

**2016–2025**
Key Highlights

Construction and Maintenance Looking Forward

New Brunswick

Resource projects carry construction employment in New Brunswick higher from 2017 to 2019. This growth rebuilds the non-residential workforce to the record high levels achieved in 2011, and then adds strong growth to 2019. Moderate growth in residential jobs that starts in 2017 restores some jobs lost during a decline in housing activity that ran from 2011 to 2015. Together, labour requirements arising in both markets deplete the limited provincial workforce and create recruiting challenges. Meeting labour market needs may depend on the mobility of the workforce across provinces and markets, as well as from outside of Canada.

Proposed pipeline, marine terminal and resource development projects bring new opportunities at a time when demographic forces are limiting labour force growth and a portion of the local construction workforce has been drawn to work in other provinces. The ebb and flow of specialized trades working on the big engineering projects exceeds the normal level of unemployment and market adjustments depend on the movement of workers from other markets.

The BuildForce system tracks these shifting requirements and the available workforce. Employment levels in New Brunswick are sustained at a high level even after the engineering projects have peaked in 2019. At the end of the 2016–2025 forecast scenario, New Brunswick construction employment is expected to grow by more than 1,900 workers, with net in-mobility¹ estimated at 2,500 to meet industry needs.

Across the scenario period, the key question arises of how the New Brunswick construction industry will keep pace with requirements – managing recruiting and training challenges

BUILDFORCE'S LMI SYSTEM

BuildForce Canada uses a scenario-based forecasting system to assess future labour market conditions for 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.

in the face of rising and sustained demands in resource projects and growing numbers of retiring workers. The largest challenges will emerge over the medium term to 2019.

¹ In-mobility refers to the arrival of workers from outside the local construction industry.

The 2016 BuildForce labour market information (LMI) system has been improved by the addition of a complete supply-side analysis for each of the residential and non-residential markets. This groundbreaking work provides the first-ever analysis of separate conditions in both markets.

NON-RESIDENTIAL HIGHLIGHTS (2016 TO 2025)

While the strongest phase of the resource cycle in Canada has passed, the New Brunswick construction expansion still has momentum. After peaking in 2011, non-residential employment cycled down and then up in line with the completion and start of major projects. At the start of the scenario in 2016, non-residential employment is just below the previous 2011 peak.

Labour requirements

Industrial, commercial and institutional (ICI) building activity is projected to rise across the scenario period, adding 600 jobs. Commercial activity continues a steady gain across the 2016–2025 period. Institutional building is mostly unchanged to 2018 and then starts a modest rise. Industrial building is more volatile, with a small drop in 2016 followed by gains in 2017 and 2018. Industrial trends down after 2019, but finishes the scenario in 2025 above levels reported in 2015.

Marine terminal, pipeline and mining projects start up across the 2017–2019 period and raise employment, with the biggest gains expected in 2017. Project employment is focused on a group of skilled and often very mobile trades, including construction managers and supervisors, heavy equipment operators and mechanics, pipefitters, welders and others.

After 2020, planned major projects begin to wind down, reducing employment. Later in the scenario period, a proposed major hydro dam refurbishment project contributes to requirements for engineering-related work.

Maintenance-related employment also creates a growing market for the construction workforce, and across the 2016–2025 scenario, 500 jobs are added in steady and moderate growth to non-residential maintenance. Job losses on major projects late in the scenario are also partly offset by moderate growth in commercial and institutional building activity. At the end of the 10-year scenario, employment in non-residential building and engineering jobs, including maintenance, has risen by 1,900 jobs above 2015 levels.

The available workforce

Current population trends make adding new workers a major challenge. The New Brunswick population has one of the older age profiles across the provinces. The pool of youth entering the workforce is declining, while retirements rise. These challenges are not new, but are complicated by the expected increase in construction.

The BuildForce LMI system tracks supply and accounts for the change in the available labour force, including retirements, new entrants² and net in-mobility. Retirements measure permanent losses to the workforce, which might be offset by the entry of first-time workers aged 30 and younger to the construction labour force.

