



Contents

3

Key findings

4

Construction labour shortages are a major issue

7

Labour shortages contribute to cost inflation

8

Paving the path forward

9

Appendix AMethodology

11

Appendix BBibliography

Key findings

- Since 2017, job vacancies among skilled trades in the residential construction sector have grown at an average rate of 11 per cent annually. These vacancies are indicative of labour shortages in the construction sector that elevate costs and lengthen project timelines for housing construction and renovations.
- Overlapping pressures intensify these shortages. These
 pressures include the rising frequency and severity of natural
 catastrophes, elevated housing demand, and a strained labour
 supply due to demographic challenges.
- The lack of skilled-trades labour is expected to worsen over the coming years, with shortages growing at a rate of 13 per cent annually between 2026 and 2045. This will put additional pressure on the cost of housing renovations.
- We estimate that labour shortages will add 0.2 per cent annually to inflation in the residential construction sector over the next 20 years. This share of cost inflation compounds every year, contributing to issues such as rising housing costs and property insurance.
- We estimate that, should labour shortages be corrected, the total annual cost of residential renovations and repairs would be \$7.9 billion lower in 2045.
- Similar cost inflation could arise in other subsectors of construction—namely, commercial, industrial, or infrastructure—should they face similar shortages among the skilled-trades occupations shared between them.

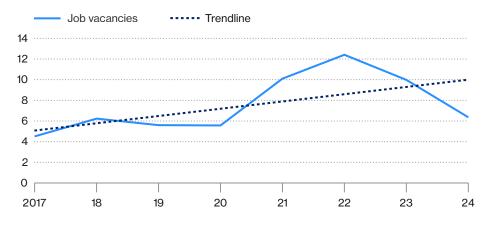


Construction labour shortages are a major issue

Shortages can have far-reaching consequences Since 2017, job vacancies for skilled trades in the construction industry have grown at an average rate of 11 per cent annually, indicating rising difficulty for employers to find workers. (See Chart 1.)

Chart 1

Residential construction vacancies are on an upward trend (number of job vacancies, thousands)



Source: Statistics Canada, "Job Vacancy and Wage Survey"; The Conference Board of Canada.

Labour shortages in the residential sector raise wages and prolong rebuild times, intensifying the pressure on housing renovation costs and slowing an already lagging supply of new homes in Canada. These cost pressures propagate into broader inflation across the economy, which ultimately translate to various cost-of-living challenges for Canadians. We expand on two of these challenges below: access to homeownership, and property and casualty insurance premiums.

Declining access to homeownership for Canadians

Higher building and renovation costs contribute to rising home prices. Moreover, housing shortages due to delays in construction projects cause additional price pressures from the mismatch between supply and demand. These cost challenges are now changing the makeup of Canadians' living arrangements and pricing many young families and new Canadians out of key housing markets. Homeownership rates have been on the decline—down to 66.5 per cent in 2021 from the peak of 69 per cent in 2011¹— while the economy has witnessed growth of 21.5 per cent in renter households over the same period.² According to the Canada Housing and Mortgage Corporation, housing starts need to double over next decade, compared to the recent pace of building, to restore affordability to pre-pandemic levels.³

- 1 Statistics Canada, To Buy or to Rent.
- 2 Statistics Canada, A Tale of Two Renters.
- 3 Canada Mortgage and Housing Corporation, Canada's Housing Supply Shortages.

Property and casualty insurance premiums

Skilled-labour shortages can contribute to higher insurance premiums in two ways: by raising construction labour costs and by lengthening timelines for rebuilds and renovations. Construction costs are an input into the business operations of insurers, where they may be required to take on the costs of repairs and living expenses of the victims following property damages. As such, any increase in construction costs and timelines can also translate into higher home insurance costs via higher premiums. That said, many factors go into insurer premium calculations, such that skilled-labour shortages may not immediately translate into higher premiums—they simply add to the various sources of cost pressures present in this market.

