



## 2015–2024 Key Highlights

# Construction and Maintenance Looking Forward Nova Scotia

While total construction investment and employment fluctuate in a narrow band over the 2015–2024 *Construction and Maintenance Looking Forward* scenario for Nova Scotia, important demographic challenges and shifts across markets tighten labour market conditions for several trades and occupations between 2019 and 2022. From 2008 to 2013, the province’s construction industry was sustained at record levels, as work shifted from residential peaks in 2011 and 2012 to engineering peaks in 2013. The record employment level reached in 2013 will act like a ceiling across the scenario period, as work ebbs and flows close to, but below, that level.

Labour force adjustments will depend, in part, on the mobility of the workforce among construction markets, with the dominant movement being out of new housing work and into residential renovation and non-residential building. Construction employers in Nova Scotia will face recruiting challenges – often linked to competing demands that attract local workers to opportunities in other provinces.

Overall, human resources management in construction will be dominated by demographics. Rising retirements and a shrinking younger population limit growth in the available skilled workforce across many trades.

### HIGHLIGHTS (2015 TO 2024)

- Non-residential construction investment rises modestly, driven by industrial (shipyard upgrades and expansion) and commercial projects, while steady growth in renovation expenditures helps to offset a decline in new residential construction investment.

### BUILDFORCE’S LMI SYSTEM

BuildForce Canada uses a scenario-based forecasting system to assess future labour market conditions. This labour market information (LMI) system tracks measures for 34 trades and occupations. BuildForce consults with industry, including owners, contractors and labour groups, to validate the scenario assumptions and construction project lists, and seeks input from government on related analysis. It was necessary to recast this year’s outlook prior to publishing to better reflect the significant changes in current market conditions.

- 2015 starts the scenario with employment unchanged compared to 2014, which was down from previous high levels reported in 2013.
- Overall, construction employment levels are expected to rise, with a modest increase of 1,100 jobs over the 2015–2024 scenario period.
  - Across the period, new housing jobs decline by 1,200, but these are offset by gains of 800 in renovation, 600 in commercial and institutional, and 500 in engineering work.
- Estimated retirements will add more than 8,000 hiring opportunities; far in excess of the estimated new entrants<sup>1</sup>.
- Mobility will be key, as the needed workforce must be drawn from other industries, provinces and abroad, in almost every year across the scenario period.
  - Many of Nova Scotia’s skilled workforce are employed on a temporary basis in other provinces.
  - Nova Scotia employers in industrial, commercial and engineering markets may compete with hiring in other regions such as British Columbia, Manitoba and Saskatchewan over the medium term.

## NON-RESIDENTIAL CONSTRUCTION

- Across the 2015–2024 scenario period, non-residential building construction rises by 1,700 jobs in steady increments, but this follows recent market volatility:
  - Sharp gains in engineering work added 2,000 jobs as projects peaked in 2013.
  - Projects winding down in 2014 erased part of the gain.
- From 2015 to 2024, recent engineering and project gains are barely sustained, as ongoing projects add just 500 more jobs in the coming decade.
- Meanwhile, more steady gains in ICI (industrial, commercial and institutional) building construction and maintenance work add 1,000 jobs across the scenario period.

## RESIDENTIAL CONSTRUCTION

- Residential construction employment declines by 500 jobs across the scenario period, but there are some opportunities for the unemployed to find work in other construction markets.

- New housing activity is on a downward trend after an extended growth period from 2001 to 2012, when housing starts exceeded household formations<sup>2</sup>.
  - Jobs in new housing declined by more than 2,000 in 2013 and 2014 and are projected to decline by a further 1,200 jobs across the scenario period.
  - From 2015 to 2024, the population remains relatively unchanged, with household formation either unchanged or declining later in the scenario period.
- Renovation and maintenance demands related to the existing housing stock rise slowly.
  - Renovation employment rises by 800 jobs, while maintenance falls by 100 from 2015 to 2024.