Across the decade:

- The available non-residential workforce expands by 1,100 workers as unemployment levels are driven below historical levels.
- Nearly 4,500 workers are expected to be lost to retirement and must be replaced.
- An estimated 3,300 first-time new entrants to the workforce are expected to be recruited from New Brunswick's local population.
- Meeting overall labour requirements will require recruiting an additional 2,300 workers from outside the local non-residential workforce.

Figure 1 tracks annual changes in the labour force across the 2016–2025 scenario period. Most of the change is concentrated from 2017 to 2019. Then, in 2020, the projects wind down and a portion of this workforce leaves.

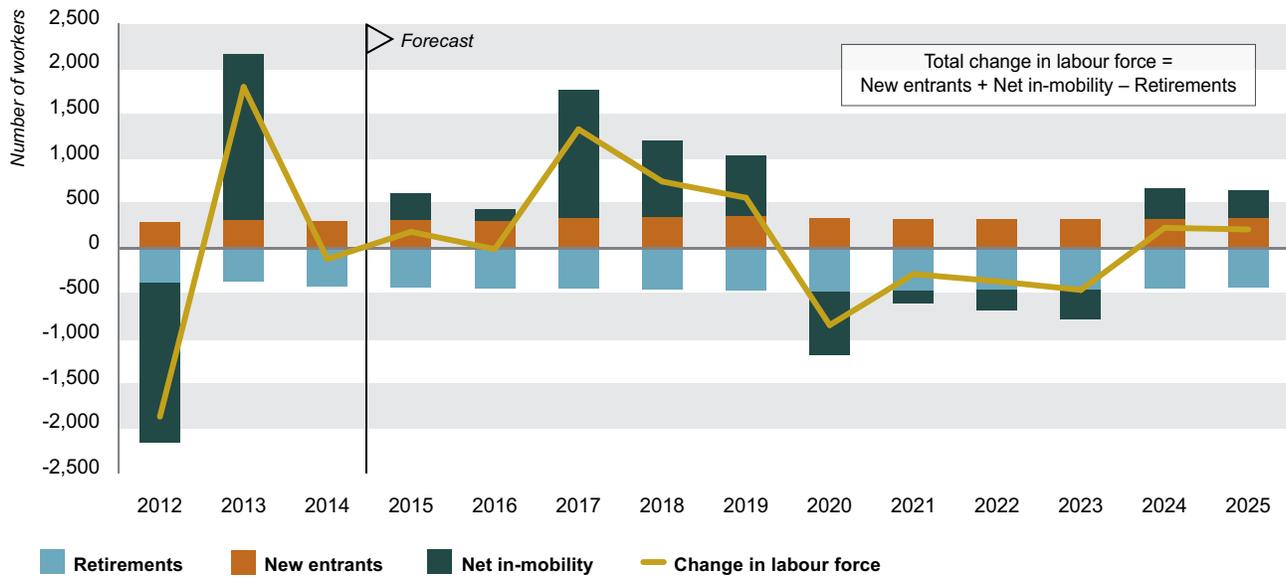
Non-residential rankings, risks and mobility

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

The rankings for some trades working in the non-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

² New entrants are measured by applying the traditional proportion of the provincial workforce that enters the construction industry. The projected estimate across the scenario period assumes that the construction industry is able to recruit this group in competition with other industries.

Figure 1: Annual estimated changes in non-residential supply, New Brunswick



Source: BuildForce Canada

sector level. Trades may also be excluded because they typically do not work in the sector being assessed (e.g., home building and renovation managers in non-residential). For New Brunswick, non-residential rankings are reported for 24 trades and occupations.

Table 1 (page 4) provides non-residential rankings, showing largely balanced markets in 2016 and after 2021. Ranks reflect the projected additions to employment across all non-residential markets from 2017 to 2019. Industrial and engineering project demands raise employment, and markets tighten in 2017 with rankings of 4.

RESIDENTIAL HIGHLIGHTS (2016 TO 2025)

A decade-long rise in New Brunswick housing ended in 2010 followed by an extended period of decline to 2015. Investment and employment was unchanged in 2016 and the modest rise in activity increased employment from 2017 until 2019, coinciding with the cycle in non-residential investment.

Labour requirements

An increased new housing cycle adds 625 jobs from 2016 to 2020 and then reverses, losing an estimated 750 jobs by the end of the scenario period in 2025. A large renovation market rises modestly across the scenario period. This stable market is tied to an older housing stock and moderates the volatility in new housing.