Market retrenchment

When rebuild costs and living expenses become extreme, insurance carriers may fully exit specific markets and regions, leaving fewer firms that provide this service in the region. Higher market concentration can hinder competition, reducing consumer choice and, in turn, affecting the quality of services and raising prices. In the end, an issue over which insurers have little control over may lead to worse outcomes for households.



Shortages are expected to worsen over time

Shortages in skilled trades are expected to persist in the near term. In the absence of direct remedial policies, we estimate that labour shortages among these occupations,⁴ measured as excess vacancies,⁵ will grow 13 per cent annually between 2026 and 2045.

Three critical factors will influence labour shortages in the construction sector: climate change risks, policies designed to increase home building, and demographic challenges. All of these factors present upside risks to the estimate of excess vacancies, as they could prove to have a much greater impact on labour demand in the construction sector than we currently anticipate.

⁴ See Appendix A for the complete list of skilled trades considered in this report.

⁵ Labour shortages are approximated by excess vacancies via our framework of implied labour demand. See the next section as well as the methodology in Appendix A for more details.



Climate change risks

Potentially greater frequency and greater severity of natural catastrophes increase the need for urgent repairs, putting pressure on an already strained skilled-labour pool. More resources would be devoted to fixing damage rather than building new homes, further tightening effective housing supply. Moreover, there will be an ongoing need to retrofit existing buildings to reinforce their resilience to natural catastrophes, as well as improve their energy efficiency in the transition toward net-zero emissions.

We forecast that spending growth on residential repairs and renovations will average 4.8 per cent annually between 2026 and 2045. This estimate is below the pace of 6.5 per cent annually seen between 2000 and 2020. Thus, any growth in damages from natural disasters would likely drive increases in renovation and repair spending beyond current expectations and lead to even larger labour shortages and inflation impacts in the construction sector.

Sustained demand for housing

Based on recent construction trends and our demographic forecasts, we expect housing starts in Canada to average 222,000 units annually over the next five years, with the pace of building gradually slowing to 184,000 units annually by 2045. However, federal government ambitions—such as the annual 500,000 new-build target⁶—could accelerate the pace of building and add pressure to construction labour demand. As a result, in the absence of a coordinated labour strategy, this policy may put additional pressure on home building costs.

Strained labour pool

Canada is facing demographic challenges that are straining the labour supply. The aging of the workforce is hitting the residential construction sector: approximately 1.1 per cent of skilled-trades workers retire every year, and this trend is expected to continue over the long term. Immigration has long been a solution to this loss of skilled workers, but new immigrants joining skilled trades in the construction sector are now lagging behind retirements. Between 2015 and 2024, new immigrants entering this workforce joined at a rate of just 0.7 per cent of available workers. With recent reductions in immigration targets across the country, the construction sector may feel the strain in its labour pool more than ever. Alongside little to no productivity gains in recent decades, worker availability is likely to remain a binding constraint in residential construction.

- 6 Liberal Party of Canada, "Building Canada Strong."
- 7 Conference Board of Canada, The, "The Model of Occupations, Skills and Technology."
- 8 Conference Board of Canada, The, Building Inclusive Communities.
- 9 Statistics Canada, Table 36-10-0480-01, "Labour Productivity and Related Measures."

Labour shortages contribute to cost inflation

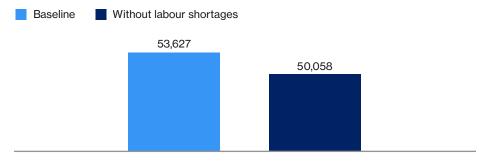
Our analysis suggests that the long-term annual inflation rate in the residential construction sector would be 0.2 percentage points lower in the absence of labour shortages, falling to 2.0 per cent annually from our baseline of 2.2 per cent. This projection implies that shortages will add \$7.9 billion in residential renovation and repair costs annually by 2045 that could otherwise be avoided.

