

# THE HOME BUILDERS INSTITUTE (HBI) CONSTRUCTION LABOR MARKET REPORT

*Fall 2025*



Building Careers.  
Changing Lives.

## Executive Summary

The demand for new construction has slowed, due to ongoing elevated interest rates. However, this reduction in demand and corresponding softening for labor markets, has allowed the Federal Reserve to resume easing monetary policy and lowering borrowing costs. This policy shift will increase demand for construction and home buying and lift demand for construction labor. Thus, in the short run, the demand for construction labor will remain soft, thereby holding back the real-time measure of the number of open construction sector jobs. However, in the long run, the demand for construction will reaccelerate with gains for single-family construction and remodeling.

Additional construction workers will be needed to reduce the nation's housing deficit during the second part of the current decade, a shortfall NAHB estimates to total 1.5 million homes.<sup>1</sup> Moreover, labor productivity growth is central to economic gains and wage growth. Gains for productivity will depend on education efforts for workers and offsetting inefficiency regulatory burdens in sectors like construction.

This report explores these themes and provides an overview of the current state of the nation's construction labor market. Key findings include:

- New research from NAHB Economics quantifies the size and impact of the skilled labor shortage: \$10.8 billion per year.
  - \$2.7 billion annual impact due to longer construction times and increased carrying costs.
  - \$8.1 billion annual impact due to lost construction (19,000 homes)
- There are currently 8.3 million payroll construction workers.
  - Residential construction represents 3.3 million of this total.
- The estimated required amount of construction worker hiring is approximately 723,000 per year, according to NAHB analysis of BLS data and projections.
- Amid a dramatic slowdown in the job market, home builders and remodelers lost 26,100 jobs over the last 12 months.
- As of August, the six-month moving average of job losses for residential construction was 4,783 a month, reflecting the five months of declines recorded over the past six months.
- Running counter to medium-run trends, the number of open construction sector jobs increased from a 229,000 level a year ago to 306,000 in July. This remains lower than a year prior, however.
- Average hourly wages in the overall construction industry decelerated, rising 3.7% over the last year, but still exceeding national private sector averages.
- Reflecting the ongoing craftsmen shortage and strong remodeling demand, home building non-supervisory workers' wages trended higher, rising 9.2% in July, substantially outpacing inflation and wage growth for the overall sector.
- Construction employment is broad-based geographically across the nation.
- Including self-employed and temporarily unemployed, the construction labor force stands at 11.9 million.
- Self-employed account for 23% of the employed construction labor force, a new post-pandemic norm, down from 26% in 2010

---

<sup>1</sup> <https://eyeonhousing.org/2022/12/the-size-of-the-housing-shortage-2021-data/>

- The makeup of the construction workforce shows dramatic shifts:
  - The share of tradesmen declined from 71% in 2005 to under 61% in 2022, as the industry lost more than a million craftsmen.
  - The share of computer, engineering, and science occupations doubled at the same time.
  - The share of management and business occupations increased 60%.
- Women make up a growing share of the construction employment, reaching a 20-year high of 11.2% in 2024. This is a noticeable increase from 9.1% in 2017
- Immigrant workers now account for 25.5% of the construction workforce, a new historic high. In construction trades, the share of immigrants is even higher, with one in three craftsmen coming from outside the U.S.
- Hispanics make up close to a third of the construction labor force (32%), a record high share.
- Construction attracts 6.5% of all employed Veterans.
- The median age of workers in the construction labor force remains 42.
  - As a result of the generational shifts, the share of employees aged 25 to 54 decreased from 72% in 2015 to 68.1% in 2023.
  - At the same time, the share of younger workers ages 25 and under increased by 1.2 points (from 9% to 10.2%), while the share of the oldest 55+ workers grew by 2.7 percentage points.
- Remote work no longer dominates the labor market, with the telework rate hovering below 22% as of April 2025, altering housing demand.
- While Artificial Intelligence is reshaping the labor market, its impact on the home building industry is limited for the time being, with most single-family home builders not currently using AI.

### **A New Estimate of the Economic Impact and Scale of the Skilled Construction Labor Shortage**

Utilizing the results of the research prepared by Denver University researchers Holt and Ray<sup>2</sup>, the NAHB Economics team produced new economic impact estimates of the skilled labor shortage for single-family home building. The findings indicate that the skilled labor shortage's impact on the residential construction industry is a multibillion-dollar annual challenge that is responsible for the lost production of thousands of newly built homes.

The analysis finds that the aggregate annual impact of the skilled labor shortage in the home building sector is \$2.663 billion in terms of higher carrying costs and \$8.143 billion in terms of lost single-family home building (19,000 homes). This represents a combined aggregate economic effect of \$10.806 billion due to longer constructions times associated with scarce skilled labor. This is a significant cost impact given the current size of the single-family residential construction building market: \$422.8 billion at the annual rate measured by Census in November 2024.<sup>3</sup>

NAHB utilized a two-step process to determine the economic impact of the skilled labor shortage on the residential construction industry. The first element is the direct cost of longer construction times, as

<sup>2</sup> *The Skilled Labor Shortage and the Impact on Building Costs and Cycle Times*. 2024. Eric Holt and Bill Ray, University of Denver. Report Prepared for HBI. The full NAHB analysis is included as a technical supplement to the HBI report.

<sup>3</sup> [www.census.gov/construction/c30/pdf/release.pdf](https://www.census.gov/construction/c30/pdf/release.pdf)

measured by Holt and Ray, primarily through the increase of carrying costs. The second element is the induced impact on lost construction activity due to implied higher construction and carrying costs.

### Macroeconomic and Construction Employment Outlook

Demand for new construction remains weaker than in 2020-2021, yet still solid despite the recent "higher for longer" interest rate environment. Inflation is moderating, now recording year-over-year growth rates of less than 3%. However, inflation remains above the Fed's 2% target. Consequently, the Federal Reserve has resumed lowering the short-term federal funds rate. The Fed previously cut this Interest rate by 100 basis points at the end of 2024. And after a lengthy pause for much of 2024, the Fed has resumed cutting this lending rate in September. NAHB is forecasting additional rate reductions before the end of 2025, with at least 75 basis points of easing before mid-2026.

A lower federal funds rate will reduce the prime rate, and in turn, the interest rates for business and building financing, including AD&C loans. A lower federal funds rate will also place indirect downward pressure on long-term interest rates, including mortgage rates. NAHB's forecast projects mortgage rates to move below 6% on a sustained basis later by early 2027, pricing in frustrated home buyers and increasing demand for both single-family construction and remodeling. These gains, from the current soft levels of construction, will increase demand for construction workers.

There are several ways to measure the current need for additional workers. According to a prior NAHB Economics analysis of Bureau of Labor Statistics (BLS) data and projections, the average annual number of occupational openings in construction totals approximately 723,000 a year.<sup>4</sup> This estimate is determined by estimating the required net growth in employment due to construction expansion, *plus* workers required to replace individuals who leave the sector permanently. This estimate reflects the need for more than 60,000 adjusted net hires a month. Over the course of 2024-2026, this total represents a need for an additional 2.17 million adjusted net hires for construction.

This measure can be broken down for a few specific occupations. For example, the number of occupational job openings for carpenters totals 9,100 per year. And the number of annual occupational job openings totals almost 8,000 for electricians, almost 5,200 for pipelayers, more than 5,000 for construction equipment operators, and more than 1,000 for drywall installers.

### US Employment

Job growth slowed sharply in recent months, and the unemployment rate rose to its highest level in nearly four years in August. The latest jobs report, along with downward revisions to previous months' data, indicates a dramatic cooling in the U.S. labor market. This softening trend added pressure on the Federal Reserve to cut the short-term federal funds rate by 25 basis points at the conclusion of its September meeting.

According to the Employment Situation Summary reported by the Bureau of Labor Statistics (BLS), total nonfarm payroll employment added 22,000 jobs in August, which was well below the expected 75,000.

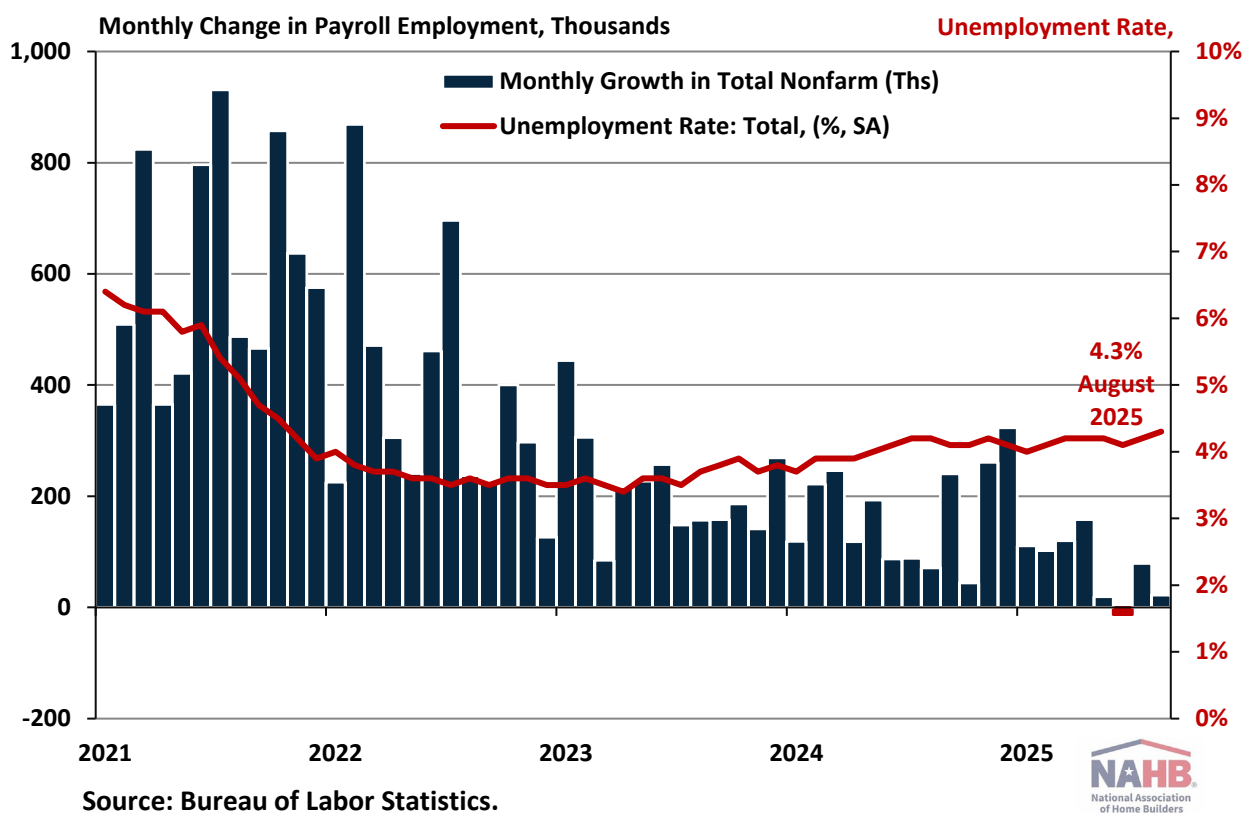
---

<sup>4</sup> BLS occupational projections are found here: <https://www.bls.gov/emp/tables/occupational-projections-and-characteristics.htm>

Falling short of expectations, job growth estimates came with significant downward revisions to the previous two months, including job losses in June, the first negative monthly job growth since January 2010. Combined, the 2-month revisions erased 21,000 jobs from previously reported figures for June and July.

As of August 2025, monthly job growth averaged 75,000, a significant slowdown compared to the 168,000 monthly average gain for 2024. More dramatically, in September, the BLS revised earlier employment numbers over the 12 months ending in March and suggested that the U.S. economy added 911,000 fewer jobs than previously estimated.

## Monthly Change in Payroll Employment and Unemployment Rate

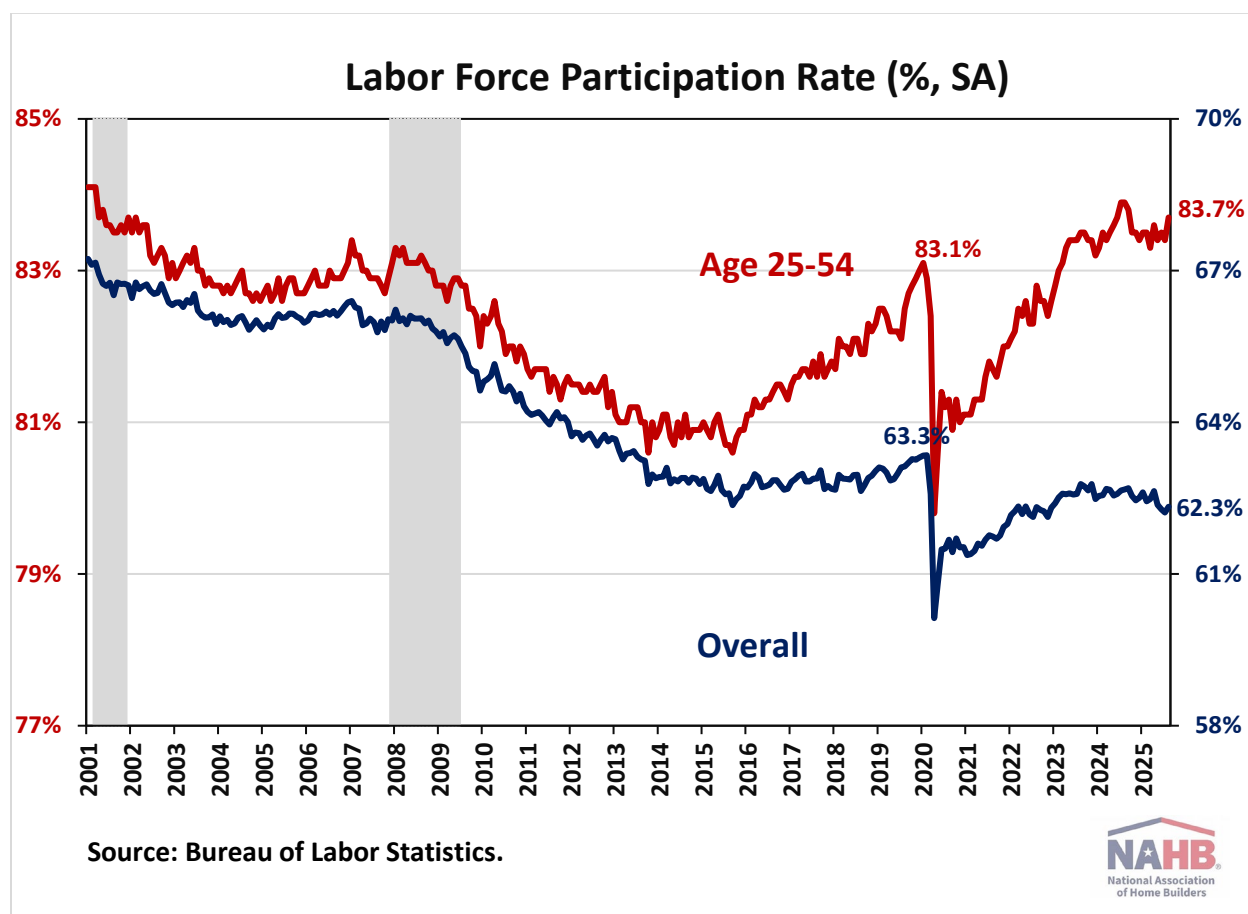


As another sign of a dramatic slowdown in the labor market, the unemployment rate went up to 4.3% in August, its highest point in nearly four years. The increase in the unemployment rate for August was due to the simultaneous rise in the number of people unemployed (+148,000) and employed (+288,000).

In line with a general cooling of the U.S. employment market, the number of open jobs for the overall economy decreased from 7.36 million in June to 7.18 million in July, per the June Bureau of Labor Statistics Job Openings and Labor Turnover Survey (JOLTS). The July reading was notably lower than the 7.50 million estimates from a year ago, raising concerns about the strength of the recovery and contributing to the pressure on the Fed to cut the short-term federal funds rate. Previous NAHB analysis indicated that this number had to fall below 8 million on a sustained basis for the Federal Reserve to move forward on interest rate reductions.

