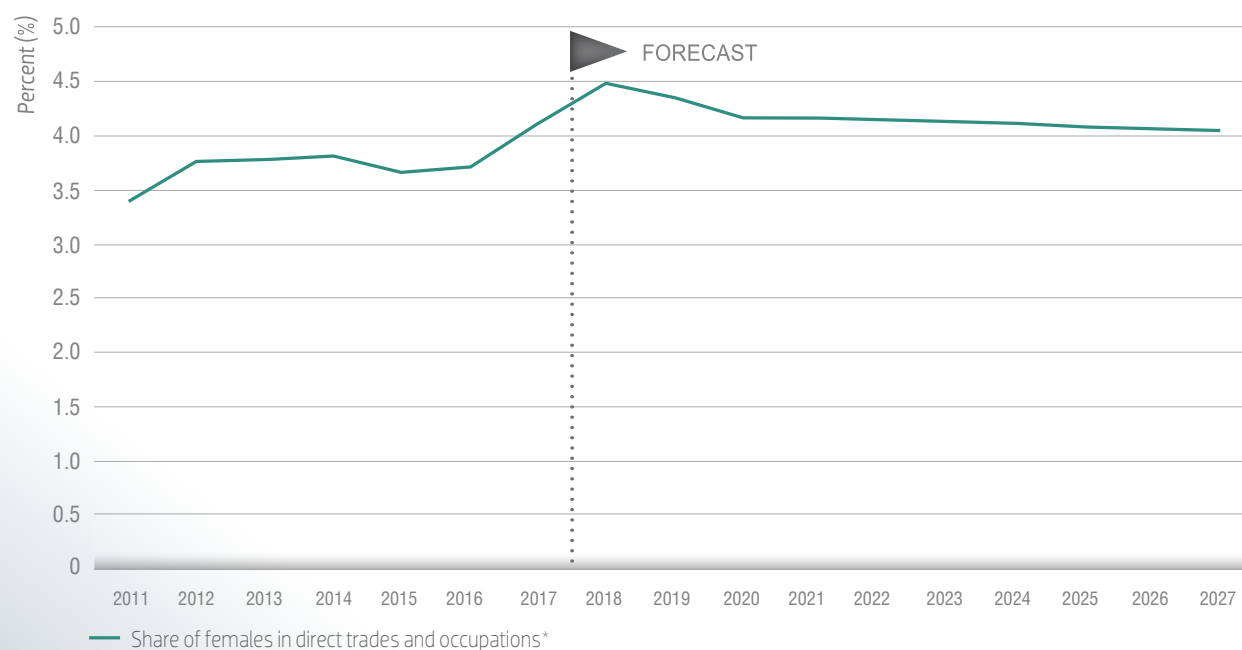
Canada's Indigenous population has the highest rate of population growth and a higher propensity to choose construction as their career choice. An estimated 11 percent of all Indigenous people in the country work in the construction sector; almost 4 percent of total industry employment.

Women are another underrepresented group in Canada's construction industry, currently representing approximately 12 percent of the country's total construction workforce. An estimated 26 percent of women working in construction work in direct trades and occupations, while the remaining 74 percent work in administrative and management-related occupations within the construction industry. This translates into women representing 4.1 percent of Canada's direct construction workforce.

While female employment in construction trades and occupations has risen over the recent past, the share of women had been fairly stagnant to 2016. Rapid growth in residential and commercial and institutional building construction in 2017 has, however, improved women's representation in the industry, as women tend to choose occupations concentrated in these sectors.

Figure 2 illustrates the share of women in direct trades and occupations based on current recruitment patterns of females into the workforce.

Figure 2: Share of women in direct trades and occupations, Canada



* Direct trades and occupations refers to the 34 trades and occupations tracked by BuildForce Canada, which excludes administrative-type occupations.

Source: BuildForce Canada calculations based on Statistics Canada's Labour Force Survey (LFS) and 2011 National Household Survey (NHS)

In 2018, continued growth in commercial and institutional building activity combined with weakening engineering construction activity should lead female employment higher, while male employment should decline slightly, as the latter should feel a greater impact from receding engineering activity. Subsequently, the share of women in direct trades and occupations is expected to reach a peak in 2018 before winding down and stabilizing near 4.1 percent.



Table 7 shows the anticipated employment in direct trades and occupations by gender for Canada.

The diverse construction industry among Canada's provinces, as well as pre-existing recruiting patterns and occupational choice among women, lead to some provinces being more effective at attracting women into the construction trades. Western provinces have been generally more successful at attracting women into the industry and construction trades. Saskatchewan has done particularly well at attracting women into direct skilled trades and occupations, and although women only account for 10 percent of

total employment, nearly four in 10 women employed in construction work directly on construction projects. Similarly, Nova Scotia's focus on engaging and training youth into construction trades has led to an increasing interest by women, with approximately one third of women employed in direct trades and occupations. Alternatively, although Quebec's construction industry is made up of approximately 13 percent women, nearly 85 percent of them work in administrative and management-related occupations.

Figure 3 shows the distribution of female employment within construction.