## THE AVAILABLE WORKFORCE

- Province-wide demographic trends across the scenario period will limit population growth, as the natural rate of deaths exceeds births by 13,500.
- Out-migration to other provinces draws away another estimated 8,600 workers.
- International immigration of an estimated 25,600 workers is needed to fill the gap.
  - The total labour force for all industries is relatively unchanged across the scenario period.
  - Unemployment, in most industries, is currently at low historical levels and declines further from 2015 to 2024.
- Even modest increases in labour requirements will need to be supplied from outside the traditional Nova Scotia workforce.

## CHANGES IN CONSTRUCTION LABOUR SUPPLY

The BuildForce LMI system tracks supply and accounts for the change in the available labour force, including retirements, new entrants and net in-mobility<sup>3</sup>. Retirements measure permanent losses to the workforce, which are partially offset by the entry of first-time workers aged 30 and younger to the construction labour force. Figure 1 tracks the annual changes in the labour force across the forecast period.

- Net in-mobility is required to meet overall labour demands, as estimated new entrants may not be sufficient to offset retirements.<sup>4</sup>

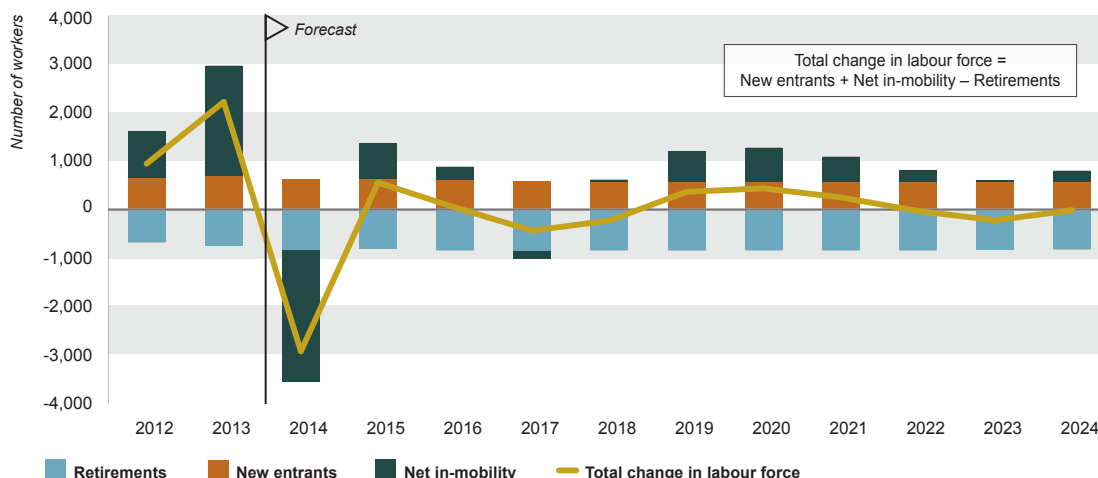
<sup>1</sup> The amount of new entrants is measured by applying the traditional proportion of the provincial workforce aged 30 and younger that enters the construction industry for the first time. The projected estimate across the scenario period assumes that the construction industry is able to recruit this group in competition with other industries.

<sup>2</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.

<sup>3</sup> In-mobility refers to the arrival of workers from outside the local construction industry.

<sup>4</sup> Recruiting is required by the construction industry from other industries and/or other provinces or countries to meet labour requirements.

**Figure 1: Annual Estimated Changes in Supply**



Source: BuildForce Canada

- The ebb and flow of labour requirements across market segments creates demand for in-mobility from 2019 to 2022.

## RANKINGS, RISKS AND MOBILITY

BuildForce assesses market conditions for 34 trades and occupations in Nova Scotia using a ranking system that combines measures of the change in employment, unemployment, net in-mobility and adjustments based on industry input. The rankings reflect a combination of residential and non-residential market conditions unique to Nova Scotia 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 (see ranking table on page 5).

- Ranks are highest from 2019 to 2021, as housing recovers and non-residential activity rises to a new peak, creating tight labour markets.
- Small, annual increases in employment (less than 2 percent) later in the scenario period are enough to create tight labour markets again for some trades and occupations.

