

**2016–2025**
Key Highlights

Construction and Maintenance Looking Forward

Ontario

The 2016 *Construction and Maintenance Looking Forward* scenario for Ontario projects an extended period of moderate gains in employment. Growth will continue from 2016 to 2019 and then a very modest downturn will bring employment back to current levels by 2025. The peak in 2019 marks a 25-year expansion that doubled construction employment. While the pace of growth will be low by past standards, adding to the workforce becomes progressively more difficult as retirements increase and fewer young entrants are available. These market challenges are more apparent early in the scenario period and in the specialized trades and occupations that are needed for new housing, infrastructure and major engineering construction projects.

Residential construction employers face a unique set of challenges as job openings shift across a rising cycle in new housing from 2016 to 2018, losses from 2019 to 2025, and longer-term gains in renovation and maintenance. In contrast, non-residential building construction rises more consistently across the 10-year scenario, while major engineering and civil projects create short-term fluctuations.

The emerging trends for the residential and non-residential construction sectors are tracked in a new feature of the 2016 BuildForce labour market information (LMI) system, which has been improved by the addition of a complete supply-side analysis for each market. This groundbreaking work provides the first-ever analysis of separate conditions in both markets, which are summarized in new individual rankings.

Changes are not evenly distributed across the province's regions and the mobility of the workforce will be a critical factor in balancing supply and demand. From 2016 to 2019, employment gains are strongest in Southwest Ontario and the Greater Toronto Area (GTA), with Eastern and Central Ontario lagging. The varied strength of the new housing revival and the start of major projects are the main factors separating regional performance.

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.

HIGHLIGHTS (2016 TO 2025)

For Ontario in total:

- Employment has risen since the 2009 recession, with strength and weakness alternating between residential and non-residential construction.
- The biggest gains were in the GTA and Central Ontario.

- No single market has consistently led growth, as opportunities shift between big infrastructure projects, renewed growth in industrial work and gains in commercial building activity.
- From 2016 to 2018, there is a more broadly based gain in work across new housing, non-residential building construction and major civil projects.
- Employment gains in the first years of the scenario are centred in housing and big civil projects in the GTA and Southern Ontario, with periodic recruiting challenges.
- The scenario anticipates the start of mining and pipeline work in the North that will prompt related gains in new housing and commercial building construction.
- As the new housing cycle turns down and fewer major engineering projects are identified after 2020, employment slowly declines.
- Unemployment has dropped well below historical levels and no longer offers a reliable source for hiring.
- The industry will have to rely more on attracting young people and new immigrants – often in competition with other industries.
- Shifting market conditions may be balanced by workforce mobility across regions and sectors.

REGIONAL SUMMARIES

Greater Toronto Area (GTA)

- The cyclical expansion of housing, engineering and industrial building construction from 2016 to 2019 is stronger in the GTA.
- Commercial construction and residential renovation and maintenance are stable sources of steady growth.
 - Improvements in industrial construction reflect a limited recovery in manufacturing as activity rises, but remains below the peak levels reached in the mid-2000s.
- The GTA has Ontario's largest planned and ongoing engineering projects in transit and nuclear generation.
 - Labour requirements are focused on specialized trades and occupations.
 - Once hiring is largely complete, there is little change in project employment until very late in the scenario period.
- Recurring tight market conditions may be resolved by attracting workers from other regions.

Central Ontario

- Gains from 2010 to 2015 in new housing and non-residential building started the scenario at high levels of employment.

- Cyclical gains and losses are milder than in other regions, but the current high level of employment is sustained.
- Annual changes in unemployment and net mobility¹ move within a narrow 1 percent range – with overall market conditions mostly balanced across the scenario period.
- Moderate changes in overall regional conditions may conceal a wide variation of activity across local markets within the Central region.

Eastern Ontario

- Over the past five years, activity in most Eastern Ontario construction markets has lagged behind other regions.
- A limited number of new institutional and engineering projects (many in the national capital region) have boosted employment, and some improvements are apparent in the early stages of the scenario period.
 - New institutional projects provide some employment opportunities over the short term.
 - But as the projects end and government restraint continues, employment recedes back to current 2015 levels.
- Significant replacement demands remain as many in the workforce retire.
- New entrants from the local population aged 30 and younger entering the Eastern Ontario construction labour market are expected to find employment opportunities, offsetting estimated retirements.
- Construction employers in the region may face periodic competition as activity peaks in other regions.
- Conditions in Eastern Ontario may be affected by the recently announced federal government infrastructure spending plans.