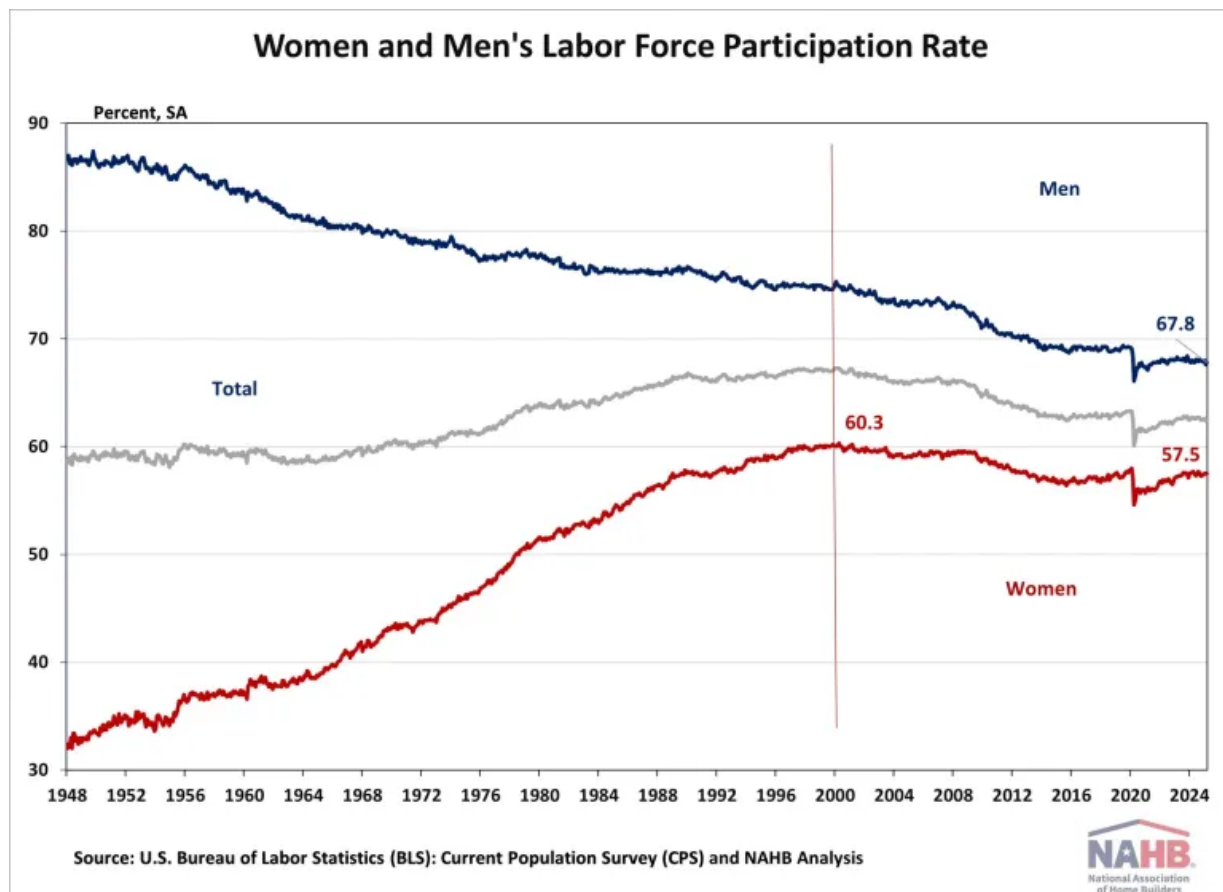
Meanwhile, wage inflation continues to trend lower. In August, wages grew at an annual rate of 3.7%, 0.2 percentage points lower than the previous month's reading. Despite the deceleration, wage growth has been outpacing inflation for nearly two years. The summer measures came slightly above the Fed's 3.5% long-run target rate for wage growth that captures the inflation target of 2% plus productivity growth.

As of August, the labor force participation rate—the proportion of the population either seeking employment or already employed—rose by 0.1 percentage points to 62.3%. Nevertheless, the rate remains below its pre-pandemic level of 63.3% recorded at the start of 2020. Among prime working-age individuals (aged 25 to 54), the participation rate increased by 0.3 percentage points to 83.7%, the highest level since October 2024 and exceeding the pre-pandemic point of 83.1%. In contrast, the participation rate for older Americans, those aged 55 and older (62.3% as of August), remains below the pre-pandemic mark, when it stood at 63.3% at the beginning of 2020.



Labor force participation trends also diverged across genders. Historically, women's labor force participation rate rose rapidly between 1948 and 2000, peaking around 60% in 1999. Over the same period, men's participation rates declined. As a result, women now represent nearly half (47%) of the total U.S. labor force. While participation rates dropped for both men and women during the pandemic, men's labor force participation rate never recovered. Women, on the other hand, were quicker to return to the labor force. Dissecting further, research from the Brookings Institution and The Hamilton Project<sup>2</sup> reveals a significant shift: women with young children (under 5 years), especially those who are highly

educated, married, or foreign-born, are now more likely to be in the labor force than they were before the pandemic.



Among sectors, employment continued to rise in healthcare (+31,000) and social assistance (+16,000). The federal government, mining, wholesale trade, and manufacturing sectors lost jobs. Federal government employment fell by 15,000 jobs in August and has now decreased by a total of 97,000 positions since peaking in January 2025. The BLS notes that “employees on paid leave or receiving ongoing severance pay are counted as employed in the establishment survey.”

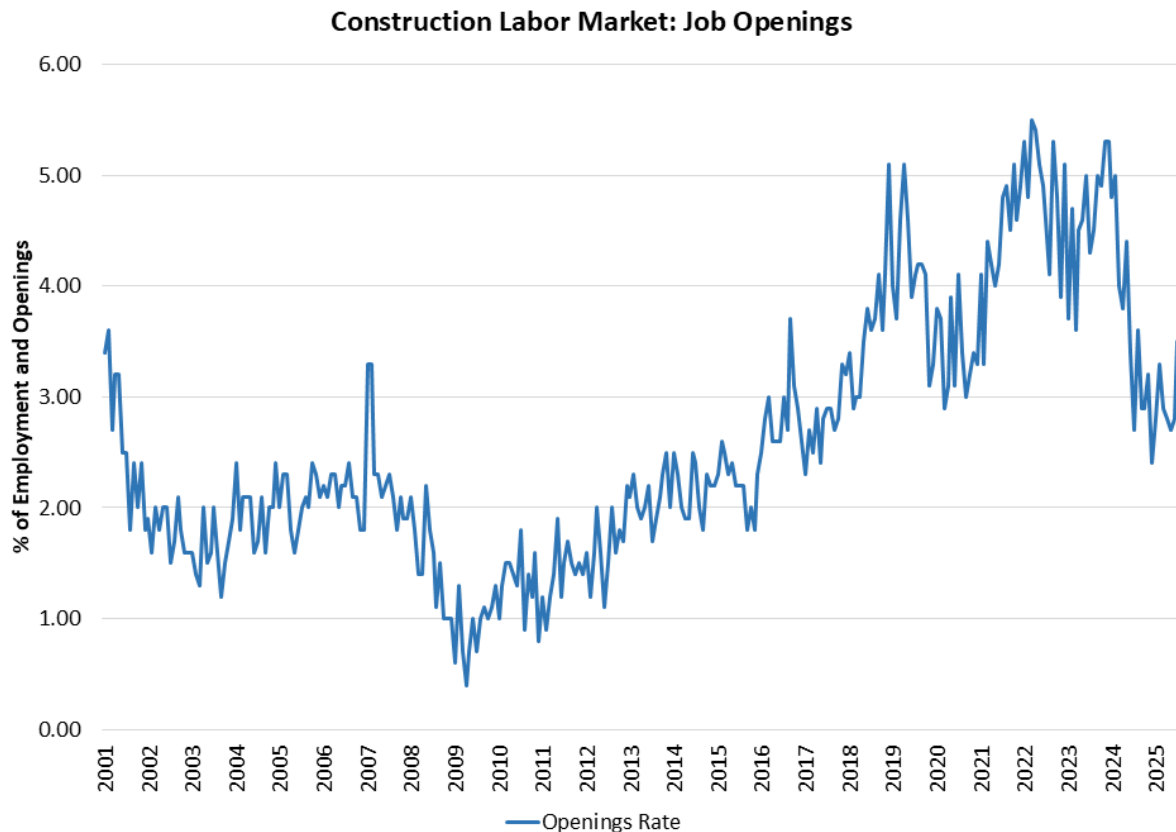
### Construction Employment

Employment in the overall construction sector declined by 7,000 in August, marking the third consecutive month of job losses in the industry. Downward revisions to June and July figures further underscore the sector’s ongoing weakness. Within the industry, residential construction lost 6,100 jobs, while non-residential construction employment declined by 1,200 jobs during the month.

The unemployment rate for construction workers rose to 3.9% on a seasonally adjusted basis. The unemployment rate for construction workers has remained at a relatively low level, after reaching 15.3% in April 2020 due to the impact of the COVID-19 pandemic.

Running counter to the national trend, the number of open construction sector jobs increased from a revised 242,000 level in June to 306,000 in July. This marks an increase in open, unfilled construction jobs from those registered a year ago (229,000) and points to resurfacing tightness in the construction labor market. The chart below notes the declining trend that has been in place since the Fed raised the

federal funds rate, but with the recent uptick in unfilled positions in construction.



Source: Bureau of Labor Statistics JOLTS data

The construction job openings rate increased to 3.5% in July, higher than the 2.7% estimated a year ago. The layoff rate in construction increased to 2.8% in July, the highest rate since March 2023. The quit rate declined to 0.9% in July, the lowest recorded for the construction sector (data starts in 2000).

The construction market appears to have experienced considerable churn in July, with job openings rising, quits very low, and layoffs increasing. Nevertheless, a reversal of the current soft readings for job openings in construction points to a persisting underlying skilled labor shortage. Future data will allow for identifying trends.

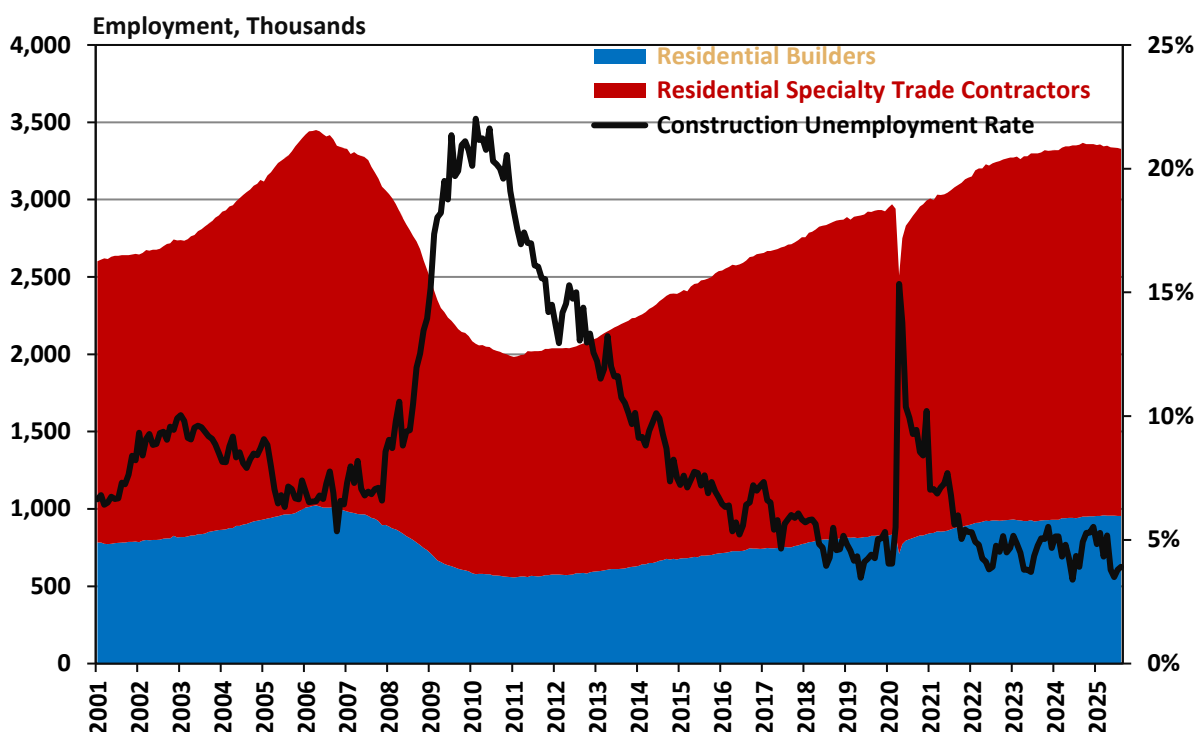
### **Residential Construction Employment**

Residential construction payroll employment now stands at 3.3 million, comprising 954,000 builders and 2.4 million residential specialty trade contractors.

As of August, the six-month moving average of job losses for residential construction was 4,783 a month, reflecting the five months of losses recorded over the past six months, specifically in March, May, June, July, and August 2025. Over the last 12 months, home builders and remodelers experienced a net loss of 26,100 jobs, marking the fourth annual decline since September 2020. Since the low point following the Great Recession, residential construction has gained 1,345,300 positions.

In August, the unemployment rate for construction workers declined to 3.9% on a seasonally adjusted basis. After reaching 15.3% in April 2020, due to the impact of the COVID-19 pandemic, the trend was downward and stabilized since 2022. The unemployment rate for construction workers remains historically low by the standards of the last 20 years, reflecting a fundamental shortage of skilled craftsmen.

## Residential Construction Employment and Unemployment Rate



Source: Bureau of Labor Statistics.



### State-Level Employment Data

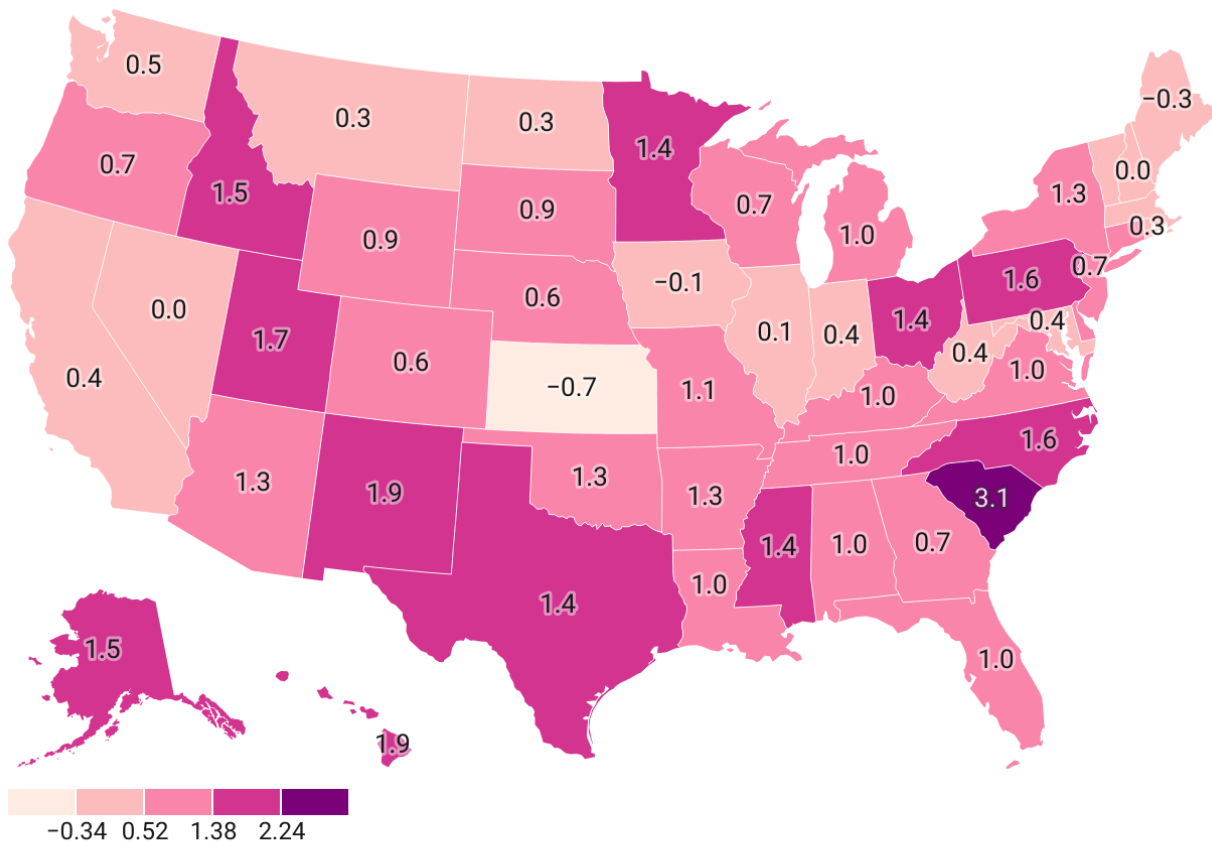
The latest government state employment report paints a mixed picture of the job market, with the recent deceleration in job growth being uneven across the United States. While a few states saw modest employment gains, most areas showed little to no progress. Nonfarm payroll employment increased in 32 states in August compared to the previous month, while decreasing in 17 states and the District of Columbia. Montana reported no change.

On a month-over-month basis, employment data was most favorable in Texas, which added 17,600 jobs. Pennsylvania came in second (+12,200), followed by Ohio (+9,900). Meanwhile, a total of 80,000 jobs were lost across 17 states and the District of Columbia, with New York reporting the steepest job losses at 16,100. In percentage terms, employment increased the highest in Utah at 0.5%, while the District of Columbia saw the largest decline at 0.7% between July and August.

Year-over-year, ending in August, 1.5 million jobs have been added to the labor market, a 0.9% increase compared to the August 2024 level. The range of job gains spanned from 100 jobs in New Hampshire to 195,600 jobs in Texas. Four states and the District of Columbia lost a total of 23,600 jobs in the past 12

months, with Kansas reporting the steepest job losses at 10,000. In percentage terms, the range of job growth spanned 0.1% in Illinois to 3.1% in South Carolina. The range of job losses in Iowa, Maine, Kansas, and the District of Columbia spanned 0.1%-1.2%.