Table 7: Construction employment by gender, Canada (total direct trades and occupations)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	1,073,800	1,060,800	1,066,400	1,074,200	1,075,400	1,070,700	1,064,700	1,065,400	1,073,500	1,081,000	1,088,300
	46,200	49,900	48,500	46,800	46,700	46,300	45,900	45,700	45,800	45,900	46,000

Source: BuildForce Canada calculations based on Statistics Canada's Labour Force Survey (LFS) and 2011 National Household Survey (NHS)

10-YEAR AVERAGE

0.9%



POPULATION
GROWTH

400,400



BIRTHS

307,100



DEATHS

263,500



NET
IMMIGRATION

BY 2027

42



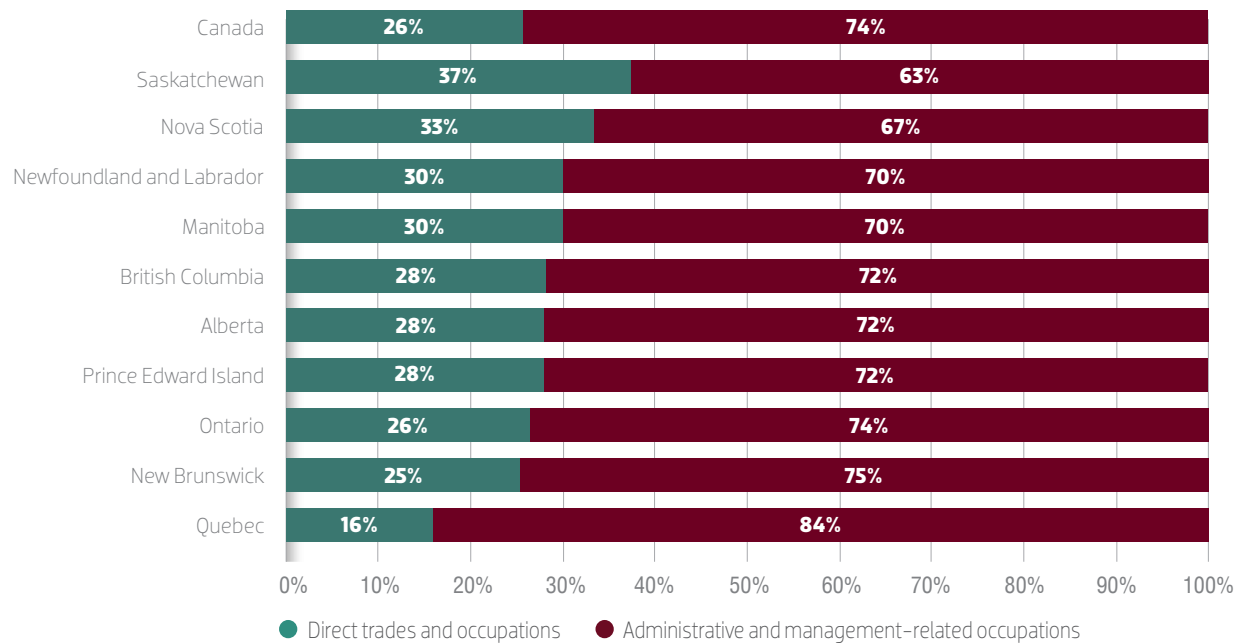
AVERAGE AGE OF
CONSTRUCTION
WORKFORCE

21%



PERCENT OF CURRENT
LABOUR FORCE LOST TO
RETIREMENT

Figure 3: Distribution of female construction employment, 2017, Canada



* **Direct trades and occupations** refers to the 34 trades and occupations tracked by BuildForce Canada, which excludes administrative-type occupations.

Source: BuildForce Canada calculations based on Statistics Canada's Labour Force Survey (LFS) and 2011 National Household Survey (NHS)

CONCLUSIONS AND IMPLICATIONS

Canada's construction market has entered a new period of slower growth, following about two decades of almost uninterrupted expansion during which the workforce doubled. Although employment demands have softened, industry continues to grapple with the challenges of renewing an aging workforce just as slower population growth leaves fewer youth available to enter the workforce, and competition from all industries that are facing similar increases in age demographic challenges.

The 2018–2027 BuildForce Canada outlook sees overall employment demands edge slightly higher to a new plateau, but the outlook across provinces is mixed. New demands driven by major energy, public transportation, and other infrastructure investments, and industrial maintenance requirements sustain workforce demands at historical highs as the remnants of large resource-expansion-era projects are completed. The decade ahead is characterized by slower population growth, which dampens demand for new housing. The potential for economic diversification away from dependence on resource development projects, and the emergence of new technologies and environmental policy changes are likely to translate into changing construction demands that may require different skills. Workforce mobility and the industry's capacity to train new and existing workers will be needed to facilitate the transition ahead.

The anticipated retirements prognosticated for decades have now materialized, and only intensify 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. The task of attracting new young workers to construction may become increasingly more difficult, as many industries face similar challenges related to replacing an aging workforce.

With an estimated 255,000 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 to meet changing requirements across provinces. 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 the 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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Funded by the Government of Canada's Sectoral Initiatives Program

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Canada

JANUARY 2018