Northern Ontario

- Over the past few years, activity has lagged and employment has declined.
- The 2016 scenario includes:
 - the start of a major gold mine and the potential for new resource developments to come on stream over the medium term
 - a proposed pipeline across the region
 - utilities projects
- Employment is expected to rise and then fall back below current levels as major projects end after 2019 and 2020.
- Renewed growth raises housing starts, residential investment and employment.

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

- Increased activity prompts potentially tighter labour markets over the medium term, but much depends on the timing of proposed major resource development projects, which could be delayed due to weak commodity prices and global demands.
- The older age profile in Northern Ontario leaves limited natural population growth, so that net in-mobility may be a key source of labour supply during peak periods.

Southwest Ontario

- Southwest Ontario was severely hit by the 2009 recession and the limited manufacturing recovery, with non-residential construction employment declining from 2010 to 2015.
- Employment will recover lost ground, as several major, long-term projects are spread across the region and across the entire 2016–2025 scenario period.
- Key projects include a major bridge construction, nuclear power generation refurbishment and other utilities work.
- Modest improvements are expected in industrial activity, and much of the employment lost over the decade-long decline from 2002 to 2013 is recovered by 2020.
- This new activity is associated with a housing revival that raises housing starts to a peak level in 2019, but remains well below previous peak activity from 2003 to 2006.
- Rising employment draws workers from unemployment.
 - Large and specialized requirements for major civil and utilities projects may require the need to recruit from other markets.

NON-RESIDENTIAL HIGHLIGHTS (2016 TO 2025)

While employment growth in non-residential markets across the 2016–2025 scenario period is modest, recruiting will continue to be a challenge as a growing proportion of the workforce retires.

Labour requirements

Non-residential employment grows stronger early in the scenario period, from 2016 to 2019, and then slows over the remainder of the period.

- Major infrastructure, transit, mining, electricity and industrial projects are key drivers and are spread across the GTA, Southwest and Northern Ontario.

- Province-wide non-residential employment grows by 9,500 jobs to 2019, with more than half of the gains in the GTA and the Southwest.
- After 2019, demands are concentrated in maintenance, commercial, utilities work and some industrial projects, while employment declines in the other markets.
- Labour market conditions are largely determined by the scheduling of large projects, especially in the GTA, Southwest and Northern Ontario, where major projects are underway and proposed to start early in the scenario period. Tighter conditions are expected as employment rises.

The available workforce

While the age profile of the Ontario population is growing older, it will sustain a natural increase across the scenario period, as births exceed deaths. Still, the pool of youth entering the workforce is declining, while retirements rise. These challenges are not new, but are complicated when there is any significant rise in construction jobs.

The BuildForce LMI system tracks supply and accounts for the change in the available labour force, including retirements, new entrants 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 from the local population.

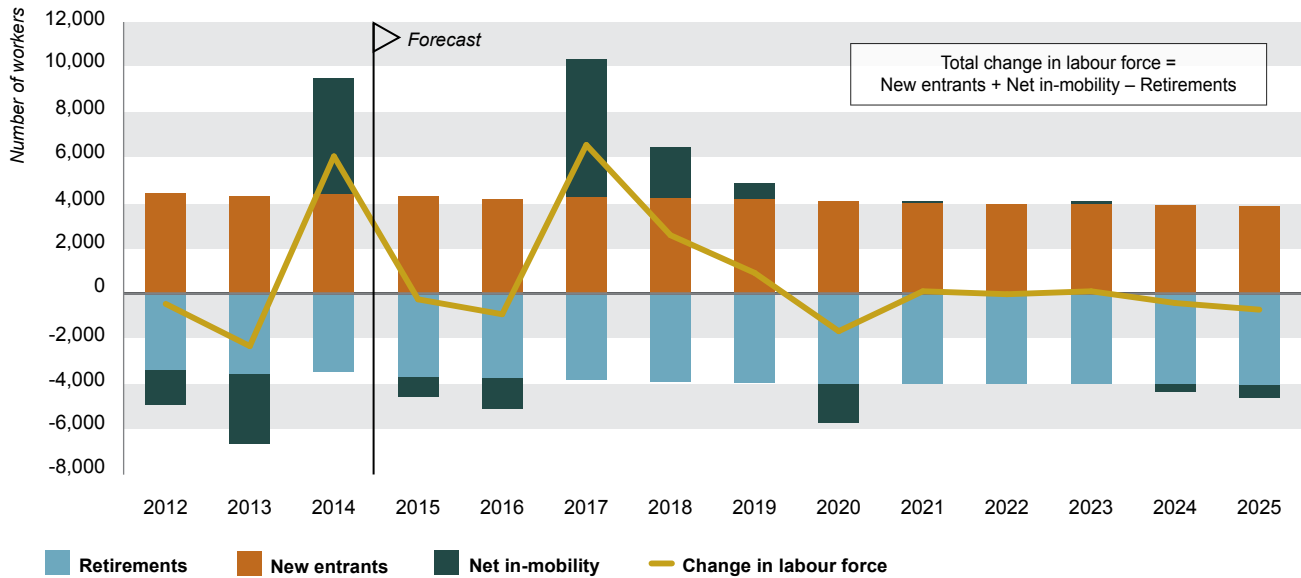
Across the decade:

- The available non-residential workforce expands by 6,500 workers, as unemployment is driven below historical levels.
- More than 39,300 workers are lost to retirement and must be replaced.
- An estimated 40,600 new entrants² are drawn into the workforce to meet these demands.
- Meeting overall labour requirements will require an additional 5,200 workers from outside the provincial markets to meet total demand requirements.

Labour requirements are not distributed evenly across the years or regions. Changes noted above are concentrated in 2017 and 2018, and the most intense recruiting may focus on specialized workers. Then, in 2020, the projects wind down and a portion of this workforce leaves. Figure 1 tracks the annual changes across the scenario period.

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, Ontario



Source: BuildForce Canada

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 Ontario 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 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 Ontario, non-residential rankings are reported for 32 trades and occupations.

Table 1 provides non-residential rankings, showing tightening conditions in 2017 and then largely balanced markets after 2018, with the exception of boilermakers, where proposed long-term nuclear refurbishment projects sustain tighter market conditions.

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 Ontario

TRADES AND OCCUPATIONS	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Boilermakers	3	3	4	4	4	4	4	3	3	3	4
Bricklayers	3	3	3	3	3	3	3	3	3	3	3
Carpenters	3	3	3	3	3	3	3	3	3	3	3
Concrete finishers	3	3	3	3	3	3	3	3	3	3	3
Construction estimators	3	3	4	3	3	3	3	3	3	3	3
Construction managers	4	3	4	3	3	3	3	3	3	3	3
Construction millwrights and industrial mechanics	3	3	4	3	3	3	3	3	3	3	3
Contractors and supervisors	3	3	3	3	3	3	3	3	3	3	3
Crane operators	3	3	3	3	3	3	3	3	3	3	3
Drillers and blasters	3	3	4	3	3	3	3	3	3	3	3
Electrical power line and cable workers	3	3	4	3	3	3	3	3	3	3	3
Electricians	3	3	3	3	3	3	3	3	3	3	3
Elevator constructors and mechanics	3	3	3	3	3	3	3	3	3	3	3
Floor covering installers	3	3	3	3	3	3	3	3	3	3	3
Gasfitters	3	3	3	3	3	3	3	3	3	3	3
Glaziers	3	3	3	3	3	3	3	3	3	3	3

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

Source: BuildForce Canada

RESIDENTIAL HIGHLIGHTS (2016 TO 2025)

Immigration is a critical determinant of the pattern of residential construction activity across the scenario. Recent trends showed immigration levels peaked in 2013 and then eased back by 2015. Immigration is projected to begin rising again in 2016 and the number of new arrivals will increase each year across the scenario period. This influx adds to the younger age groups and related household formations³.