## August YoY Percent Change in Total Nonfarm Employment (SA)

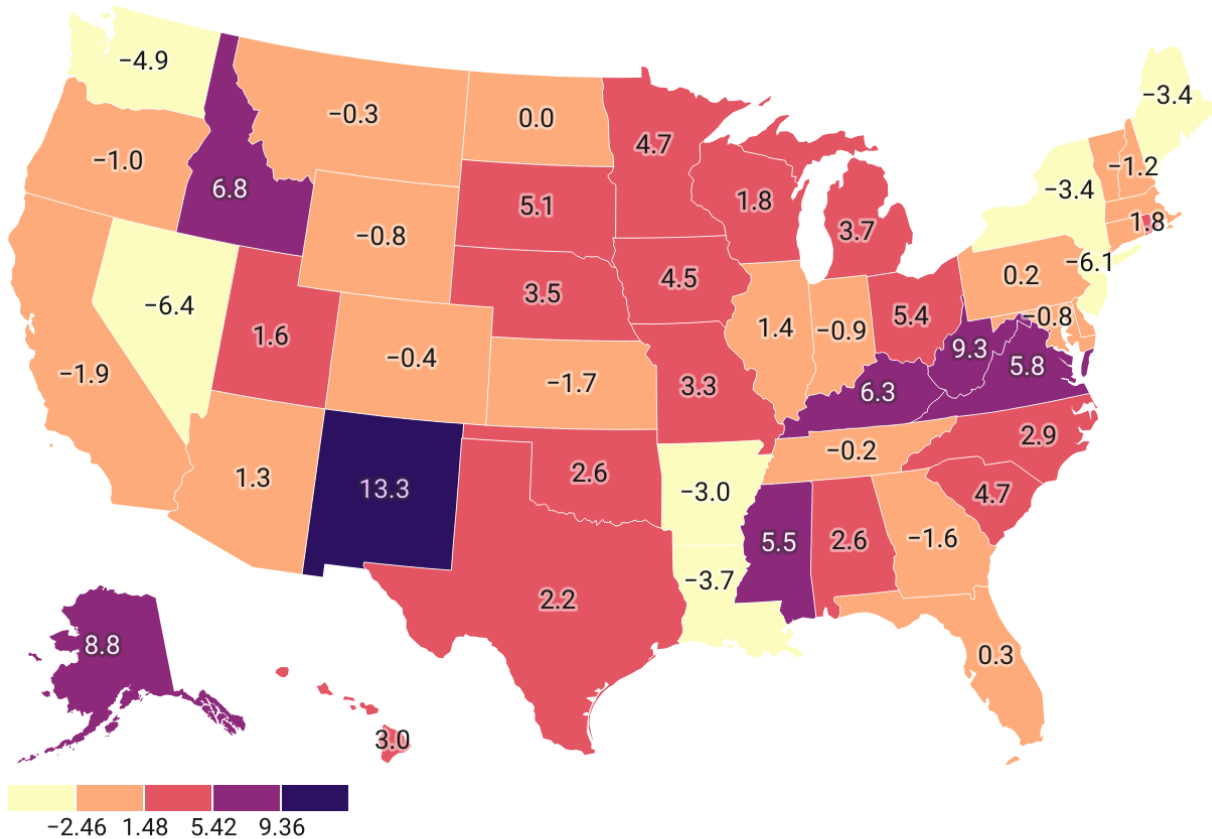


Map: NAHB Analysis • Source: U.S. Bureau of Labor Statistics • Created with Datawrapper

Across the nation, [construction sector jobs data](#) —which includes both residential and non-residential construction—showed that 19 states reported an increase in August compared to July, while 29 states lost construction sector jobs. The two remaining states and the District of Columbia reported no change on a month-over-month basis. Florida, with the highest increase, added 3,600 construction jobs, while Nevada, on the other end of the spectrum, lost 4,400 jobs. Overall, the construction industry lost a net 7,000 jobs in August compared to the previous month. In percentage terms, Mississippi reported the highest increase at 3.1% and Nevada reported the largest decline at 4.1%.

Year-over-year, construction sector jobs in the U.S. increased by 58,000, 0.7% higher compared to the August 2024 level. Texas added 18,500 jobs, the largest gain of any state, while California lost 16,900 construction sector jobs. In percentage terms, New Mexico had the highest annual growth rate in the construction sector at 13.3%. During this period, Nevada reported the largest decline of 6.4%.

## August YoY Percent Change in Total Construction Employment (SA)



Map: NAHB Analysis • Source: U.S. Bureau of Labor Statistics • Created with Datawrapper

### Wages in Construction

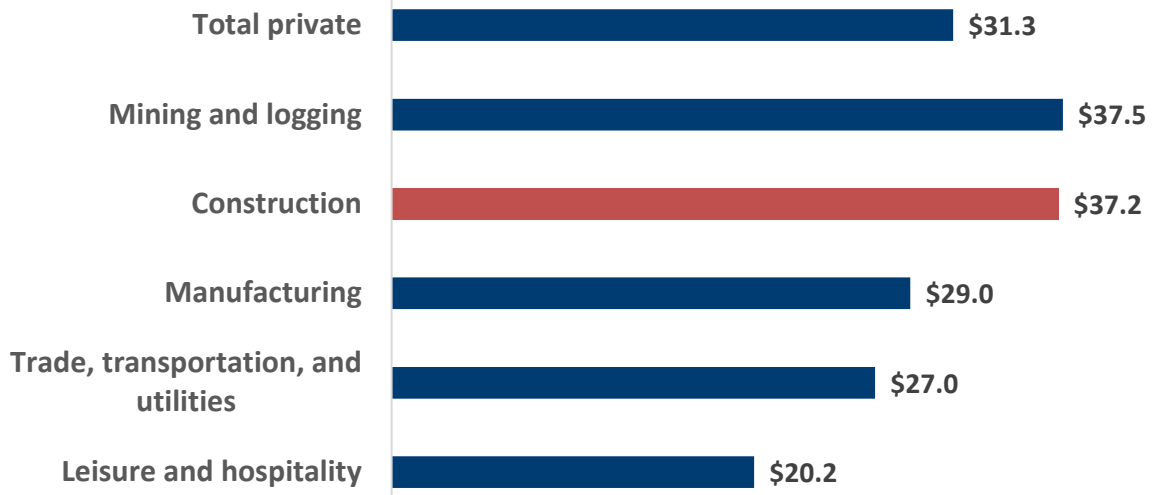
Despite a weakening demand for construction labor, wages in construction continue to rise, often outpacing and exceeding typical earnings in other industries. The strong construction wage growth reflects persistent long-term labor challenges facing the industry. According to the latest Current Employment Statistics (CES) report from the Bureau of Labor Statistics (BLS), average hourly earnings (AHE) in construction increased 3.7% since a year ago. They reached the \$39.7 per hour rate in July 2025<sup>5</sup>. At the same time, seasonally adjusted average hourly earnings in manufacturing were \$35.3, and \$31.1 in trade, transportation, and utilities. The overall US private sector AHE were \$36.4.

Looking at wages of production and non-supervisory employees, the differences across industries persist, with production workers in construction earning some of the highest AHE - \$37.2 in July 2025. Nonsupervisory and production workers in mining and logging were averaging \$37.5 per hour, in manufacturing - \$29, in trade, transportation, and utilities - \$27, in leisure and hospitality - \$20.2. Averaging across the entire private sector, the mean hourly earnings of production and nonsupervisory workers were \$31.3.

<sup>5</sup> AHE measures wage rates, including overtime, but does not include benefit costs and payroll taxes.

## Average Hourly Earnings of Production and Nonsupervisory Employees

*Seasonally Adjusted, July 2025*



Average hourly earnings (AHE) in construction vary greatly across 43 states that report these data. Alaska, states along the Pacific coast, Illinois, Minnesota, and most states in the Northeast record the highest AHE. As of April 2025, fourteen states report average earnings (NSA) exceeding \$40 per hour. Average earnings in construction in Alaska and Massachusetts exceeded \$50 per hour (NSA).

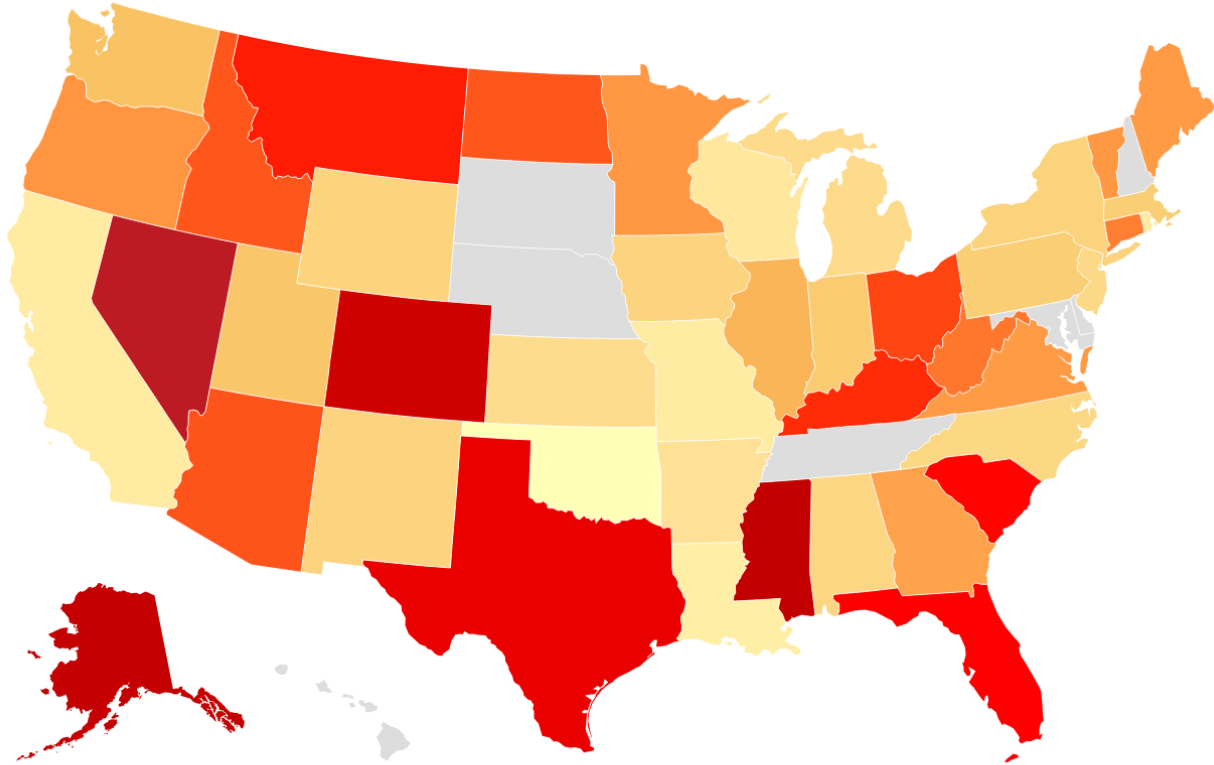
April 2025, NSA



While differences in regional hourly rates reflect variation in the cost of living across states, among other things, faster-growing wages are more likely to indicate specific labor markets that are particularly tight. Year-over-year, Nevada, Mississippi, Alaska, Colorado, Texas, Florida, South Carolina, and Montana reported the fastest-growing hourly wages in construction, more than doubling the national average growth of 3.6%. Nevada reported the largest annual increase of 10.6%, while the growth rate in Mississippi and Alaska was just under 10%.

## Change in Average Hourly Earnings in Construction

% Change, Y-O-Y, April 2025

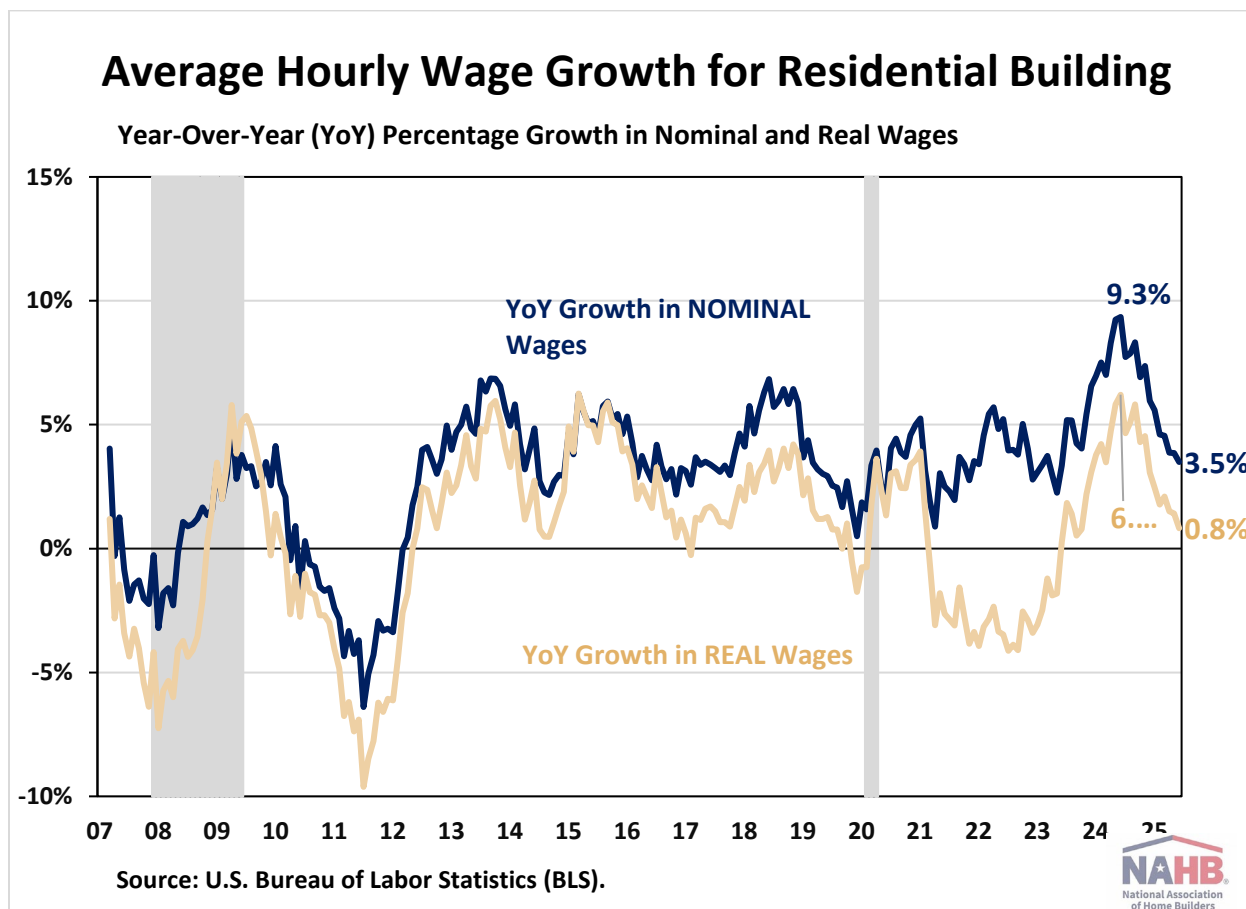


Map: NAHB Economics • Source: Current Employment Statistics, BLS • Created with Datawrapper

### Wages in Residential Building Construction

After strong growth throughout 2024, both real and nominal wage growth for residential building workers slowed during the second quarter of 2025, reflecting a broader cooling in residential construction activity.

In nominal terms, average hourly earnings (AHE) for residential building workers rose to \$39.4 in June 2025, a 3.5% increase from \$38.0 a year ago, according to the latest report from the U.S. Bureau of Labor Statistics (BLS). This marks a continued deceleration in the year-over-year wage growth, which peaked at 9.3% in June 2024. Despite the slowdown in wage growth, residential building workers' wages remain competitive: 11.4% higher than the manufacturing sector (\$35.3/hour), 25.3% higher than the transportation and warehousing sector (\$31.4/hour), and 2.3% lower than the mining and logging sector (\$40.3/hour).

