

Construction and Maintenance Looking Forward Saskatchewan

Construction employment in Saskatchewan has more than doubled in the past decade (adding 24,000 jobs) and this has been the strongest expansion in Canada.

Construction growth is expected to continue for another five years, with large-scale resource and infrastructure projects leading growth in two waves. Project start-ups between 2014 and 2016 peak in 2018, while a second round of projects starting in 2018 end in 2020. Momentum is also added by increased employment in industrial and commercial building, which grow each year at annual rates exceeding 5 percent from 2015 to 2017.

The 2015 Construction and Maintenance Looking Forward scenario projects that this extraordinary expansion, which began in 2005, will span 15 years and run to 2019, with construction gains leading growth for the whole provincial economy.

Growth has created a cycle, as both investment and in-migration add new opportunities and a young population to fuel a further expansion. Housing activity has more than doubled since the early 2000s and this, in turn, supports the construction cycle. Housing continues to expand until 2016.

Saskatchewan's gains are straining against demographic and economic limits that may eventually slow growth. Global economic activity is slowing and Canada's population growth is limited by an aging profile. Labour market conditions will continue to force Saskatchewan employers to hire outside of local markets and this will bring them into competition for essential skills and work experience.

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.

HIGHLIGHTS (2015 TO 2024)

 Following several years of strong growth, non-residential investment in Saskatchewan declined in 2014 as some major engineering projects began to wind down. Growth resumes in 2015 as new mining and pipeline projects come on stream, with activity expected to peak in 2019. It then slows across the remainder of the scenario period, but overall activity stays well above historical levels.

- Residential investment is up in 2015 and 2016. It
 declines across the remainder of the scenario period,
 driven by slower population growth, which translates
 into declines in household formation¹, housing starts
 and new housing investment.
- Overall, total construction employment adds 7,700 jobs from 2015 to peak in 2019 and then declines by 7,550 as major projects wind down. Total employment falls slightly above current levels by 2024.
- As in the past, the local labour force cannot support the estimated construction gains to 2019 and unemployment runs near record low levels.
- Both local population growth and in-migration are needed from 2015 to 2019 to keep pace with employment growth.
- Interprovincial mobility is projected to draw workers, with a net inflow into Saskatchewan until 2020.
- Employers in resource and engineering work will compete
 with labour demands in other regions especially from
 2016 to 2019 as the major projects are completed. While
 the decline in the price of oil has slowed activity in Alberta
 for the near term, scheduled projects in neighbouring
 provinces are expected to pick up over the next few
 years. In British Columbia, key projects include LNG²
 terminals, pipelines, utilities and mining. In Manitoba,
 major power generation and transmission projects are
 expected to peak in 2016 and 2017.

NON-RESIDENTIAL CONSTRUCTION

- Shifting non-residential activity drives the biggest cycle, as employment rises by 7,000 jobs to a peak in 2019 and then drops back by 4,100, leaving a net gain of 2,900 jobs across the 2015-2024 scenario period.
- This cycle plays out in both the engineering and industrial, commercial and institutional (ICI) markets.
- Gains in ICI building are concentrated from 2015 to 2016, but annual changes are gradual – ICI building adds 1,500 jobs across the scenario period.
- Engineering construction employment rises by 4,100 jobs over the near term – to a high peak in 2019 – and then declines by 4,200 off peak as major projects wind down and employment drops. By the end of the scenario period employment is slightly below levels reported at the start:
 - Mining and pipeline projects move in cycles, with several started or starting from 2013 to 2015 and ending in 2017.
 - The next round of proposed mining projects starts in 2018 and peaks in 2019.
- The engineering projects drive requirements to a peak in 2019 for several skilled trades, including:

- crane operators
- heavy equipment operators
- electrical power line and cable workers
- electricians
- insulators
- plumbers
- steamfitters and pipefitters
- trades helpers and labourers
- welders
- In contrast, a group of trades working more intensively in ICI sustain more moderate employment gains to reach peaks at the end of the scenario period:
 - floor covering installers
 - glaziers
 - painters and decorators
 - plasterers and drywall installers
 - tilesetters

RESIDENTIAL CONSTRUCTION

- The residential cycle is shorter. It increases by 1,000 jobs to a peak in 2016 and then declines by 3,700 as new housing slows across the remainder of the scenario period.
- The distribution of work across the residential labour force is dominated by the new housing cycle, with all groups peaking in 2016.
- Renovation and maintenance employment limited because of Saskatchewan's relatively new housing stock – rises in steady, but small, annual increments across the scenario period.

THE AVAILABLE WORKFORCE

Province-wide demographic trends from 2015 to 2024 indicate:

- Population growth will be strong, compared to other provinces, with growth of 190,000 people across the decade.
- Natural population growth during this period is estimated at 67,700, as births exceed deaths.
- International immigration is projected to total 110,000 people and net interprovincial in-migration is estimated at 12,000.
- The total provincial labour force (all industries) is projected to increase by 76,000 workers – strong compared to other provinces.
- Unemployment, in most industries, is currently at low historical levels.

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 the means by which population growth is transformed into demand for new housing.