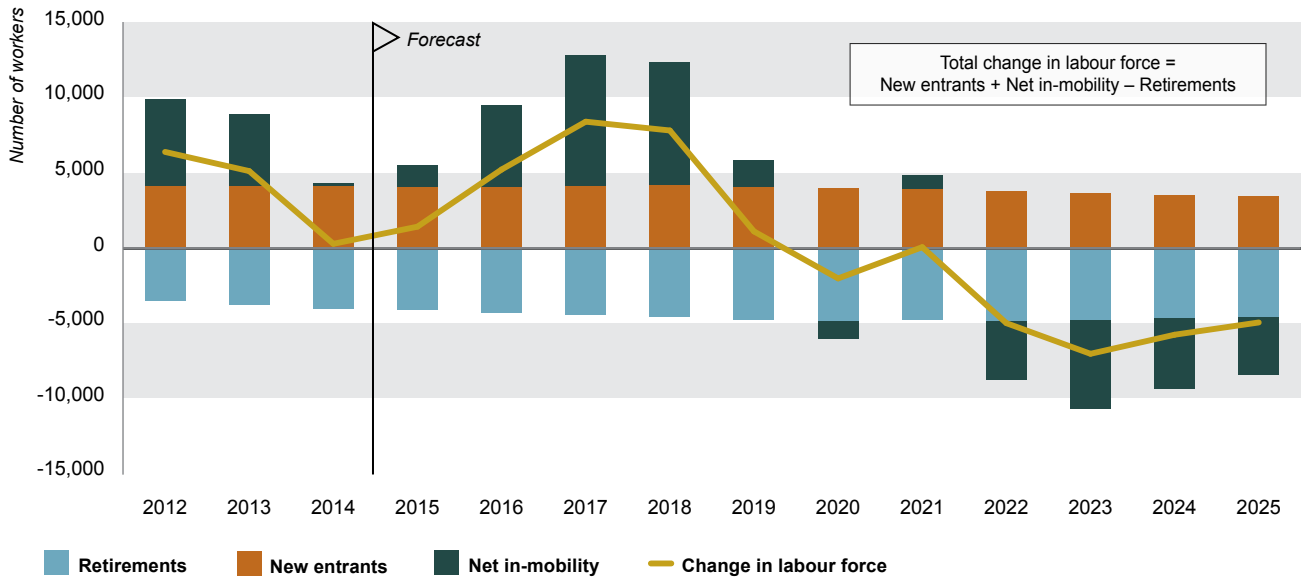
Labour requirements

Residential employment peaks in 2019 and then declines as new housing investment slows. By the end the scenario period, employment is down by 1,700 workers, or a 1 percent decline.

- A new housing cycle grows out of the rising immigration, adding 22,000 jobs from 2016 to 2019.
- The cycle reverses from 2020 to 2025, and employment in new housing markets drops just below current levels.
- A large renovation market adds 2,000 jobs with modest gains across the scenario, while work in maintenance work adds another 700.
- A small net loss of 1,700 jobs remains in 2025.
- The new housing cycle is volatile, with employment rising and then falling 25 percent.
- Market changes are concentrated in the GTA, where immigration tends to be focused.
 - Half of the new housing impacts are in the local Toronto labour market, creating recruiting challenges.

³ 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.

Figure 2: Annual estimated changes in residential supply, Ontario



Source: BuildForce Canada

The available workforce

In addition to meeting demands in the changing markets, 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 drops by 2,000 jobs across the scenario period, following a long-term loss across the period.
- Over the same period, replacement demands (retirements) total an estimated 46,000 workers.
- The estimated 39,000 new entrants offset retirement demands.

On balance, local residential employers will need to draw in 5,000 new workers to meet requirements for new housing, renovation and retirement, but much will depend on successful recruiting of the province’s youth.

Figure 2 sets out the annual pattern of these changes, showing recruiting from other markets as new housing improves to 2018 and then settles back to current levels. Estimated annual retirements represent a major industry challenge for the coming decade.

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 Ontario, residential rankings are reported for 29 trades and occupations.

Rankings reflect the stronger cycle in the residential sector, with many markets rising to a 4 at the peak in 2017 and 2018, and then retreating to a 2 later in the scenario period as activity slows.

Balanced markets, signalled by a rank of 3, require a limited and normal level of workforce mobility. Stronger housing markets, with a rank of 4, will need to recruit from other markets and provinces. *Construction and Maintenance Looking Forward* results in other provinces, regions and markets provide some indicators. Within Ontario, conditions will attract skilled and experienced residential workers to the GTA.

Table 2: Rankings for trades and occupations in residential construction in Ontario

TRADES AND OCCUPATIONS	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Bricklayers	3	3	3	3	3	3	3	3	3	3	3
Carpenters	3	3	3	3	3	3	3	3	3	3	3
Concrete finishers	3	3	3	3	3	3	3	3	3	3	3
Construction estimators	3	3	4	3	3	3	3	3	2	3	3
Construction managers	4	4	4	4	3	3	3	2	2	2	2
Contractors and supervisors	3	3	3	3	3	3	3	3	3	3	3
Crane operators	4	4	4	4	3	3	3	2	2	2	2
Electricians	3	3	4	3	3	3	3	3	2	2	3
Elevator constructors and mechanics	3	4	4	4	3	3	3	2	3	3	3
Floor covering installers	3	3	3	3	3	3	3	3	3	3	3
Gasfitters	3	3	3	3	3	3	3	3	2	3	3
Glaziers	4	4	4	4	3	3	3	2	2	2	2
Heavy equipment operators (except crane)	3	3	3	3	3	3	3	3	2	3	3
Heavy-duty equipment mechanics	3	3	4	4	3	3	3	3	3	3	3
Home building and renovation managers	3	3	3	3	3	3	3	3	3	3	3
Insulators	3	3	3	3	3	3	3	3	3	3	3
Ironworkers and structural metal fabricators	4	3	4	4	3	3	3	2	2	2	2
Painters and decorators (except interior decorators)	3	3	3	3	3	3	3	3	3	3	3
Plasterers, drywall installers and finishers, and lathers	3	3	4	3	3	3	3	3	3	3	3
Plumbers	3	3	4	3	3	3	3	3	2	2	3
Refrigeration and air conditioning mechanics	3	3	4	3	3	3	3	3	2	2	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	3	3	3	3	2	2	3
Steamfitters, pipefitters and sprinkler system installers	3	3	3	3	3	3	3	3	3	3	3
Tilesetters	3	3	4	4	3	3	3	2	2	2	2
Trades helpers and labourers	3	3	4	3	3	3	3	3	2	2	3
Truck drivers	3	3	3	3	3	3	3	3	3	3	3
Welders and related machine operators	3	3	4	4	3	3	3	2	2	2	3