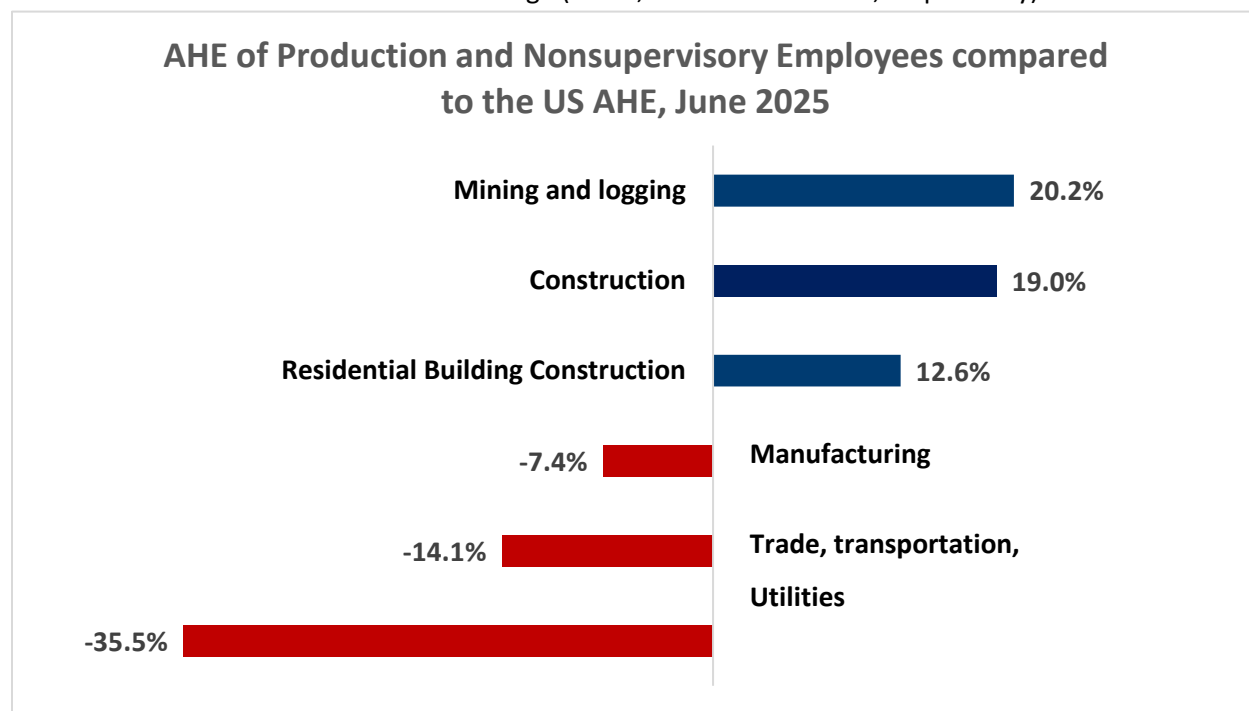


Despite a weakening cyclical demand for labor, the fundamental shortage of skilled labor continues to challenge the construction sector. Reflecting the ongoing shortage of craftsmen amid strong remodeling demand, wages of production and non-supervisory workers in home building have trended upward this year. In the residential building sector, where more than half of production employees are remodelers, wages rose 9.2% in June, substantially outpacing inflation and wage growth for white-collar workers in the sector.

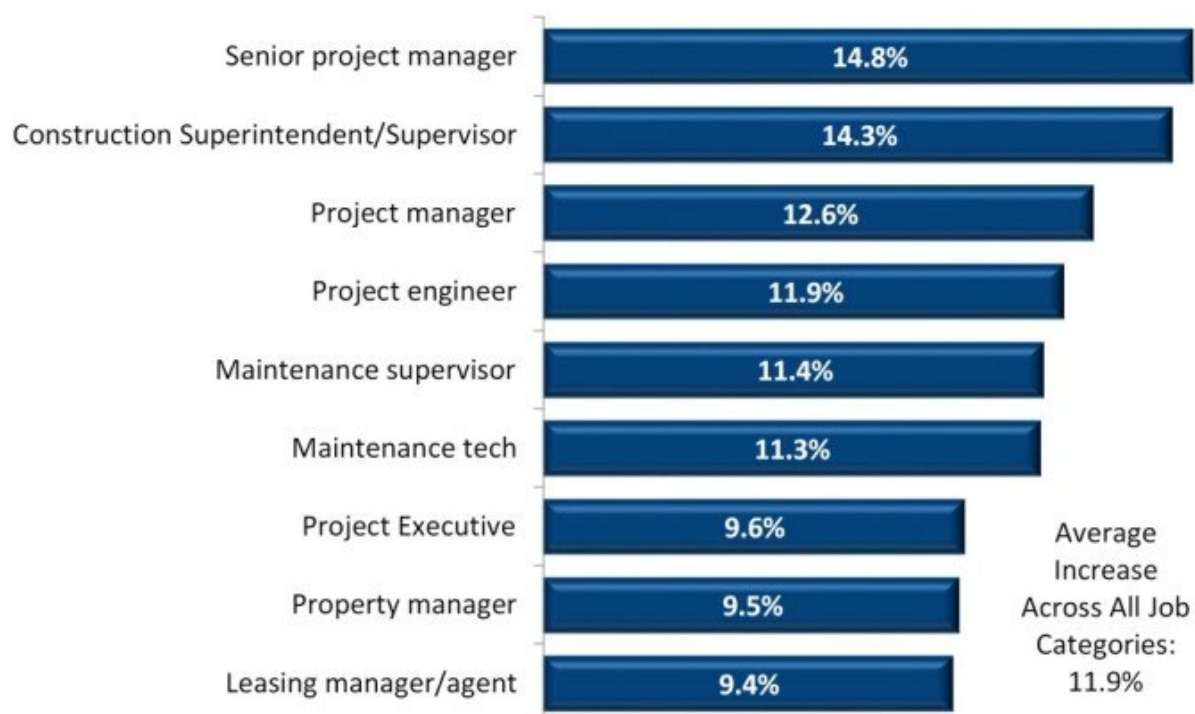
According to the latest Bureau of Labor Statistics (BLS) report, average seasonally adjusted hourly earnings of production and non-supervisory employees in home building exceeded \$35 by June 2025. At the same time, the US average hourly earnings across all industries were \$31.3. Production and nonsupervisory employees in manufacturing averaged \$29, in trade, transportation, and utilities - \$27, mining and logging - \$37.5, in leisure and hospitality - \$20.2 per hour.

This translates into a 12.6% premium for AHE of production workers in residential building construction compared to the US average for production and nonsupervisory employees. At the same time, production workers in manufacturing, trade, transportation, and utilities, and leisure and hospitality

industries earn less than the national average (-7.4%, -14.1% and -35.5%, respectively).



**Average Increase in the Cost of Compensating Multifamily Employees Over the Past 12 Months**



## Occupational Wages in Construction

The Occupational Employment and Wage Statistics (OEWS) program, a different survey from the Bureau of Labor Statistics, provides comprehensive occupational wages. These statistics are detailed but less timely. The latest May 2024 estimates were released in April 2025. According to NAHB's analysis of these data, half of payroll workers in construction earn more than \$60,320, and the top 25% make at least \$81,510. In comparison, the U.S. median annual pay is \$49,500, while the top quartile (the highest paid 25%) makes at least \$78,810<sup>6</sup>.

The OEWS publishes wages for almost 400 occupations in construction. Out of these, only 46 are construction trades. The other construction industry workers are in finance, sales, administration, and other off-site activities.

In 2024, the highest paid occupation in construction is lawyers with wages of \$180,520 per year, and the top 25 percent make over \$238,720. Traditionally, Chief Executive Officers (CEO) occupy the top paid position in the industry, but in 2024, they are second on the list, with half of CEOs making over \$174,030, while the wages of the top quartile remain undisclosed.

Out of the top twenty highest-paid occupations in construction, fourteen are various managers. The highest-paid managers in construction are architectural and engineering managers, with half of them making over \$153,510, and the top 25 percent on the pay scale earning over \$181,150 annually.

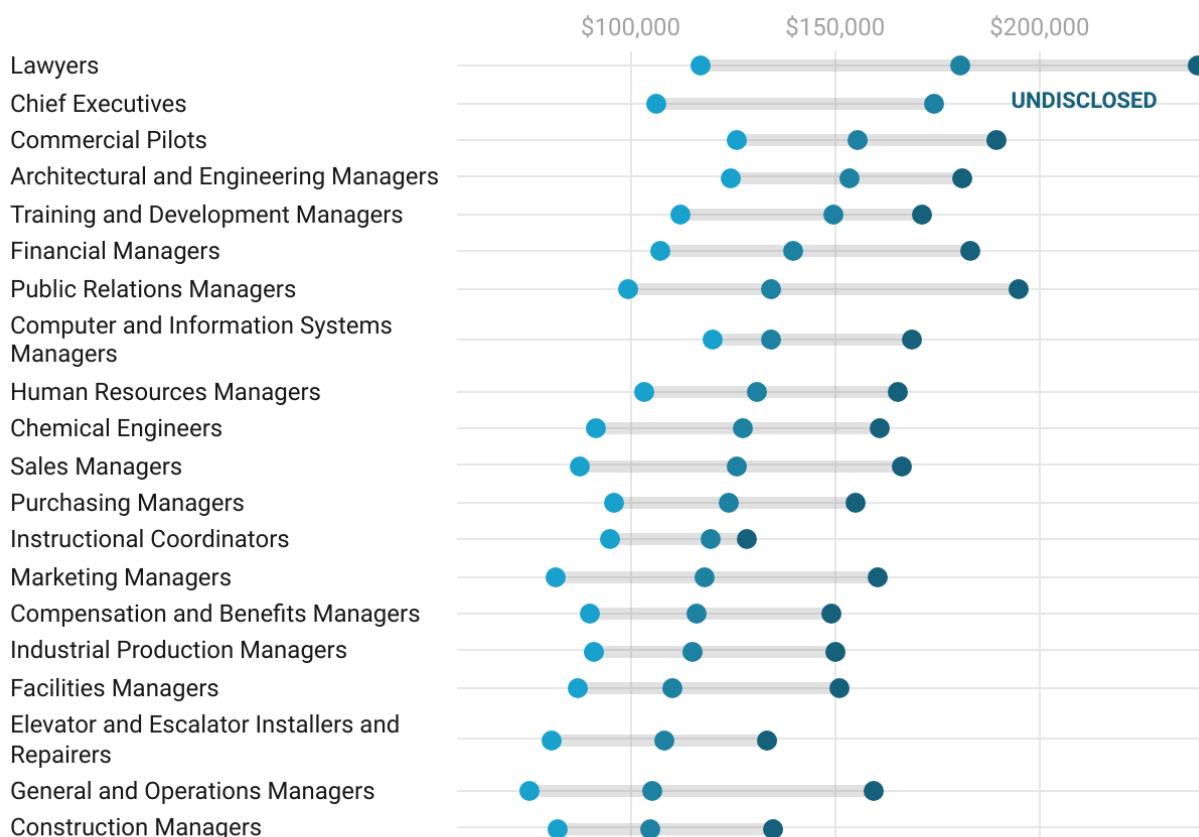
The architectural and engineering managers also stand out for having a smaller salary range spread, measured as a percentage difference between the bottom and top 25 percent pay levels. Only computer and information systems (CIS) managers have a narrower pay range among managers in construction. The annual pay of the highest-paid 25 percent CIS managers in construction is at least \$168,850, which is 40% higher than the top earnings of the lowest-paid quartile (\$119,990). In contrast, higher-level positions, such as lawyers and CEOs, have a noticeably wider pay scale spread. The top 25 percent highest-paid lawyers make more than double the bottom quartile pay, potentially reflecting a greater range of responsibilities and opportunities for career advancement for lawyers in construction.

---

<sup>6</sup> The OEWS wages are straight-time, gross pay. They do not include premium pay (stock and year-end bonuses, overtime pay, weekend premium pay, etc.).

# HIGHEST PAID OCCUPATIONS IN CONSTRUCTION, 2024

● 75% MAKE AT LEAST ● MEDIAN ● TOP 25% MAKE AT LEAST



Source: 2024 OEWS, BLS • Created with Datawrapper

**Among construction trades**, elevator installers and repairers top the median wages list with half of them earning over \$108,130 a year, and the top 25% making at least \$133,370. This is also the only construction trade that made the industry's overall top 20 highest-paid occupations list.

First-line supervisors of construction trades are next on the trade list; their median wages are \$78,900, with the top 25% highest-paid supervisors earning more than \$100,150.

In general, construction trades that require more years of formal education tend to offer higher annual wages. Median wages of construction and building inspectors are \$66,340, and the top quartile is \$89,550. This is also the trade with a relatively wide pay scale spread, with the top 25 percent making at least 74% more than the bottom quartile, potentially reflecting a wider variance in educational attainment, professional responsibilities, and expertise of building inspectors.

Carpenters are one of the most prevalent construction crafts in the industry. This trade requires less formal education. Nevertheless, the median wages of carpenters working in construction exceed the

national median. Half of these craftsmen earn over \$59,890, and the highest paid 25 percent bring in at least \$76,290.

Plumbers and electricians, trades that typically require specialized training and licensing, earn higher annual wages. Half of plumbers in construction earn over \$62,820, with the top quartile making over \$81,740. Electricians' wages are similarly high.

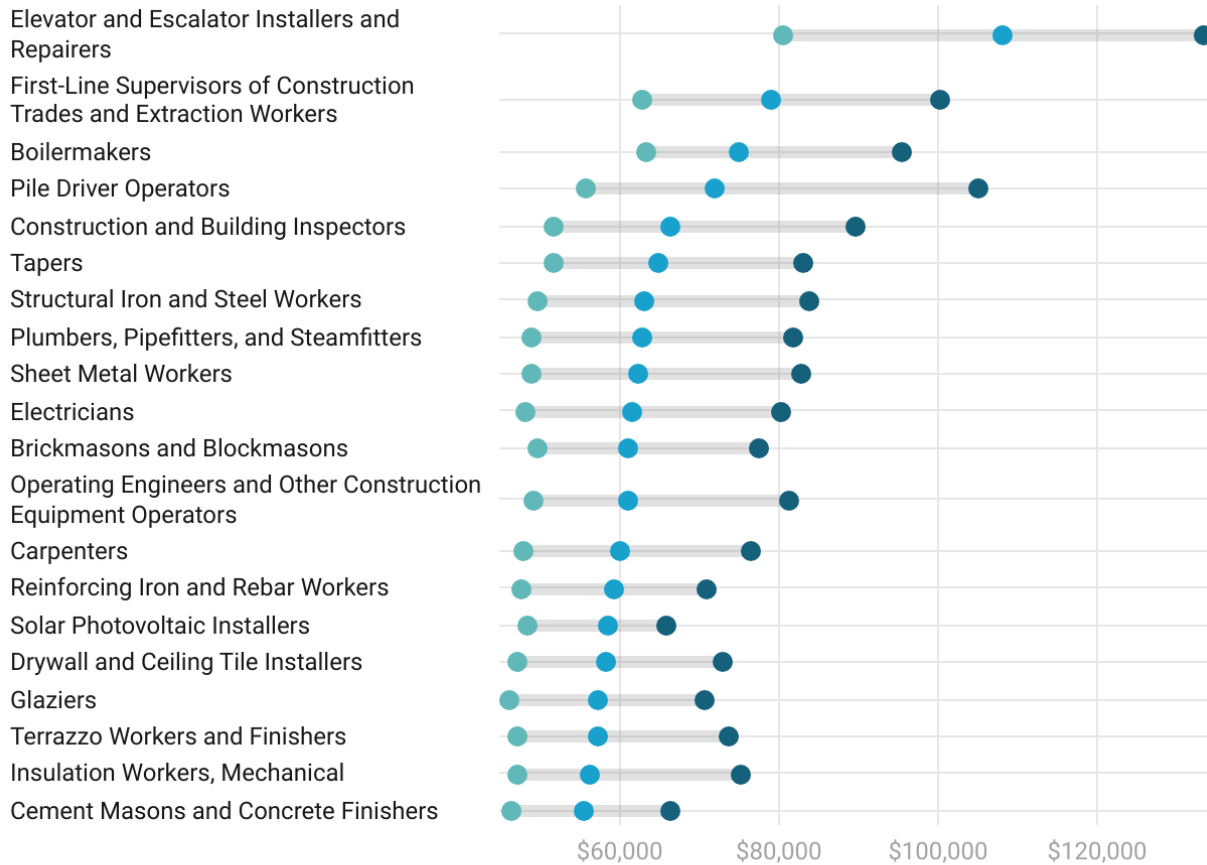
The construction trade with the greatest pay range spread is pile driver operators. The top 25 percent highest-paid operators earn at least \$105,100, over 100% more than the bottom quartile. This wide pay scale presumably reflects a greater variety of opportunities and geographic locations (some pile driver operators work on offshore rigs), as well as varying degrees of technical expertise and training (some equipment comes with computerized controls and requires additional knowledge of electronics).

In contrast, solar photovoltaic installers, a relatively new construction trade, have a much narrower pay scale. The difference between the annual pay of the top 25 percent (\$65,850) and the bottom quartile (\$48,350) is 36%, likely reflecting less variation in expertise, training, and geographic prevalence.

Typically, construction trades that require less skill not only offer lower wages but also show less variation in pay. Apprentice workers (helpers of painters, plumbers, electricians, roofers, carpenters, and other construction trades) illustrate this point. These are the six lowest-paid construction occupations that simultaneously show the narrowest variation in pay. For example, the highest paid quartile of carpenters' helpers makes at least \$46,720 a year, while the bottom quartile earns at most \$35,870, only a 30% difference.