Put differently, a \$100,000 residential renovation project in 2025 would grow to \$150,060 instead of \$153,630 by 2045 (or 2.3 per cent lower) in the absence of any labour shortages in Canada. (See Chart 2.) Conversely, a rise of 20 per cent in labour shortages above the baseline over that period would increase this amount instead to \$166,170 – 6.4 per cent higher than the baseline.

Chart 2

Costs of future renovation projects would be 2.3 per cent lower without labour shortages

(costs above C\$100,000, C\$, by 2045)



Source: Statistics Canada, "Job Vacancy and Wage Survey"; The Conference Board of Canada.



To determine these impacts, we isolated the relationship between labour shortages and residential construction costs to assess what's to come if shortages persist. We followed a framework that circumvents two key challenges. First, there is no standard measure of labour shortages. Second, macroeconomic forecast models assume fully balanced markets in which supply equals demand over the long run, meaning the inflationary pressures of labour shortages are not observable in the forecast—the market has already adjusted to them. As such, we devised a proxy for labour shortages outside of our forecast model to assess these inflationary pressures in the absence of market-correcting forces.

We developed a new measure—**implied labour demand**—defined by the ratio of required workers per dollar of investment in the residential construction sector. Comparing implied labour demand with labour supply reveals **implied vacancies**, an alternative measure of unmet demand. Subtracting standard vacancies from implied vacancies yields **excess vacancies**, which we use as a proxy for labour shortages driving inflationary pressures. This framework enables us to estimate the cost impacts caused by labour shortages in isolation and, thus, the level of inflation achievable in the future were those cost pressures not present. (See Appendix A for details on the methodology.)

Paving the path forward

Labour shortages in construction contribute to cost-of-living challenges for Canadians. The sector will continue to face overlapping pressures, such as increasing housing demand and an aging workforce. Our forecast of a new measure of skilled-labour shortages in residential construction suggests that the issue will persist if left unaddressed.

To allow the construction sector to overcome this labour crunch and mitigate the financial strain on households, stakeholders will need to find ways to stimulate growth in labour supply. We calculated that the skilled-labour shortage in residential construction alone could reach 32,000 workers by 2045, causing prices in the sector to be 2.3 per cent higher than they otherwise would be. In 2045, this added inflation would translate to \$7.9 billion in additional costs of renovations and repairs. Finding these workers calls for a renewed interest in these occupations and a reduction in turnover.

Alternatively, the sector could compensate by sparking its stagnant productivity growth. Our estimate of labour shortages represents 15.6 per cent of our projected employment in 2045. Productivity will need to grow by an equivalent amount to neutralize the labour imbalance and unlock the sector's ability to meet a growing demand for housing. Leveraging new and existing technologies, such as modular construction, digital design tools, and robotics, will be key.

¹¹ Labour Market Information Council, What's in a Name?

Appendix A

Methodology

We used a linear regression model to estimate the relationship between inflation and labour shortages in the residential construction sector. Sourcing raw data from our Long-Term National Forecasting Model and from our Model of Occupations, Skills and Technology (MOST), we developed a residential construction–specific inflation index and a construction labour shortage index based on excess vacancies (unfilled positions above frictional levels).

Modelled variables

- 1. Residential construction inflation. Inflation is measured as the quarterly growth in price levels for renovation and repairs for the housing sector. Residential construction inflation= $\log_{\frac{P_t}{P_t-1}} \quad \text{where } P_t \text{ is the ratio of nominal to real investment in the residential construction sector for period } t.$
- 2. Labour shortages: Excess vacancies. First, we define implied labour demand as the required units of labour per dollar of renovation and reconstruction investment in each period. We use the ratio from the most recent full year on record (2024) and apply it to the level of real investment in the sector in both the recorded history and the forecast from our long-term forecast to generate a complete time series for implied labour demand.

From there, we determine **implied vacancies**, which are the gap between implied labour demand and available labour supply, taken from our MOST in the construction sector.