The available workforce

Requirements from the modest housing upturn can be partly met from the unemployed remaining in the workforce after the last cycle. But residential construction employers also need to replace a growing number of retirements. BuildForce supply-side accounting can now be applied to both residential and non-residential markets. Looking at the residential market:

- The labour force declines by an estimated 900 workers across the scenario period, following the decline in residential employment.
- Replacement demands (retirements) total an estimated 3,500 workers.
- An estimated 2,400 new entrants from the local population are expected to offset retirement demands.

- Meeting overall labour requirements will require recruiting an additional 200 workers from outside the local residential workforce.

On balance, the local residential workforce is expected to meet requirements, but much will depend on successfully recruiting the province's youth.

Figure 2 sets out the annual changes in the labour force, showing the modest buildup in recruiting as new housing improves to 2019 and then settles back to current levels. The steady loss of workers due to estimated retirements represents an important challenge for the coming decade.

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.
N/A	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 1: Rankings for trades and occupations in non-residential construction in New Brunswick

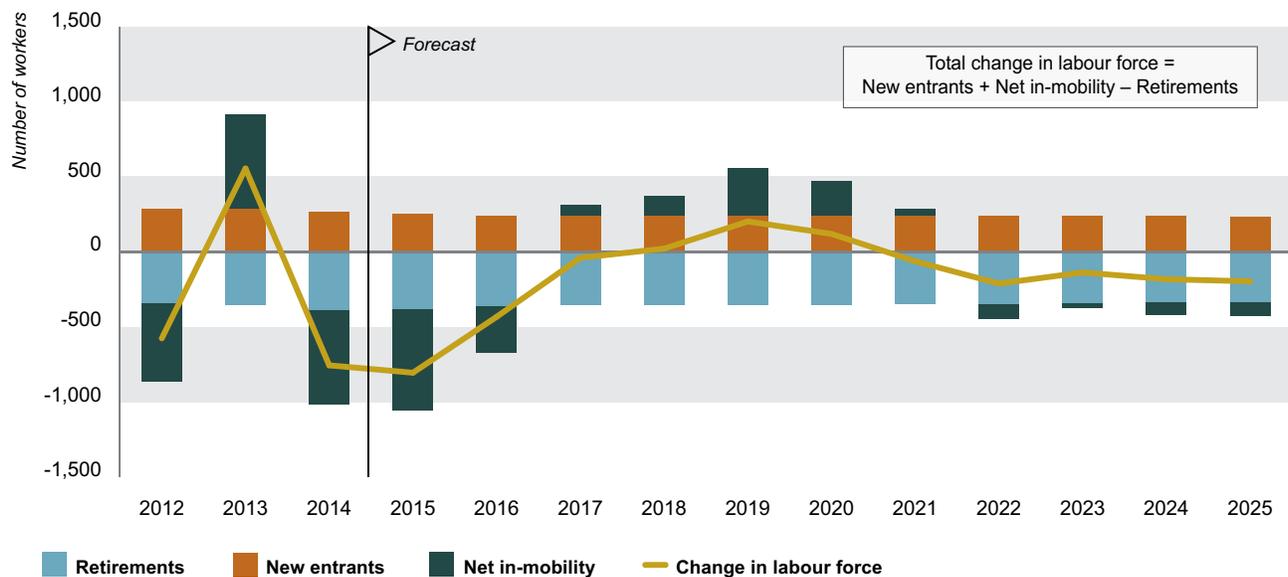
TRADES AND OCCUPATIONS	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Boilermakers	3	3	4	3	4	3	3	3	3	3	3
Bricklayers	3	3	4	3	4	3	3	3	3	3	3
Carpenters	3	3	4	3	3	3	3	3	3	3	3
Construction estimators	3	3	4	3	3	3	3	3	3	3	3
Construction managers	4	3	4	4	4	3	3	3	3	3	4
Construction millwrights and industrial mechanics	3	3	4	3	4	3	3	3	3	3	3
Contractors and supervisors	3	3	4	4	4	3	3	3	3	3	3
Crane operators	3	3	4	3	4	3	3	3	3	3	3
Electricians	3	3	4	3	4	3	3	3	3	3	3
Heavy equipment operators (except crane)	4	3	4	4	3	2	3	3	3	3	3