# Highest Paid Construction Occupations in Construction

75% MAKE AT LEAST MEDIAN TOP 25% MAKE AT LEAST



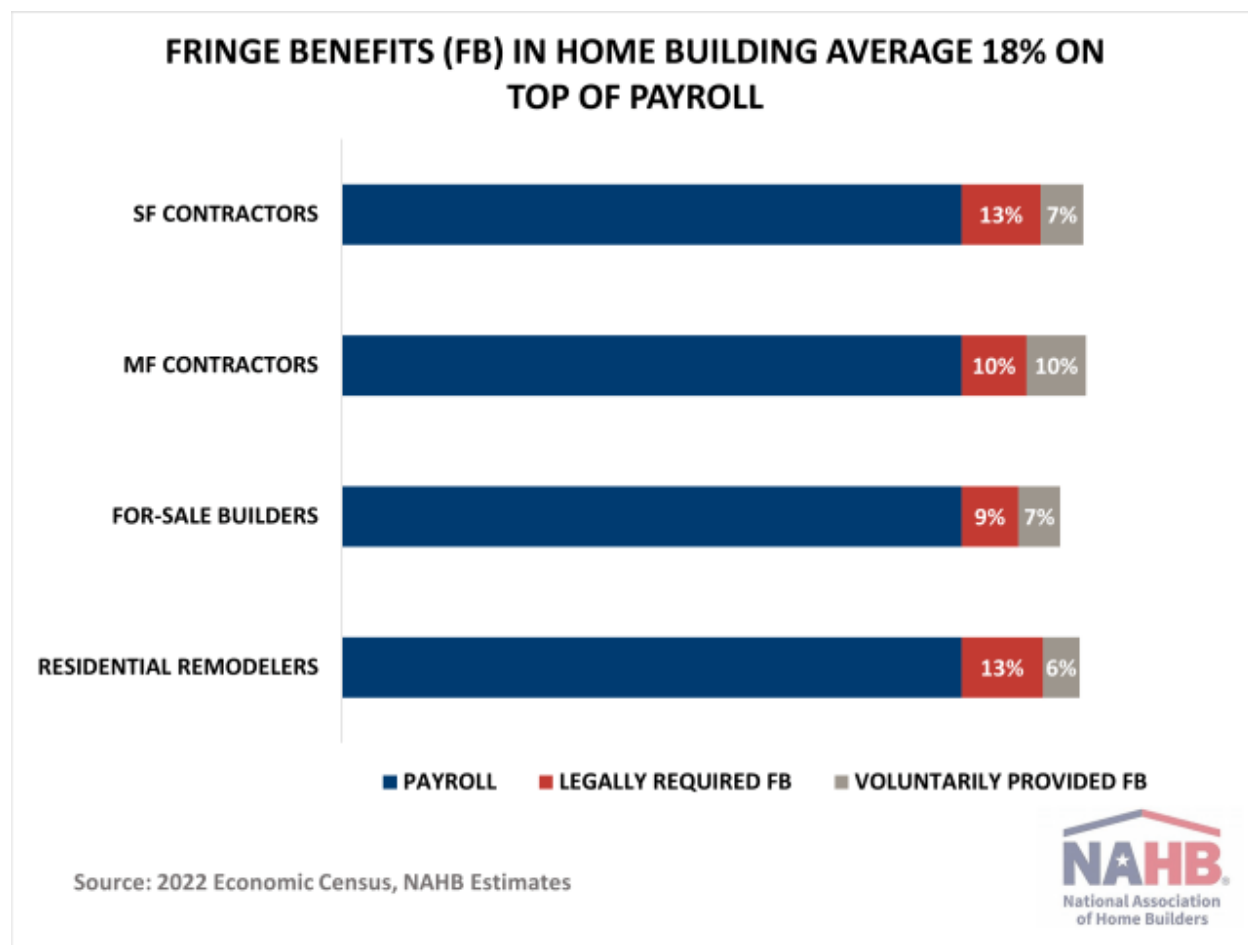
Source: 2024 OEWS, BLS • Created with Datawrapper

## Fringe Benefits in Residential Construction

In the home building industry, fringe benefits add 18% to employees' compensation on top of payroll, according to NAHB's analysis of the latest 2022 Economic Census data. The rates vary across residential construction sub-sectors, with single-family and multifamily general contractors contributing an average of 20% on top of payroll. Fringe benefits in residential remodeling and for-sale building average 19% and 16%, respectively.

Total fringe benefits consist of legally required and voluntarily provided benefits. The legally required component includes employers' contributions to Social Security and Medicare, unemployment insurance, workers' compensation insurance, and state-mandated temporary disability and other state-specific contributions. Since these benefits are mandatory by law, it may seem counterintuitive to view them as "fringe" benefits. Nevertheless, the Economic Census counts them as "legally required fringe benefits" paid on top of payroll.

In 2022, legally required fringe benefits contributed by single-family general contractors and remodelers amounted to an additional 13% on top of payroll. The average rate for multifamily general contractors and for-sale builders was 10% and 9%, respectively. Averaged across the four subsectors of home building, legally required benefits amounted to just under 12% of payroll.



Voluntarily provided fringe benefits include expenditures paid by employers for life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union-negotiated benefits. Other perks provided by employers, such as paid holidays, vacations, sick pay, bonuses, and jury pay, may seem like valuable “fringe” benefits but are technically payroll.

In 2022, voluntary fringe benefits provided by multifamily general contractors amounted to an additional 10% on top of payroll. For single-family contractors and for-sale builders, these benefits added 7% to compensation. The rate was lower for residential remodelers, where voluntary benefits amounted to 6% of payroll. Averaged across the four sub-sectors of home building, the voluntarily provided benefits approached an added cost of 7% on top of payroll.

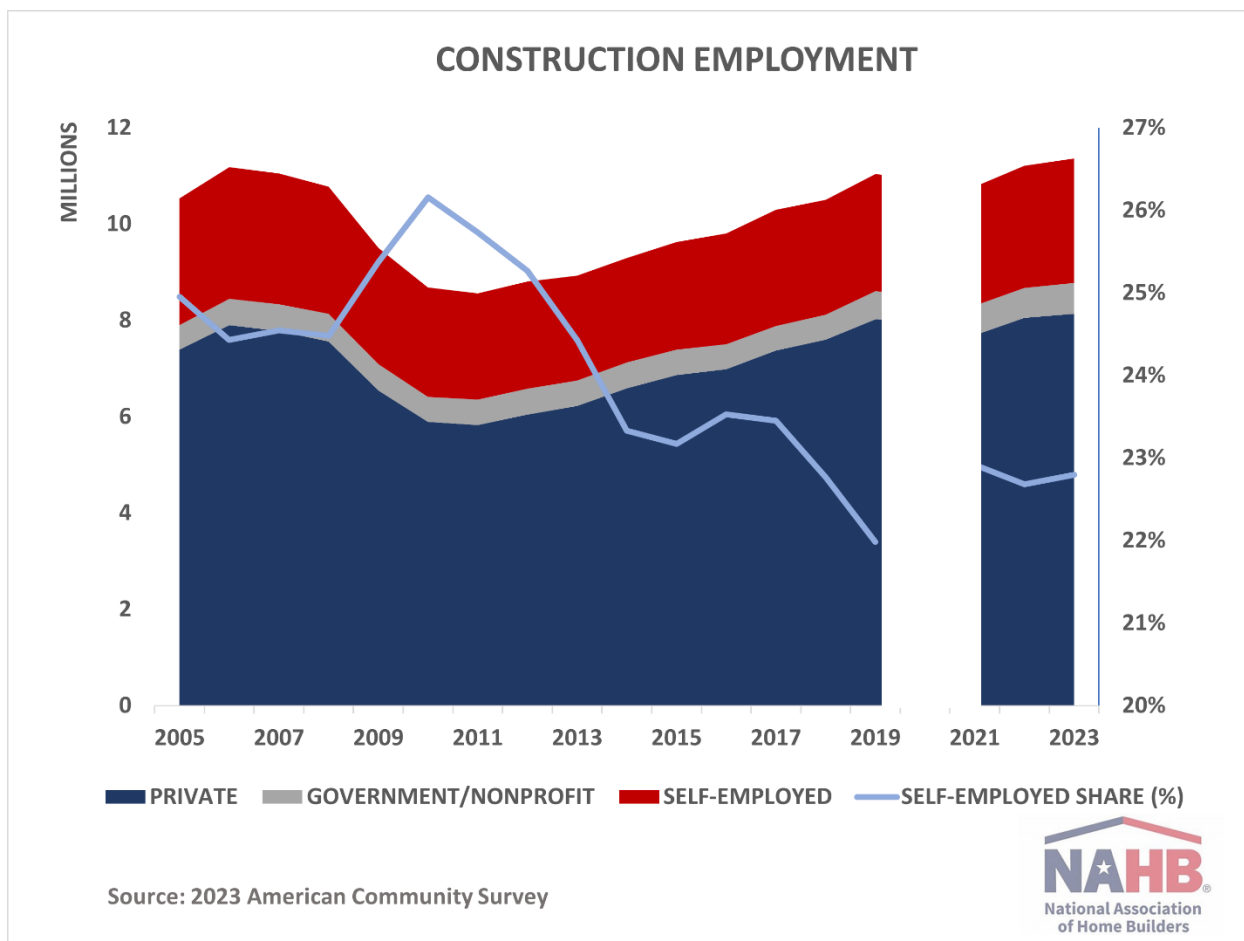
In addition to the four residential construction subsectors discussed above, the home building industry also includes land developers and specialty trade contractors (STC). Since the Economic Census does not differentiate between residential and non-residential specialty trade contractors, this combined subsector is not included in the home building chart above. Nevertheless, the fringe benefit rates for specialty trade contractors were highest, 28%, equally split between legally required and voluntary.

Among other things, the differences in the fringe benefit rates reflect variations in state-mandated regulations, company size and legal form, involvement in federally funded projects, unionization of workers, and employee participation rates in health and pension plans. For example, accounting principles depend on the legal form of organization and can affect the estimated fringe benefit rates. For corporations, payroll includes compensation of executives. For unincorporated businesses, such as individual proprietorships and partnerships, payroll excludes profit and other compensation of proprietors or partners. Partners and proprietors may also be ineligible for the complete benefits package available to employees, which also affects the estimated fringe benefit rates for their businesses.

### Self-Employment in Residential Construction

The timely payroll employment and unemployment statistics from the Bureau of Labor Statistics (BLS) do not include self-employed workers. Counting self-employed is particularly important in the home building industry, where they traditionally make up a larger share of the labor force. As of 2023, close to 2.6 million workers employed in construction are self-employed, according to the latest American Community Survey (ACS).

The share of self-employed in construction remains just under 23%, a new post-pandemic norm. While this is significantly higher than an economy-wide average of 10% of the employed labor force, for construction, these rates are historically low. At a time when the industry's payroll employment surpasses the historic highs of the home building boom of the mid-2000s, the number of self-employed remains below the peak of 2006, when over a quarter of the construction labor force was self-employed.



Declining self-employment rates in construction coincide with the declining share of tradesmen in construction and potentially reflect structural changes in the construction labor force, such as a shift towards larger construction firms that are better equipped to invest in new technologies and absorb higher overhead costs.

Partially, the downward trend in construction self-employment rates since the Housing Bust reflects the counter-cyclical nature of self-employment. Under normal circumstances, self-employment rates rise during an economic downturn and fall during an expansion. This presumably reflects a common practice among builders to reduce payrolls when construction activity is declining. In contrast, builders and trade contractors offer better terms for employment and attract a larger pool of laborers to become employees rather than self-employed when the workflow is steady and rising. Potentially reflecting the counter-cyclical nature of construction self-employment, the current self-employment rates are 3.4 percentage points lower than the peak rate of the Great Recession.

For similar reasons, persistent labor shortages that plagued the industry during the last decade likely have contributed to the decline in self-employment rates. Ostensibly, to minimize construction delays, builders and trade contractors would be willing to offer better payroll terms to secure employees when finding experienced craftsmen is challenging.

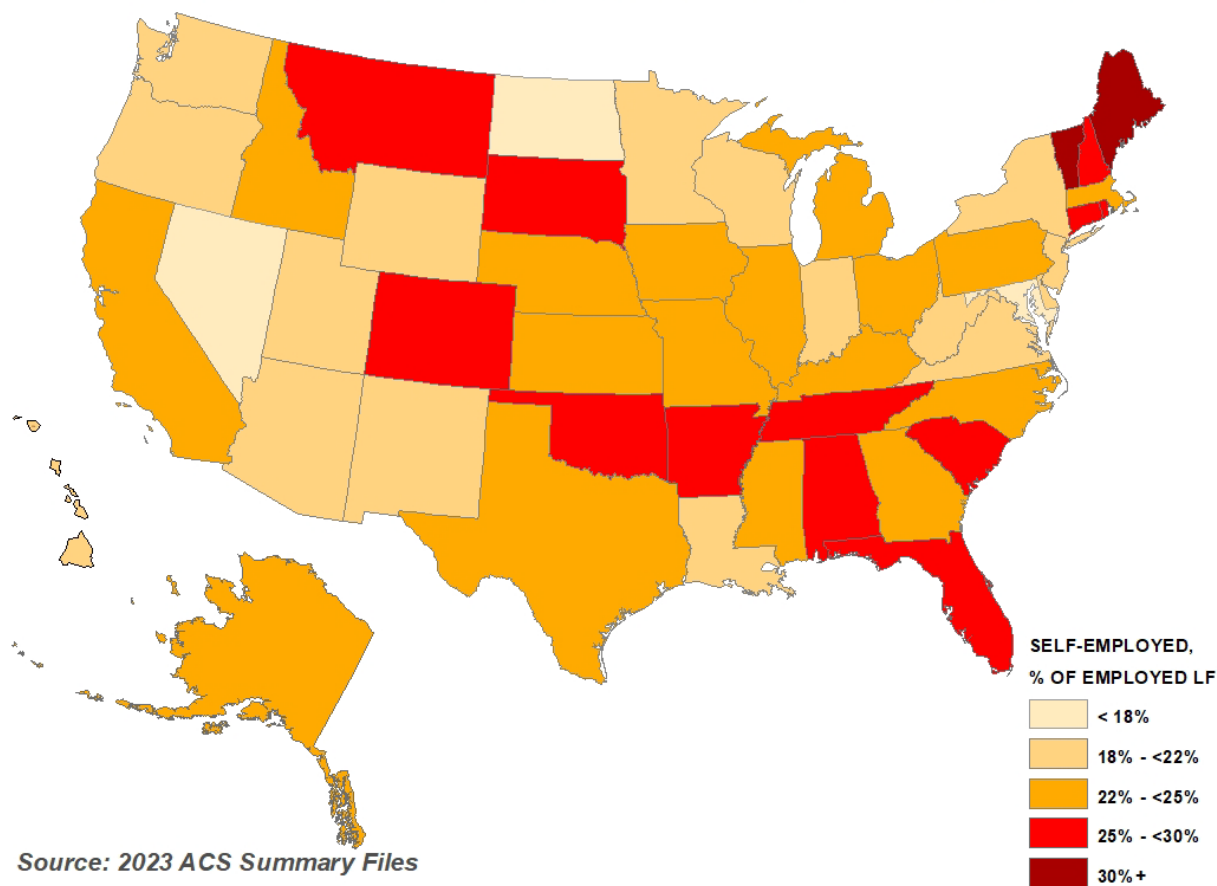
Since the 2020 ACS data are not reliable due to the data collection issues experienced during the early lockdown stages of the pandemic, we can only compare the pre-pandemic 2019 and post-pandemic

2021-2022 data (hence the omitted 2020 data in the charts above). As a result, it is not clear what accounted for the post-pandemic bump in self-employment. One answer is that self-employed workers in construction managed to remain employed during the short COVID-19 recession or recovered their jobs faster afterwards, compared to private payroll workers. Another possibility is that the booming residential construction sector attracted self-employed workers from other, more vulnerable or slow-recovering industries, including commercial construction.

Examining cross-state variation provides additional insights into construction self-employment rates. The New England states and Montana register some of the highest self-employment shares. In Maine, 38% of construction workers are self-employed. The share is similarly high in Vermont, where more than a third of workers are self-employed, 36%. In Connecticut and Rhode Island, 28% of workers are self-employed. In Montana, the share is 30%.

The New England states are where it takes longer to build a house. Because of the short construction season and longer times to complete a project, specialty trade contractors in these states have fewer workers on their payrolls. The 2022 Economic Census data show that specialty trade contractors in Vermont and Maine have some of the smallest payrolls in the nation, with five workers on average. Only contractors in Montana have smaller payrolls, averaging fewer than 5 workers. At the same time, the national average is over nine workers. As a result, independent entrepreneurs in New England and Montana tend to complete a greater share of work, which helps explain the high self-employment shares in these states.