² Liquefied natural gas

6,000 Number of workers > Forecast 5,000 Total change in labour force = New entrants + Net in-mobility - Retirements 4,000 3,000 2.000 1.000 -1.000-2.000 -3,000 -4.000 -5.000 2012 2013 2014 2016 2018 2019 2020 2021 2022 2023 2024 Retirements Net in-mobility New entrants Total change in labour force

Figure 1: Annual Estimated Changes in Supply

Source: BuildForce Canada

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-mobility³. 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.

- Replacement demands (retirements) total an estimated 8,700 workers and are the largest source of hiring demands across the scenario period.
- The estimated 9,600 new entrants⁴ offsets retirement demands.
- Saskatchewan is unique among the provinces, as the relatively young age profile of the population adds to the potential for new entrants.
- Even with this advantage, rising labour requirements exceed the gains in the local labour force over the near term, and out-of-province workers are needed in each year from 2016 to 2019.
- Unemployment in construction has been driven to record low levels, and replacement and expansion demands will hold unemployment close to the current minimum level.

RANKINGS, RISKS AND MOBILITY

BuildForce assesses market conditions for 34 trades and occupations in Saskatchewan 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 Saskatchewan 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 2016 to 2019 as employment
- Markets reach their tightest point in 2018 when big engineering project activity is strong.
- Limited labour force growth means that annual increases in employment (e.g., 3 percent or more) are enough to create tight labour markets.
- Extended periods where markets are ranked as a 3 may mask short-term, seasonal or peak demands for maintenance and project start-ups.
- Job losses from 2020 to 2022 are concentrated in the winding down of the big engineering projects.

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

⁴ 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.

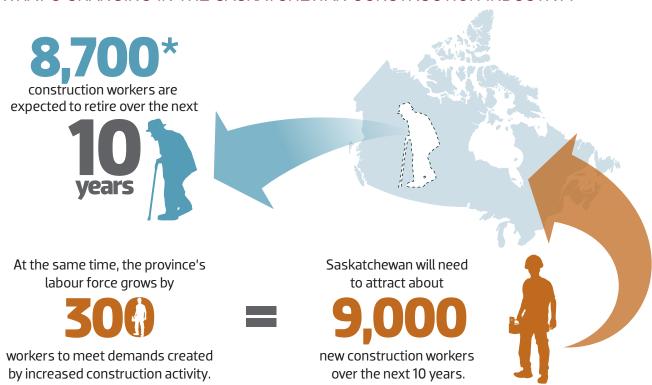
- Much of the labour force consists of out-of-province workers who are expected to leave Saskatchewan – ranks of 2 during that period capture this dynamic.
- Lower ranks later in the scenario period are largely due to the projected housing down cycle.
- Ranks signal the potential for in-mobility over the medium term.
- Saskatchewan employers will need to draw in key workers to the region to meet strong demand requirements from 2015 to 2018.

CONCLUSIONS AND IMPLICATIONS

- The 2015–2024 Construction and Maintenance Looking Forward scenario for Saskatchewan anticipates continuing human resources challenges.
- Cyclical changes in employment will require continuing mobility in the workforce across the residential and nonresidential sectors and among the provinces.
- Work prospects will shift across sectors, creating opportunities for a mobile labour force.
- Local demographics restrict labour force growth, leaving in-mobility key to recruiting.
- Tight labour market conditions will constrain recruiting for even modest increases in requirements.

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 SASKATCHEWAN CONSTRUCTION INDUSTRY?5



^{* 19%} of the current labour force

Source: BuildForce Canada (data as of February 2015)

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

Workers meeting employer qualifications are available in local markets to meet an increase in demand at the current 1 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. 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. 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 4 sources and practices. Needed workers meeting employer qualifications are not available in local markets to meet current demand so that 5 projects or production may be delayed or deferred. There is excess demand, competition is intense and recruiting reaches to remote markets. 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 SASKATCHEWAN

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

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TRADES AND OCCUPATIONS	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Heavy equipment operators (except crane)	4	4	4	4	4	4	3	3	3	3	3
Heavy-duty equipment mechanics	4	4	4	4	4	4	3	2	3	3	3
Home building and renovation managers*	3	4	4	4	4	4	4	4	3	3	3
Industrial instrument technicians and mechanics	N/A										
Insulators	4	4	4	4	4	4	3	2	3	3	3
Ironworkers and structural metal fabricators and fitters	4	4	4	4	4	4	3	2	3	3	3
Painters and decorators	4	4	4	3	3	4	3	3	3	3	3
Plasterers, drywall installers and finishers, and lathers	3	4	4	3	3	4	3	3	2	3	3
Plumbers	4	4	4	4	4	4	3	2	2	3	3
Refrigeration and air conditioning mechanics	4	4	4	4	3	4	3	3	3	3	3
Residential and commercial installers and servicers	3	4	3	3	3	3	3	3	3	3	3
Roofers and shinglers	3	4	4	4	4	4	3	2	3	3	3
Sheet metal workers	4	4	4	4	4	4	3	2	2	3	3
Steamfitters, pipefitters and sprinkler system installers	4	4	4	4	4	4	3	3	2	3	3
Tilesetters	4	4	4	3	3	4	3	2	2	2	3
Trades helpers and labourers	3	4	4	3	4	4	3	2	2	3	3
Truck drivers	4	4	4	4	4	4	3	3	3	3	3
Welders and related machine operators	3	4	4	4	4	4	3	2	2	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**. Create customized reports on a broad range of selected categories within sector, trade or province covering up to 10 years.

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www.constructionmapapp.ca





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