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TRADES AND OCCUPATIONS	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Heavy-duty equipment mechanics	4	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 and fitters	3	3	4	4	3	2	3	3	3	3	3
Painters and decorators (except interior decorators)	3	3	4	4	3	2	3	3	3	3	3
Plasterers, drywall installers and finishers, and lathers	3	3	4	3	3	3	3	3	3	3	3
Plumbers	3	3	4	3	4	3	3	3	3	3	3
Refrigeration and air conditioning mechanics	3	3	4	4	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	3	3	4	3	4	3	3	3	3	3	3
Steamfitters, pipefitters and sprinkler system installers	3	3	4	3	4	3	3	3	3	3	3
Trades helpers and labourers	4	3	4	4	3	2	3	3	3	3	3
Truck drivers	4	3	4	3	3	2	3	3	3	3	3
Welders and related machine operators	3	3	4	4	3	2	3	3	3	3	3

Source: BuildForce Canada

Figure 2: Annual estimated changes in residential supply, New Brunswick



Source: BuildForce Canada

Residential rankings, risks and mobility

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 and millwrights in residential construction). For New Brunswick, residential rankings are reported for 16 trades and occupations.

Low rankings in Table 2 reflect the 2015 decline in housing and the general, continuing declining trend in employment. As the cycle turns up, the ranks signal the added demands of new housing in the supply-demand balance for the trades and occupations. Thus, trades such as carpenters, labourers and equipment operators – who work more intensively in new housing – may have limited access to work in renovation and have brief periods of changing unemployment and increased mobility.

Balanced markets, signalled by a rank of 3 in the table, require a limited and normal level of workforce mobility. Stronger housing markets, with a rank of 4, will need to recruit from other markets or provinces.

CONCLUSIONS AND IMPLICATIONS

After a strong expansion in construction employment from 2005 to 2011 there is still momentum in the New Brunswick construction industry. The 2016–2025 *Construction and Maintenance Looking Forward* scenario anticipates above-average labour requirements over the medium term as proposed major projects come on stream.

Filling industry needs early in the scenario period and replacement demands later in the period will likely create labour market challenges:

- Slower population growth and an aging workforce combine to create specific challenges for employers.
 - Recruiting young people, immigrants and out-of-province workers, including some returning to New Brunswick, will bring construction in competition with

Table 2: Rankings for trades and occupations in residential construction in New Brunswick

TRADES AND OCCUPATIONS	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Bricklayers	3	3	3	3	4	3	3	3	3	3	3
Carpenters	2	3	3	3	4	4	3	3	3	3	3
Construction estimators	2	3	3	4	4	3	3	3	3	3	3
Construction managers	2	3	4	4	4	4	3	3	3	3	3
Contractors and supervisors	3	3	3	3	3	3	3	3	3	3	3
Electricians	2	3	3	3	4	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)	2	3	3	3	4	4	3	3	3	3	3
Home building and renovation managers	3	3	3	3	4	4	3	3	4	4	4
Painters and decorators (except interior decorators)	3	3	3	3	4	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
Trades helpers and labourers	2	3	3	3	3	3	3	3	3	3	3
Truck drivers	2	3	3	3	4	4	3	3	3	3	3

Source: BuildForce Canada

other industries facing similar demographic challenges, which will be drawing from the same, limited local population.

- Cyclical changes in employment may require mobility in the workforce across the residential and non-residential sectors and among the provinces.

- Local demographics restrict labour force growth, leaving in-mobility key to recruiting.

The *Construction and Maintenance Looking Forward* national highlights report expands on the range of worker mobility options and industry implications.

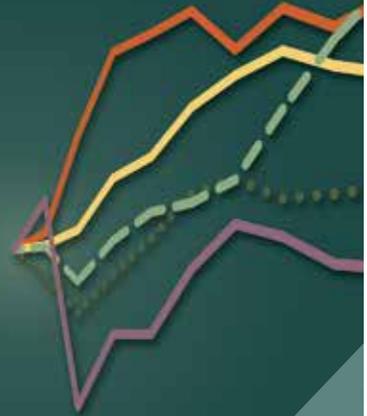
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