## CONSTRUCTION SELF-EMPLOYMENT RATES, 2023



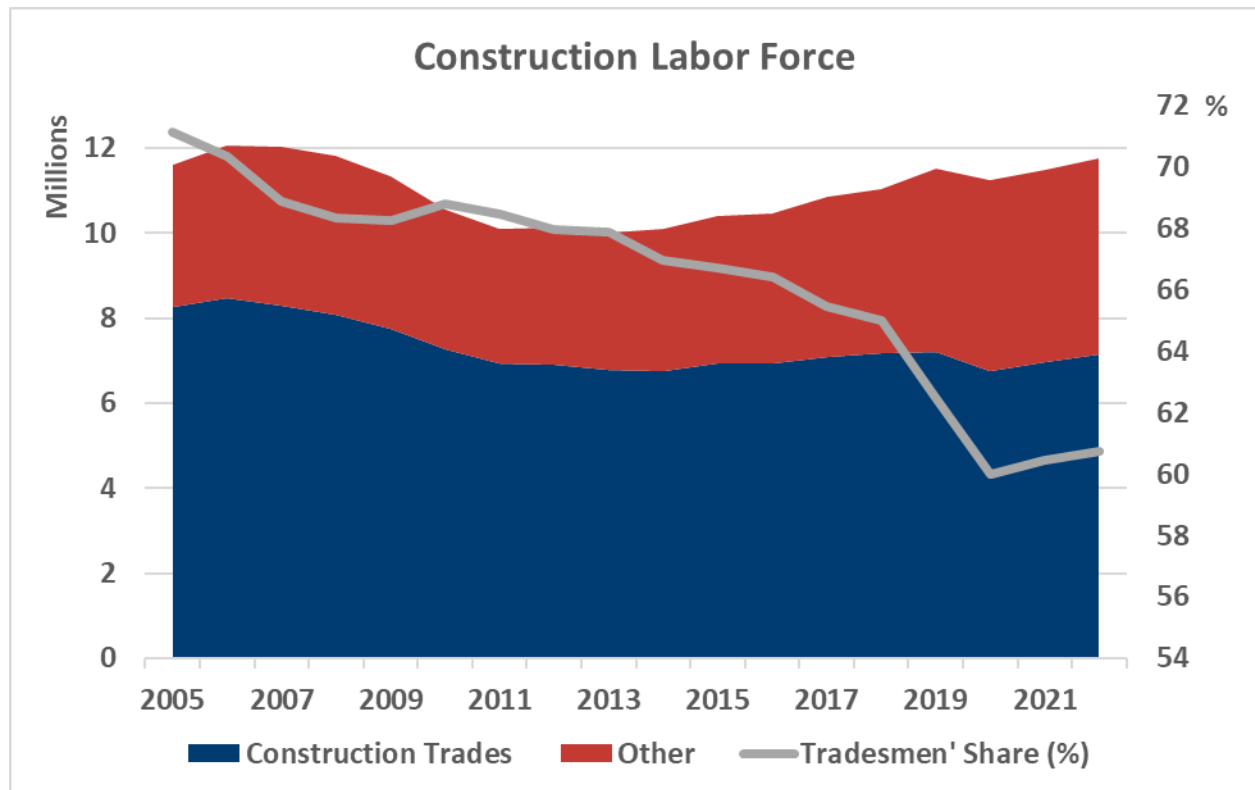
The Mountain division has states with the highest and lowest self-employment rates simultaneously. Montana and Colorado, where more than a quarter of workers are self-employed, round up the list of states with the highest self-employment rates. At the same time, Nevada registers one of the lowest (13%) self-employment rates in construction and takes place at the opposite end of the list. Only Washington, D.C., has a lower share of self-employed, 9%. The substantial differences likely reflect a predominance of home building in Montana and Colorado and a higher prevalence of commercial construction, which has larger payroll employment and, presumably, relies less heavily on self-employed.

### The Rise of White-Collar Jobs in Construction

Analysis of the history of data from the American Community Survey (ACS) reveals dramatic shifts in the makeup of the construction labor force over the last two decades. While the overall number of workers in the industry now approaches the historic highs of the housing boom of 2005-2006, the share of tradesmen declined from 71% in 2005 to under 61% in 2022. At the same time, the share of computer, engineering, and science occupations doubled, and the share of management and business occupations increased by 60%.

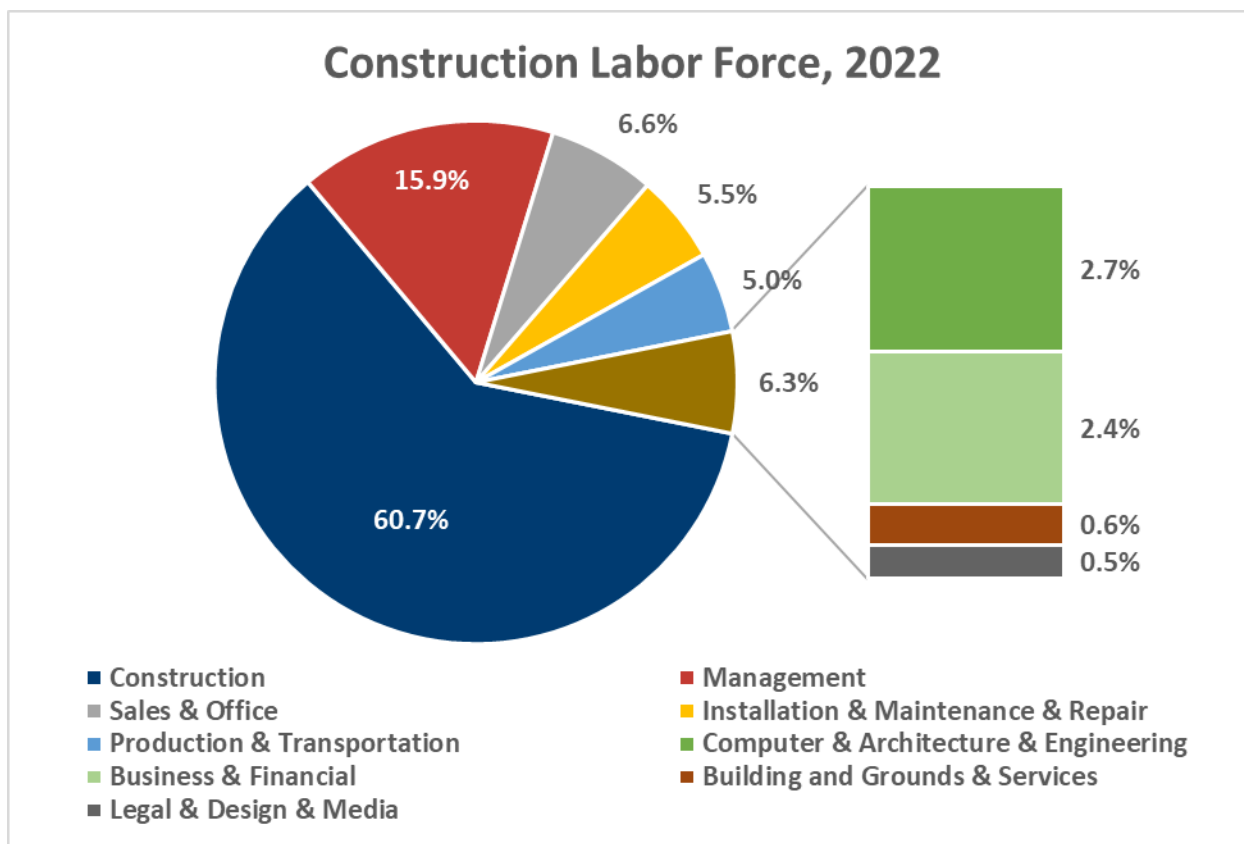
The results are noteworthy, particularly given a recent focus on relatively flat productivity growth in the construction sector. A growing number of engineering/tech workers would, on its face, suggest a boost

to productivity. However, a decline in the share of workers associated with the trades could suggest declining productivity. Indeed, more workers in management and business occupations could be another impact of the rising regulatory burden associated with building. These findings and possible impacts deserve additional research attention, given the need to supply more attainable housing to the market.



As of 2022, the construction labor force exceeded 11.7 million, just slightly below the housing boom peak of 12 million. As the common practice dictates, the complete labor force estimates include employed and unemployed workers who look for jobs. Construction trades (such as carpenters, electricians, painters, plumbers, laborers, as well as first-line supervisors) account for 7.1 million workers in the industry, or 60.7%. In contrast, there were 8.5 million construction tradesmen during the peak employment of 2006. The disappearance of more than a million craftsmen helps explain the persistent labor shortages reported by the NAHB/Wells Fargo Housing Market Index Survey.

Over the same period, the construction industry absorbed a rising number of white-collar workers. The management ranks expanded from 1.2 million to 1.9 million workers, and their share increased from 10% to 16%. Business and financial occupations grew at similar rates. The number of engineers, architects, and other science occupations doubled; they now account for close to 2.7% of the industry workforce. In contrast, the share of computer, engineering, and science occupations was just 1.3% in 2005.



Even though the prevalence of white-collar jobs in construction remains less common than in the US economy overall, their numbers and shares have been rising faster in construction since 2005. For example, while the share of computer, engineering, and science occupations doubled in construction, it increased only 40% in the overall US workforce. Similarly, whereas management ranks increased 60% in construction, they grew at a slower rate for the US labor force, registering gains of 45% since 2005.

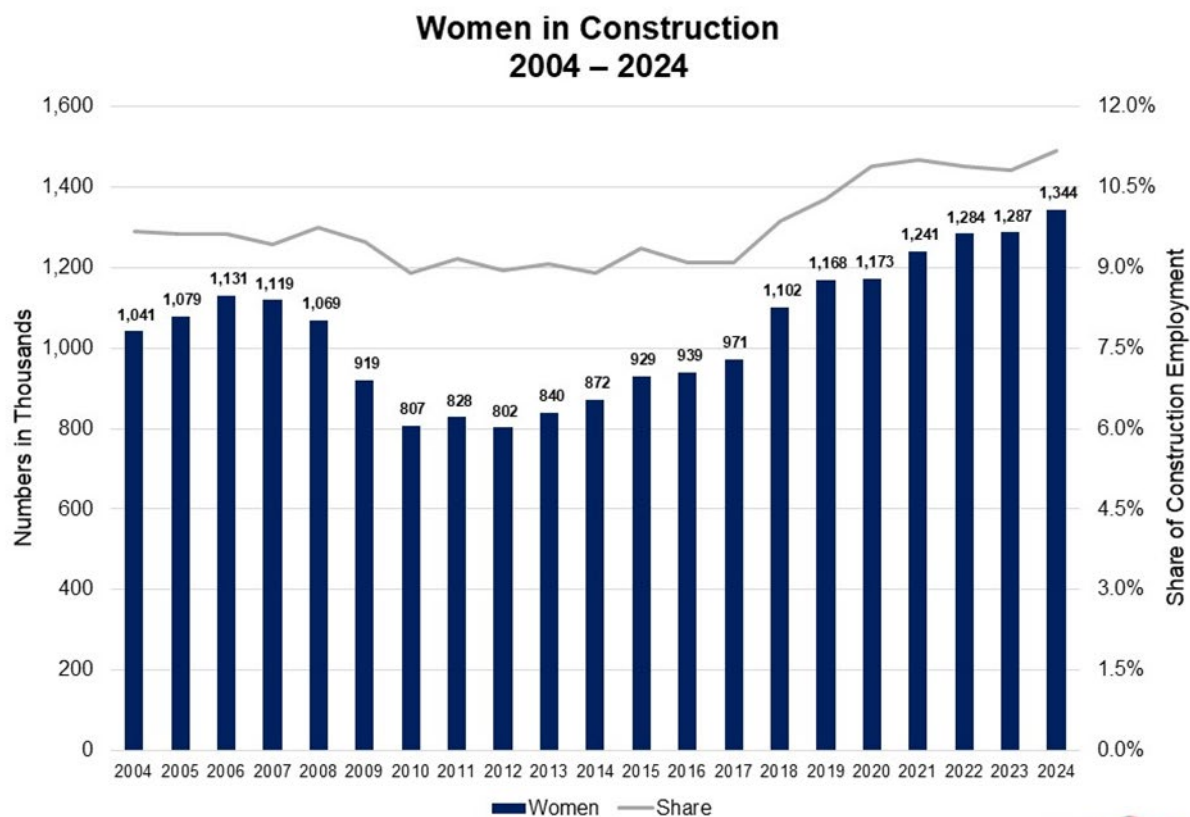
The rising presence of white-collar workers in construction undoubtedly reflects evolving production technologies, an enhanced regulatory environment, and more stringent building codes. The changing makeup of the construction workforce also coincides with the declining rates of self-employment in the industry and may reflect a shift towards larger construction firms. Larger building enterprises are better equipped to invest in new technologies and absorb higher overhead costs.

#### Women in Construction

As the industry evolves and requires a higher number of white-collar professionals, women, who are predominantly employed in occupations such as office and administrative support, management, business, and financial operations, play an increasingly important role in construction. In 2024, the share of women in construction reached a 20-year high of 11.2%.

The number of women employed in the construction industry now stands at 1.34 million, per the latest Current Population Survey (CPS). As the industry continues to face a persistent shortage of skilled labor, expanding the workforce remains one of the top priorities of the industry. Increasing the participation of women in the construction labor force represents a potential opportunity for future growth.

As recently as 2010, the Great Recession reduced the number of women working in construction by nearly 30% to 807,000. From 2010 to 2017, the number gradually rose to around 970,000 but remained below the peak of pre-recession levels. In recent years, however, growth has accelerated, with the number of women in construction reaching a record of 1.34 million in 2024.

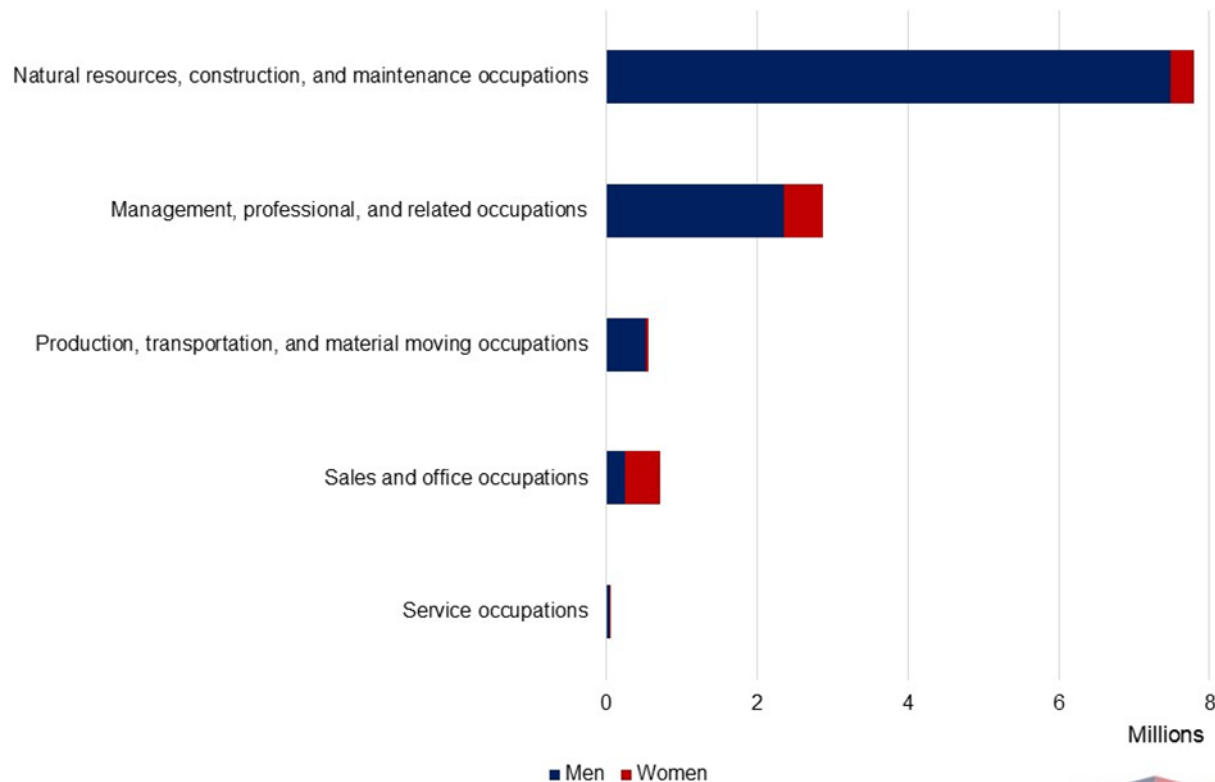


Source: Labor Force Statistics from the Current Population Survey



According to the CPS data, most women in the construction industry hold occupations in office and administrative support, management, and business and financial operations. Sales and office occupations employ the highest number of women within the construction industry, with women accounting for 65.7% of these workers. This includes 437,000 women in office and administrative support, and 39,000 in sales and related occupations. Additionally, 521,000 women hold roles in management, professional, and related occupations, though they account for only 18% of all management positions.

## Construction Industry by Occupation Categories and Gender



Source: 2024 Labor Force Statistics from the Current Population Survey



Nevertheless, construction and maintenance occupations account for the largest number of jobs in construction, and women comprise only 4% (307,000) of these occupations. Other occupation groups within the industry, such as production, transportation, and material moving occupations, as well as service occupations, employed only 22,000 female workers. As the construction skilled labor shortage remains a key challenge for housing, adding new workers is a long-term goal for the industry. Bringing additional women into the high-demand construction trades represents a potential opportunity for the future.

### Residential Construction Employment across States and Congressional Districts

Analysis of the employed labor force shows that 11.4 million people, including self-employed workers, worked in construction in 2023, a new industry record. NAHB estimates that out of the total 11.4 million, 4.7 million people worked in residential construction, accounting for 2.9% of the US employed civilian labor force. Home building in the Mountain Division, as well as in Vermont and Florida, stands out for creating a significantly higher share of local jobs, with residential construction generating more than 5% of all jobs in Idaho and Montana.