Finally, **excess vacancies** are the difference between implied and actual recorded vacancies from the Job Vacancy and Wage Survey administered by Statistics Canada. Excess vacancies capture unfilled positions above frictional unemployment and serve as a measure of structural imbalance in the construction labour market.

We restrict our analysis to the residential building construction sector (NAICS 2361) and use data at the detailed occupation level (five-digit National Occupational Classification). Within NAICS 2361, we calculate the above metrics for the following NOC 2021 occupations:

- 72200 Electricians (except industrial and power system)
- 723xx Technical construction trades
- 72402 Heating, refrigeration and air conditioning mechanics
- 72406 Elevator constructors and mechanics
- 7250x Crane operators and water well drillers
- 7310x Concrete finishers, tilesetters and plasterers
- 7311x Roofers, glaziers, painters, decorators and floor covering installers
- 73200 Residential and commercial installers and servicers
- 75110 Construction trades helpers and labourers

Here, the "xx" or "x" suffix denotes inclusion of all relevant five-digit NOC codes within those families of NOCs.

3. Control variables. We also include two control variables to capture some variation in the price index that may have been confounded with the effect of excess vacancies. We select population as a demand-side driver of residential construction services, as well as a linear trend variable that captures time-fixed effects particular to each period covered in the analysis, such as the potential impact of wildfires on the cost of lumber materials or the effect of the COVID-19 pandemic on supply chains.

Model specification

Residential construction inflation = $\beta_0 + \beta_1 *log$ (excess vacancy)

 $+\beta 2$ (population) $+\beta 3$ ("time") $+\epsilon$

Results

The positive coefficient on excess vacancy (β_1 =0.00377) accords with the theory that a higher number of unfilled positions drives up wages and project costs, lifting inflation in the sector. For every percentage increase in quarterly excess vacancy, the cost inflation rate rises by 0.00377 percentage points per quarter—about 1 percentage point annually. (See Appendix A Table 1.)

Table 1Model estimates and significance levels

| Term | Estimate | Standard error | <i>p</i> -value |
|----------------|-------------|----------------|-----------------|
| Intercept | -41.9 | 22.22 | 0.0706 |
| Excess vacancy | 0.00377 | 0.00286 | 0.1986 |
| Population | -0.00003772 | 0.00003 | 0.1464 |
| Time trend | 0.02144 | 0.01148 | 0.0731 |

Source: The Conference Board of Canada.

Model fit and diagnostics

Appendix A Table 2 provides the diagnostics for our model. With R^2 = 0.679, the model explains 67.9 per cent of variation in cost fluctuations of the construction sector, indicating that excess vacancy, population, and a time trend capture substantial systematic dynamics. The adjusted R^2 = 0.642–just 0.037 lower–signals limited overfitting and strong explanatory power given three predictors. The overall F-statistic of 18.338 confirms that the predictors are jointly significant at conventional levels. Taken together, these diagnostics point to a well-specified model that credibly attributes much of inflation's movement to observable drivers, making it a solid baseline for forecasting and monitoring.

Table 2Model fit and diagnostics

| Item | Value |
|-------------------------|----------|
| n | 30 |
| Standard error | 0.009 |
| R ² | 0.679 |
| Adjusted R ² | 0.642 |
| F-statistic | 18.338 |
| F df1 | 3 |
| F df2 | 26 |
| F p-value | 0 |
| AIC | -194.685 |
| BIC | -187.679 |

Source: The Conference Board of Canada.

Residential renovation project value calculation

We use the coefficient of excess vacancy from our model to calculate the evolution of the hypothetical residential renovation project of \$100,000 over time. The calculation is as follows, for each period:

Predicted hypothetical residential renovation cost = $Value_{t-1} * (1 + residential construction inflation - <math>\beta_1$ " * quarterly change in excess vacancies)

Limitations

Limited availability of data on vacancies (from 2015 onward) forces us to work with a small historical sample, which may affect the model's results. As such, our model is a better reflection of the relationship between prices and labour shortages in recent years. In the future, to overcome this limitation, this analysis could be performed over a longer time period or with an alternative to vacancies for which a longer history is available.