Source: BuildForce Canada

CONCLUSIONS AND IMPLICATIONS

After 18 years of rising construction employment there is still some momentum adding new jobs across Ontario. The 2016–2025 *Construction and Maintenance Looking Forward* scenario anticipates growth from 2016 to 2019. Gains will be spread across most markets and regions.

Mobility is key to meeting regional market demands across residential and non-residential markets, regions in Ontario and the other provinces. There is, however, both limitations and opportunities where mobility may balance market conditions. For example, the new housing cycle may draw in new workers from 2016 to 2018 as it grows, and then employment will fall as activity declines. Changing conditions may encourage workers to move into and out of the more stable renovation market to meet new housing demands. But this mobility may be limited by demands for unique skills and experience and the willingness to work in other regions.

Similarly there is potential for mobility across non-residential markets as the big engineering projects ramp up and then wind down. Movement into and out of the

more stable commercial and institutional markets might offer recruiting opportunities for the big engineering projects. But the project locations and the demand for specialized skills and experience might limit mobility.

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 will bring construction in competition with other industries facing similar demographic challenges, which will be drawing from the same, limited local population.
- Cyclical changes in employment may require mobility of the workforce across the residential and non-residential sectors and among the provinces.

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

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

For more information, contact:

BuildForce Canada
Phone: 613-569-5552
info@buildforce.ca

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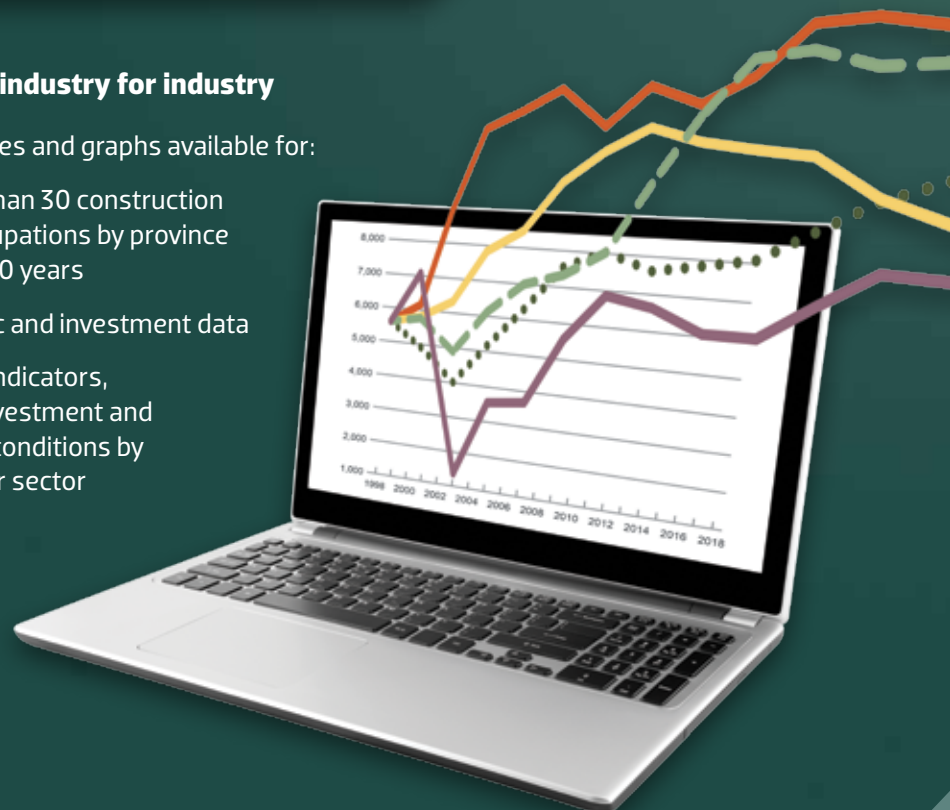
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www.constructionmapapp.ca



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