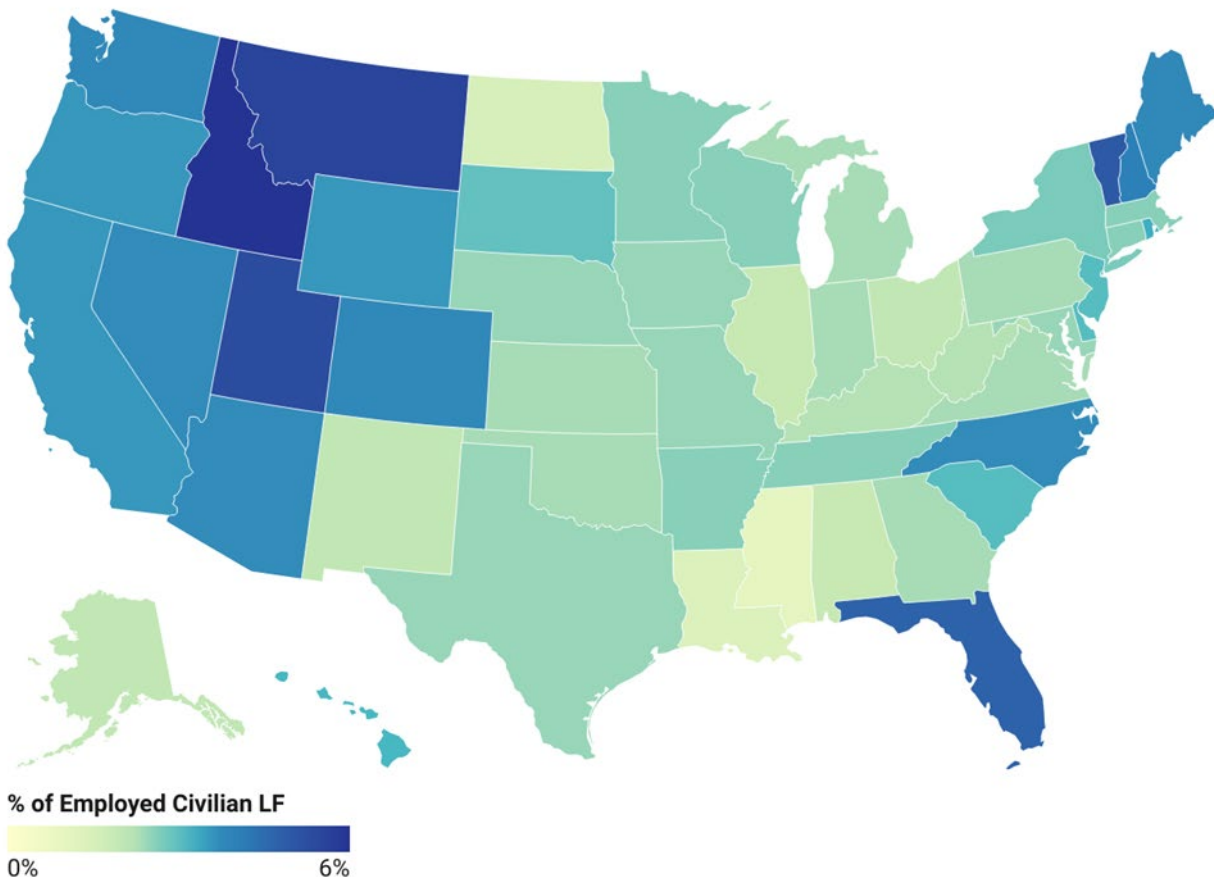
Not surprisingly, the most populous state—California—also has the most residential construction workers. Over 640,000 California residents worked in home building in 2023, accounting for 3.4% of the state's employed labor force.

Fast-growing Florida comes in second with 468,000 residential construction workers. The state stands out for registering one of the fastest-growing populations since the start of the pandemic, which undoubtedly boosted housing and construction workforce demand. Florida's large stock of vacation and seasonal housing further boosts demand for residential construction workers. As a result, in Florida, residential construction workers account for a relatively high 4.4% of the employed labor. Even though this share is well above the national average (2.9%), it is significantly lower than in 2006, when Florida registered the highest share among all 50 states and the District of Columbia, at 6.5%.

Similar to Florida, fast-growing states with a high prevalence of seasonal vacation homes top the list of states with the highest share of residential construction workers in 2023. Three states in the Mountain Division - Idaho, Montana, and Utah - take the top spots on the list, with respective 5.5%, 5.1%, and 4.9% of the employed labor force working in home building. Vermont is next on the list with a share of 4.6%.

## Home Building Employment, 2023

*% of Employed Labor Force, Including Self-Employed*



Source: ACS 2023, QCEW 2023, NAHB Estimates • Created with Datawrapper

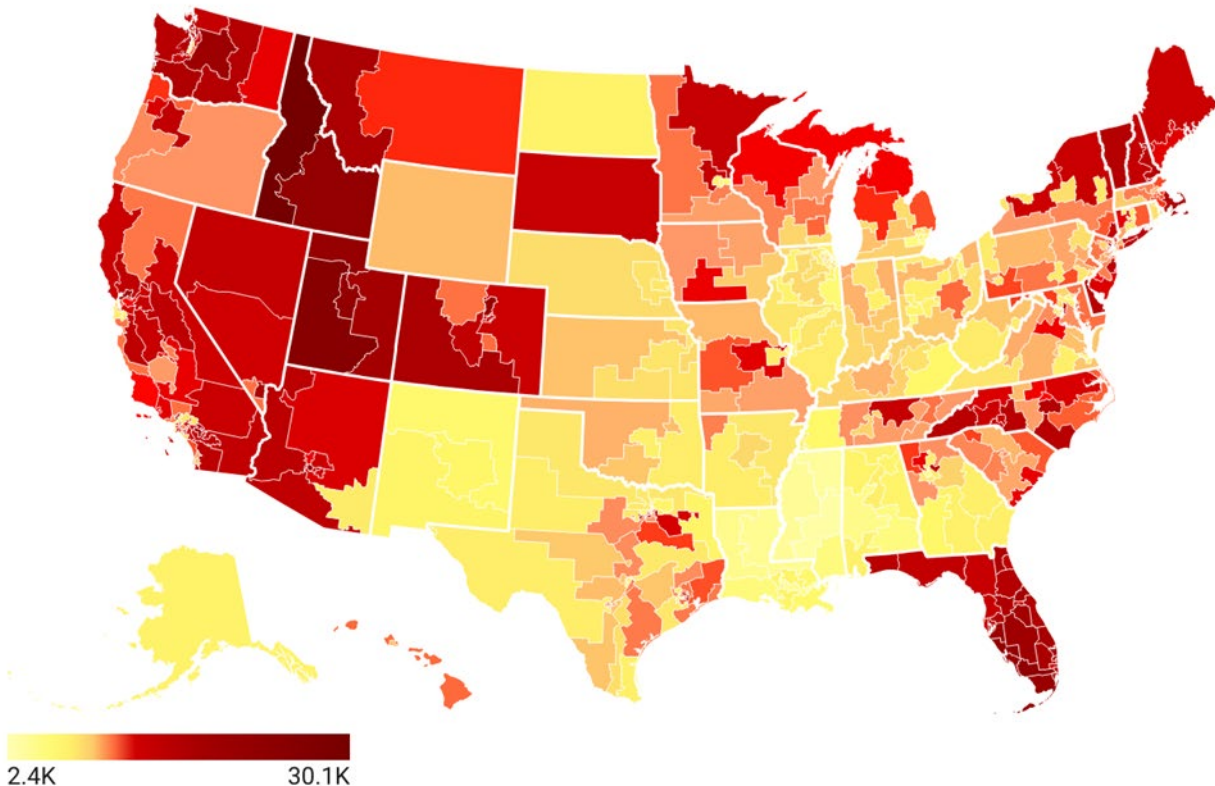
As of 2023, the average congressional district has 10,800 residents working in residential construction; however, that number is often significantly higher. In Idaho's 1st Congressional District, over 30,000

residents are in home building, and Utah's 2nd Congressional District has over 25,000 residents working in home building.

Eight other congressional districts have over 20,000 residents working in residential construction – Florida's 26th, Utah's 4th, Idaho's 2nd, Florida's 17th, Arizona's 3rd, Utah's 1st, Florida's 28th, and California's 29th.

## Home Building Employment, 2023

Workers, Including Self-Employed



Source: ACS 2023, QCEW 2023, NAHB Estimates • Created with Datawrapper

By design, Congressional districts are drawn to represent roughly the same number of people. So generally, large numbers of residential construction (RC) workers translate into high shares of RC workers in their district's employed labor force. Idaho's 1st tops this list as well, registering the highest share of residential construction workers in the employed labor force, 6.4%. Florida's 17th is a close second with 6.3% of the district labor force employed in home building. Next on the list are two Mountain division districts – Montana's 1st and Utah's 2nd – with shares of 5.8%, followed by two Florida districts – 19th (5.7%) and 26th (5.6%). California's 29th (5.4%) and 39th (5.3%) also register shares far exceeding the national average of 2.9%.

At the other end of the spectrum, several districts contain parts of large urban areas: the District of Columbia, the 12th of New York, located in New York City, Pennsylvania's 3rd that includes areas of the city of Philadelphia, Georgia's 5th with most of Atlanta, and, among others, Illinois's 7th and 9th,

covering parts of Chicago. Most residents in these urban districts tend to work in professional, scientific, and technical services. The District of Columbia stands out for having the lowest number of RC workers, with just 1,400 residing in the district. At the same time, it has a disproportionately large share of public administration workers. The 12th District of New York and the 7th District of Illinois are home to a large group of finance and insurance workers. Meanwhile, in Pennsylvania's 2nd, more than a third of residents work in health care and educational services.

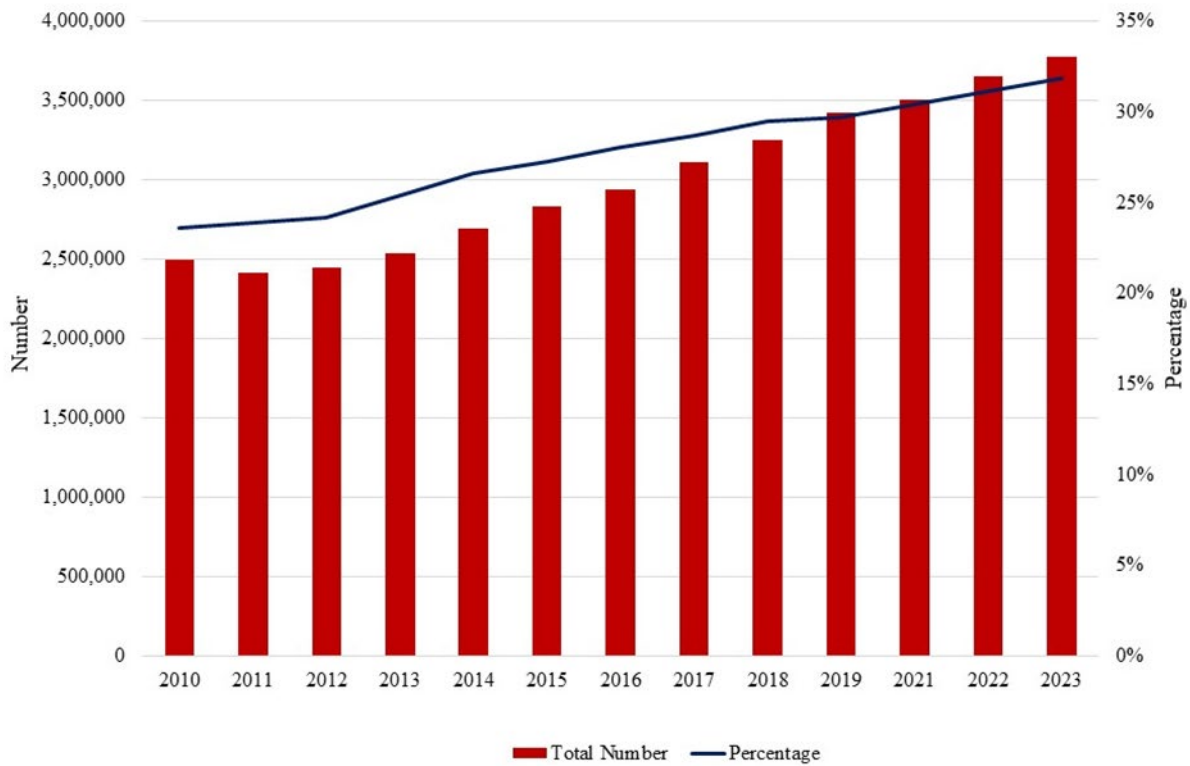
The new NAHB home building employment estimates only include workers directly employed by the industry and does not count jobs created in related industries, such as design and architecture, furniture making, building materials, landscaping, etc. As a result, the estimates underestimate the overall impact of home building on local employment.

### Racial and Ethnical Composition of the Construction Labor Force

Diversifying the construction labor force remains a key priority amid persistent skilled labor shortages. As of 2023, non-Hispanic White workers continue to account for the majority of the construction industry workforce (57%), according to the latest American Community Survey. Hispanic workers now represent nearly one-third of the labor force at 32%, followed by non-Hispanic Black workers at 5% and non-Hispanic Asian workers at 1.8%.

The most notable trend in construction employment has been the steady rise of Hispanic participation. Between 2010 and 2023, the number of Hispanic construction workers increased from 2.5 million to almost 3.8 million. Over the same period, their share of the workforce rose from 23.6% to 32%, meaning that nearly one in three construction workers today is Hispanic.

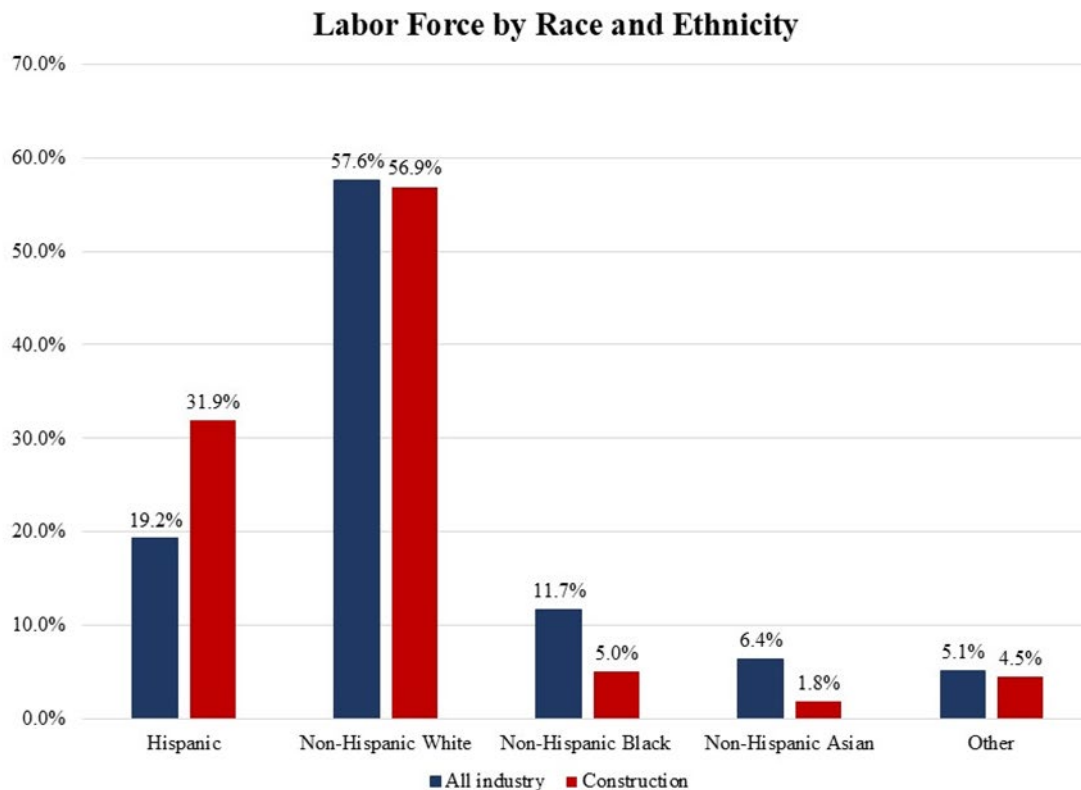
### Hispanics in the Construction Industry 2010 - 2023



Source: NAHB Estimates of 2010-2023 American Community Survey PUMS Data

Hispanic workers comprise a larger share of the construction labor force than the broader economy, making up 31.9% in construction compared with 19.2 % across all industries. Non-Hispanic White workers constitute 57.5% of the construction workforce, close to their overall share across all industries, 58.3%. Non-Hispanic Black and Asian Americans are less likely to work in the construction industry. Non-Hispanic Black workers comprise only 5% of the construction workforce nationwide, while their share in the US labor force is 12%. Non-Hispanic Asian workers account for less than 2% of the construction

workforce, while their share in the overall economy is 6.4%.