Additionally, our measurement for excess vacancies hinges on the ratio of labour demand and real investment levels in 2024 as a base. Accordingly, our estimates of implied labour demand converge toward the 2024 level for years clustered around 2024. This effect vanishes as we move further away from 2024; as such, this approach produces more reasonable and realistic forecasts for 2029 and onward.

Appendix B

Bibliography

Canada Mortgage and Housing Corporation. Canada's Housing Supply Shortages: Moving to a New Framework. Canada Mortgage and Housing Corporation, June 2025. housing-supply-shortages-new-framework-en.pdf.

Conference Board of Canada, The. Building Inclusive Communities Amid Immigration Shifts: Insights From the 2024 Canadian Immigration Summit. Ottawa: CBoC, June 11, 2025. https://www.conferenceboard.ca/wp-content/uploads/2022/10/building-inclusive-communities_june2025.pdf.

"The Model of Occupations, Skills and Technology (MOST)." The Conference Board of Canada, n.d. https://www.conferenceboard.ca/future-skills-centre/tools/model-of-occupations-skills-and-technology-most/.

Labour Market Information Council. *What's in a Name? Labour Shortages, Skills Shortages, and Skills Mismatches*. Labour Market Information Council, October 2018. https://lmic-cimt.ca/publications-all/lmi-insights-report-no-3-whats-in-a-name-labour-shortages-skills-shortages-and-skills-mismatches/.

Liberal Party of Canada. "Building Canada Strong." Liberal Party of Canada, n.d. https://liberal.ca/housing-plan/.

Statistics Canada. "Job Vacancy and Wage Survey." Statistics Canada, accessed August 2025. https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey &SDDS=5217.

- -. Table 36-10-0480-01. "Labour Productivity and Related Measures by Business Sector Industry and by Non-commercial Activity Consistent With the Industry Accounts." Statistics Canada, May 20, 2025. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610048001.
- -. A Tale of Two Renters: Housing Affordability Among Recent and Existing Renters in Canada. Statistics Canada, October 4, 2023. https://www12.statcan.gc.ca/census-recensement/2021/as-sa/98-200-X/2021016/98-200-x2021016-eng.
- —. To Buy or to Rent: The Housing Market Continues to Be Reshaped by Several Factors as Canadians Search for an Affordable Place to Call Home. Statistics Canada, September 21, 2022. https://www150.statcan.gc.ca/n1/daily-quotidien/220921/dq2 20921b-eng.htm.

Acknowledgements

This report was prepared with financial support from Insurance Bureau of Canada.

Many colleagues helped to bring this research to life. Tony Bonen, Executive Director, PhD, conceived of this research project and provided overall project direction and oversight. Khurram Makhdumi, Economist, MA, and Jacob Gervais-Chouinard, Senior Manager, MA, wrote this report. Michael Burt, Vice President, MA, provided feedback on the report. This issue briefing was designed by Mallory Eliosoff, Senior Graphic Designer.

Building Under Pressure: Skilled Trades Shortages and Rising Construction Costs

The Conference Board of Canada

To cite this research: Conference Board of Canada, The. *Building Under Pressure: Skilled Trades Shortages and Rising Construction Costs.* Ottawa: The Conference Board of Canada, 2025.

Forecasts and research often involve numerous assumptions and data sources, and are subject to inherent risks and uncertainties. This information is not intended as specific investment, accounting, legal, or tax advice. The responsibility for the findings and conclusions of this research rests entirely with The Conference Board of Canada.

An accessible version of this document for the visually impaired is available upon request.

Accessibility Officer, The Conference Board of Canada Tel.: 613-526-3280 or 1-866-711-2262 Email: accessibility@conferenceboard.ca

Published in Canada | All rights reserved | Agreement No. 40063028



The Conference Board of Canada





AERIC Inc. is an independent Canadian registered charity operating as The Conference Board of Canada, a trademark licensed from The Conference Board, Inc.