- Extended periods where markets are ranked as a 3 may mask weaker housing and strong non-residential conditions and/or short-term peak demands for maintenance work and project start-ups.
  - From 2015 to 2018, for trades working in both housing and non-residential construction, ranks are consistently below average in residential and above average in non-residential.
- Ranks signal the potential for mobility:
  - Residential employers may lose qualified workers to commercial and institutional jobs depending on the portability of skills, experience and willingness to move across construction markets.
  - Nova Scotia employers could lose specialized non-residential trades to other provinces, including British Columbia, Saskatchewan or Manitoba, over the near term and will need to draw them back between 2019 and 2022.
- Labour markets will be tight, especially from 2019 to 2021, for trades in non-residential construction, including:
  - boilermakers
  - bricklayers
  - carpenters
  - construction millwrights
  - crane operators
  - heavy equipment operators
  - heavy-duty equipment mechanics
  - pipefitters
  - welders

- Market challenges later in the scenario period are driven by an older age profile and rising retirements for specific trades and occupations, including:
  - construction managers
  - contractors and supervisors
  - residential homebuilders and renovators

- Work opportunities will shift across the residential and non-residential sectors, creating job opportunities and the need for a mobile workforce to meet labour market demands.
- Local demographics restrict labour force growth, leaving in-mobility key to recruiting.
- Retirement demands far exceed the capacity of the local workforce, where anticipated first-time new entrants to the construction labour force are not sufficient to offset replacement demand<sup>5</sup>.
- Tight labour market conditions will constrain recruiting for even modest increases in demand requirements.

## CONCLUSIONS AND IMPLICATIONS

- The 2015–2024 *Construction and Maintenance Looking Forward* scenario for Nova Scotia anticipates continuing human resources challenges.
- Modest growth in new construction activity will keep employment close to, but below, record levels reached in 2013.

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

## WHAT'S CHANGING IN THE NOVA SCOTIA CONSTRUCTION INDUSTRY?<sup>6</sup>

**8,400\***  
construction workers are  
expected to retire over the next



At the same time, the province's  
labour force grows by

**700**

workers to meet demands created  
by increased construction activity.

=

Nova Scotia will need  
to attract about

**9,100**

new construction workers  
over the next 10 years.



\* 27% of the current labour force

Source: BuildForce Canada (data as of February 2015)

<sup>5</sup> Replacement demand refers to the loss of workers due to retirement.

<sup>6</sup> The 2015 BuildForce LMI system has been enhanced to include measures of office employment in construction that was excluded in earlier labour force measures. New industry totals are consistent with the Labour Force Survey measures for total construction. The infographic presented here refers only to the 34 trades and occupations tracked by BuildForce.



## 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.

## RANKINGS FOR TRADES AND OCCUPATIONS IN NOVA SCOTIA

TRADES AND OCCUPATIONS	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Boilermakers</b>	3	3	3	3	3	4	4	4	4	3	3
<b>Bricklayers</b>	2	3	3	3	3	4	4	4	3	3	3
<b>Carpenters</b>	2	3	3	3	3	4	4	4	3	3	3
<b>Concrete finishers</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Construction estimators</b>	2	3	3	3	3	4	4	4	3	3	3
<b>Construction managers</b>	3	3	3	3	3	4	4	4	3	3	4
<b>Construction millwrights and industrial mechanics</b>	3	3	3	3	3	4	4	4	3	3	3
<b>Contractors and supervisors</b>	3	3	3	3	3	4	4	4	4	3	4
<b>Crane operators</b>	4	3	3	3	3	4	4	4	3	3	3
<b>Drillers and blasters</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Electrical power line and cable workers</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Electricians</b>	2	3	3	3	3	4	4	3	3	3	3
<b>Elevator constructors and mechanics</b>	3	3	3	3	3	4	4	4	4	3	3
<b>Floor covering installers</b>	3	3	3	3	3	3	3	3	3	3	3
<b>Gasfitters</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Glaziers</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Heavy equipment operators (except crane)</b>	2	3	3	3	3	4	4	4	3	3	3

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TRADES AND OCCUPATIONS	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Heavy-duty equipment mechanics	3	3	3	3	3	4	4	4	4	3	3
Home building and renovation managers*	3	3	3	3	3	4	4	4	4	4	4
Industrial instrument technicians and mechanics	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Insulators	3	3	3	3	3	4	4	4	3	3	3
Ironworkers and structural metal fabricators and fitters	3	3	3	3	3	4	4	3	3	3	3
Painters and decorators	3	3	3	3	3	3	4	3	3	3	3
Plasterers, drywall installers and finishers, and lathers	2	3	3	3	3	3	4	3	3	3	3
Plumbers	2	3	3	3	3	3	3	3	3	3	3
Refrigeration and air conditioning mechanics	3	3	3	3	3	4	4	3	3	3	3
Residential and commercial installers and servicers	3	3	3	3	3	3	3	3	3	3	3
Roofers and shinglers	3	3	3	3	3	3	3	3	3	3	3
Sheet metal workers	3	3	3	3	3	4	4	3	3	3	3
Steamfitters, pipefitters and sprinkler system installers	3	3	3	3	3	4	4	4	3	3	3
Tilesetters	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Trades helpers and labourers	2	3	3	3	3	3	3	3	3	3	3
Truck drivers	2	3	3	3	3	4	4	4	3	3	3
Welders and related machine operators	3	3	3	3	3	4	4	4	4	3	3

\* The NOC classification for "Residential home builders and renovators" has changed to "Home building and renovation managers."

Source: BuildForce Canada

Timely construction forecast data is available online at [www.constructionforecasts.ca](http://www.constructionforecasts.ca). Create customized reports on a broad range of selected categories within sector, trade or province covering up to 10 years.

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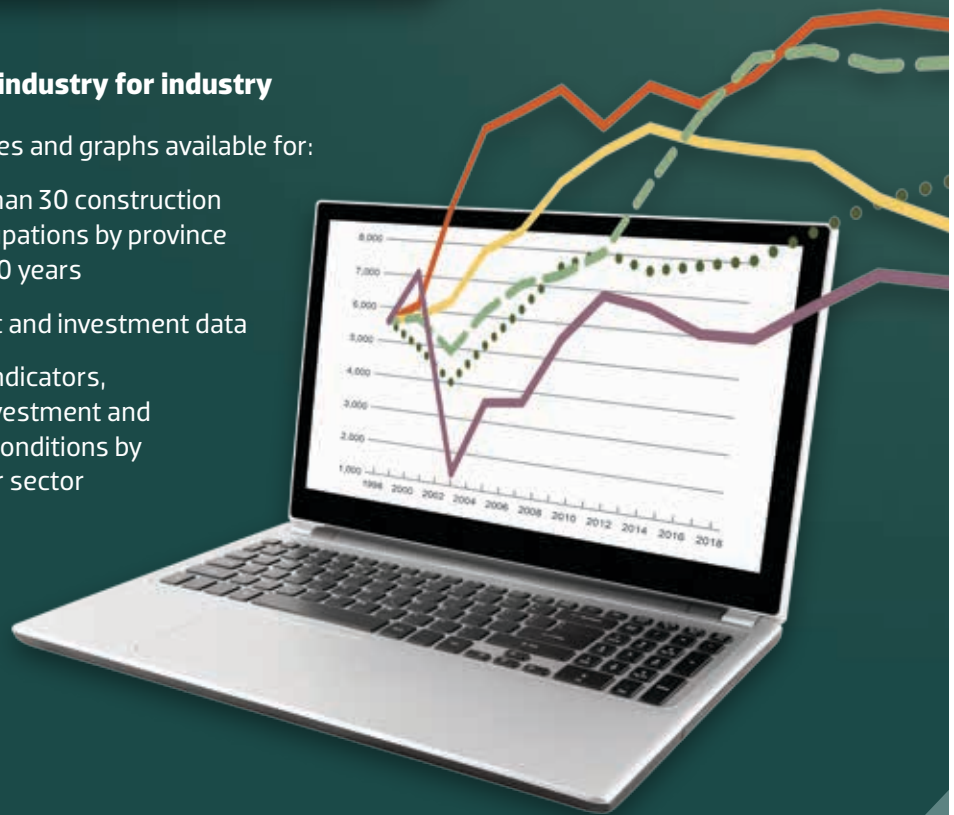
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- ◆ Macroeconomic and investment data
- ◆ Key economic indicators, construction investment and labour market conditions by province and/or sector



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