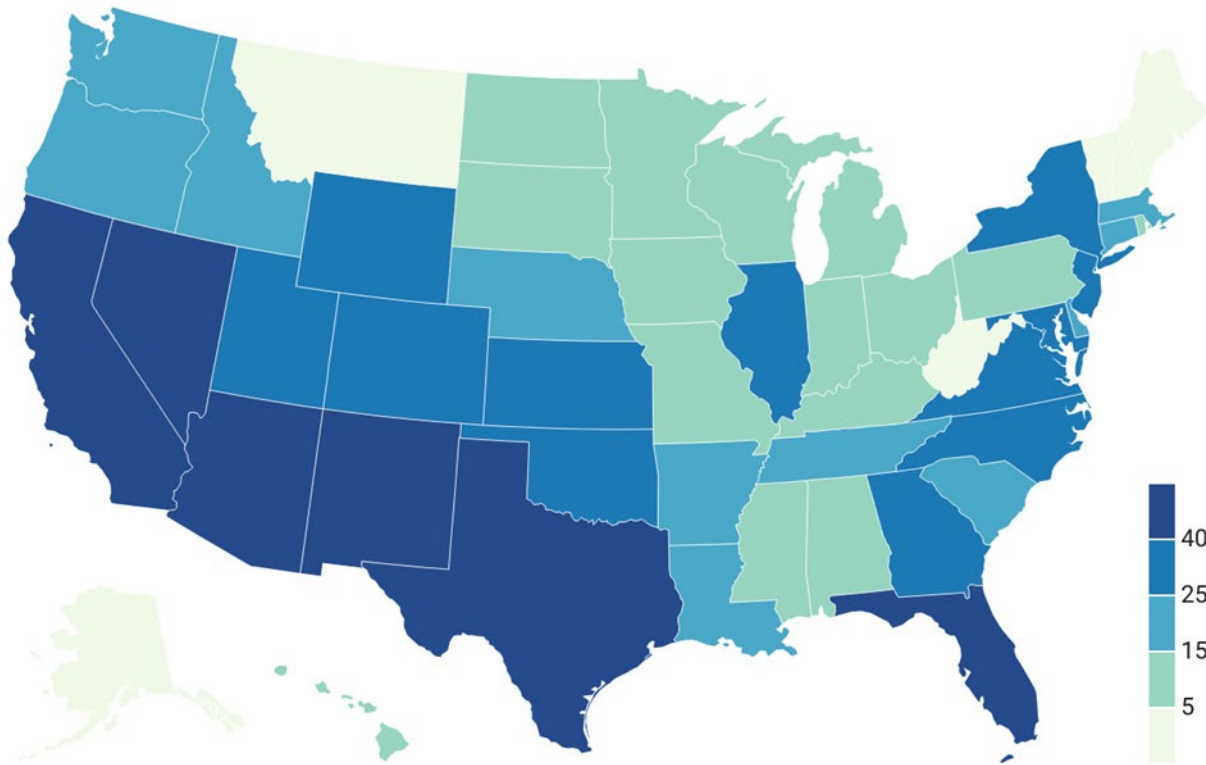


Source: NAHB Estimates of 2023 American Community Survey, PUMS Data

The share of ethnic workers in construction varies widely across states. In Maine, only 1% of construction workers are Hispanic, while in New Mexico, Texas, California, and Nevada, more than half the construction workforce is Hispanic. New Mexico leads with 64% of its construction workforce identifying as Hispanic, followed by Texas at 61% and California at 59%.

Overall, Hispanic workers are concentrated in the South and West, where Hispanic populations are larger. Three states—Texas with 803,000 workers, California with 772,000, and Florida with 374,000—employ 52% of the nation’s Hispanic construction workforce.

## Hispanic Workers in Construction (%)



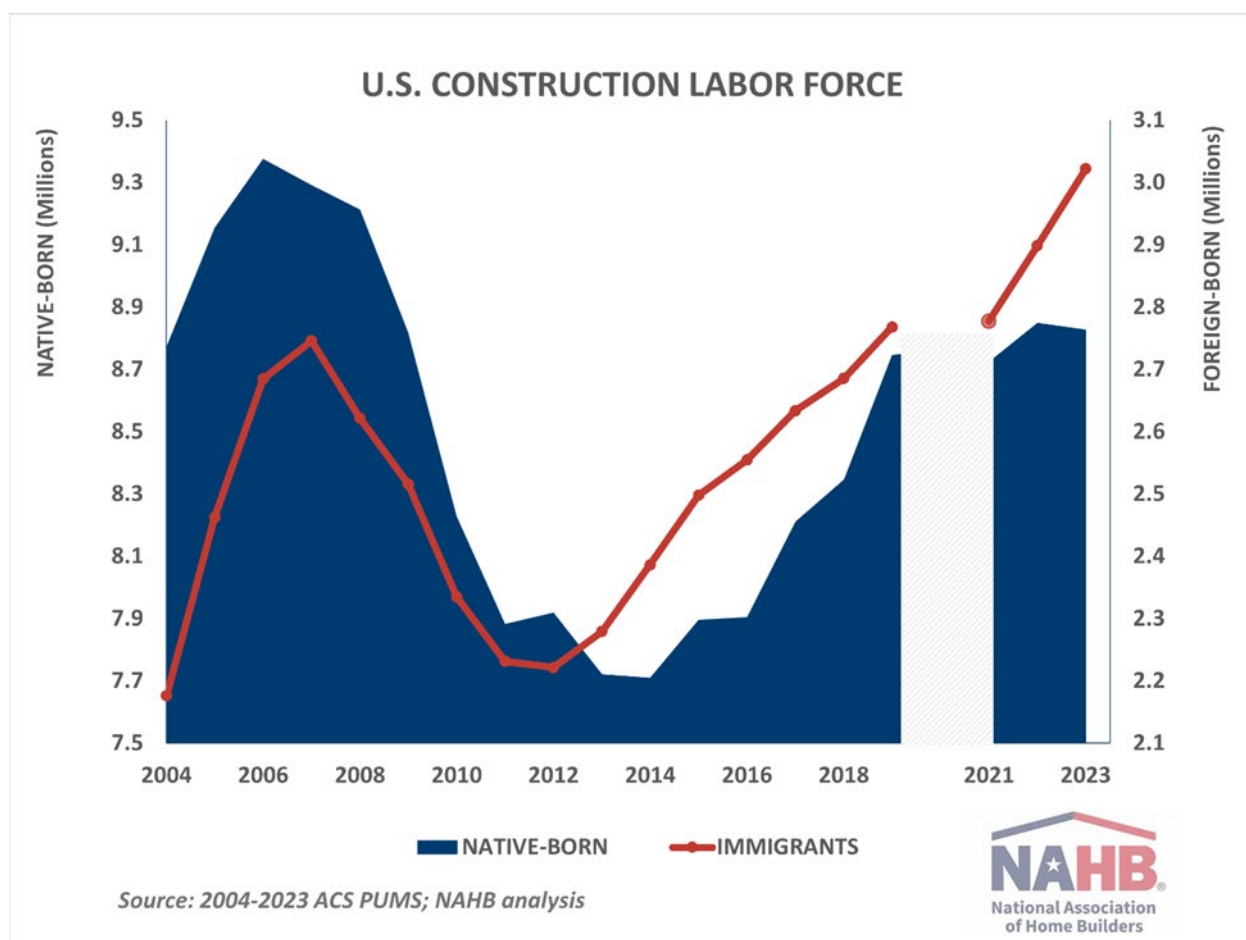
In contrast, the construction industry in the Northeast region relies heavily on non-Hispanic White Americans. In New Hampshire, Vermont, and Maine, they account for more than 90% of the workforce. States with the largest share of Non-Hispanic Black workers in construction are Mississippi (18%), Louisiana (17%), and Maryland (14%). Non-Hispanic Asian workers are a significant presence in Hawaii, where they constitute 29% of the construction labor force.

### Immigrants in Construction

Reflecting the sharp increase in net immigration of recent years, the number of new immigrants joining the construction industry has risen substantially in 2022. According to the latest American Community Survey (ACS), the industry managed to attract approximately 130,000 new workers coming from outside the U.S. to help with persistent labor shortages. For comparison, this inflow surpasses the combined number of new immigrants who joined the industry in the two years before the pandemic. Only during the housing boom of 2005-2006 was the industry absorbing a similar number of new foreign-born workers.

Native-born workers remain reluctant to join the industry, with their total count remaining below the record levels of the housing boom of the mid-2000s by over half a million. As a result, the share of immigrants in construction reached a new historic high of 25.5%. In construction trades, the share of immigrants remains even higher, with one in three craftsmen coming from outside the U.S. This is

consistent with the earlier ACS data that regularly shows higher shares of immigrants in the construction trades.

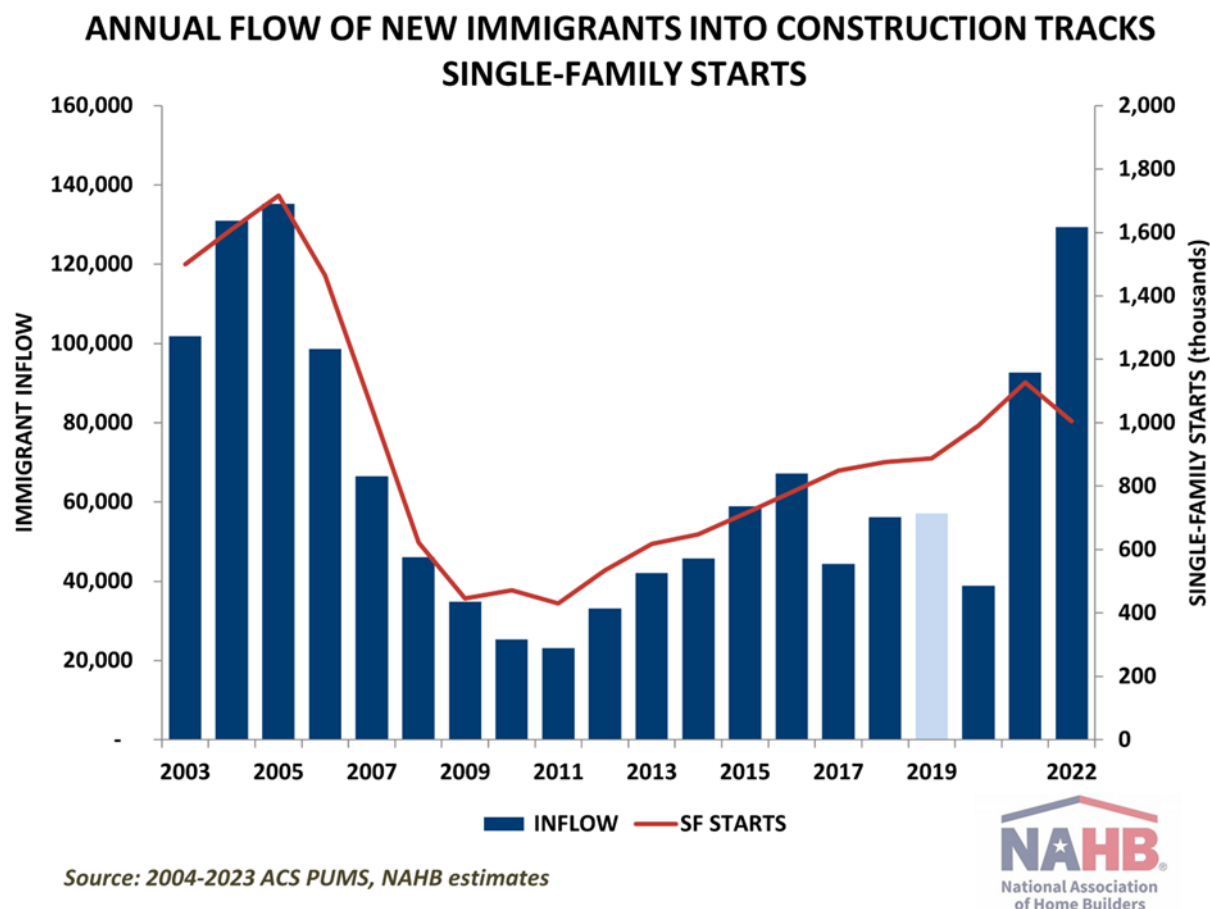


In 2023, the construction workforce consisted of 11.9 million workers, including both self-employed and temporarily unemployed workers. Out of these, 8.9 million were native-born, and 3 million were foreign-born, the highest number of immigrant workers in construction ever recorded by the ACS.

The construction labor force, including both native- and foreign-born workers, exceeds the pre-pandemic levels but remains smaller than during the housing boom of the mid-2000s. As the chart below illustrates, it is the native-born workers who remain missing. Compared to the peak employment levels of 2006, construction is short 550,000 native-born workers, and new immigrants only partially close the gap. Because of the data collection issues during the early pandemic lockdown, the 2020 estimates are unreliable and omitted from the chart above.

Typically, the annual flow of new immigrant workers into construction is highly responsive to the changing labor demand. The number of newly arrived immigrants in construction rises rapidly when housing starts increase and declines precipitously when the housing industry contracts. The response is normally quite rapid, occurring in the same year as a change in construction activity. Statistically, the link is captured by the high correlation between the annual flow of new immigrants into construction and measures of new home construction, especially new single-family starts.

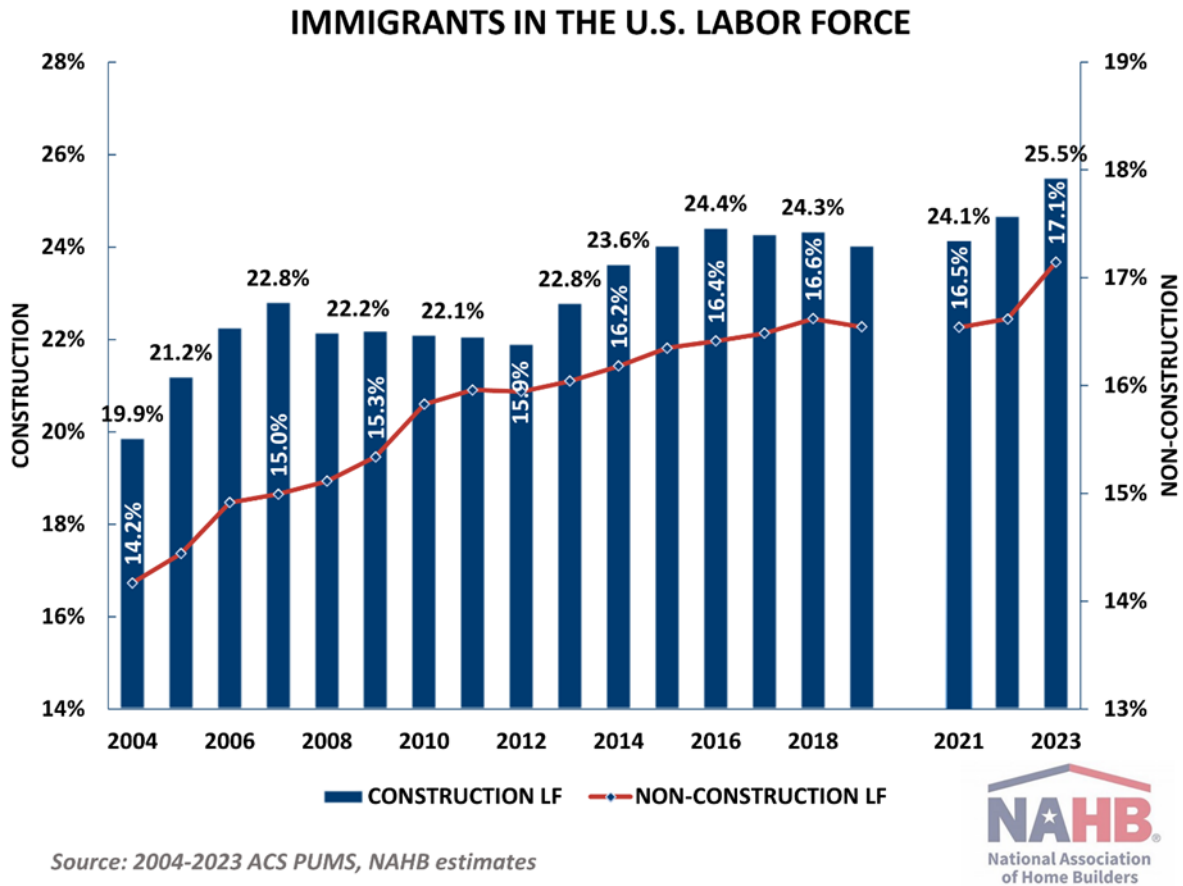
Uncharacteristically, the latest data show that the substantial uptick in the number of new immigrants in 2022 does not reflect the changing volume of home building, as new single-family starts declined during that time.



Previously, the connection between immigrant inflow and home building activity broke in 2017 when NAHB’s estimates showed a surprising drop in the number of new immigrants in construction despite steady gains in housing starts. This link was further severed by pandemic-triggered lockdowns and restrictions on travel and border crossings, drastically interrupting the flow of new immigrant workers. In 2021, however, the flow of immigrants into construction returned to typical levels, driven by home building activity.

The overall rising trend and the noticeable uptick in the share of immigrants following the pandemic are consistent with but more pronounced in construction compared to the broader U.S. economy. Excluding construction, where the reliance on foreign-born workers is greater, the share of immigrants in the U.S. labor force increased from just over 14% in 2004 to over 17% in 2023, the highest share recorded by the

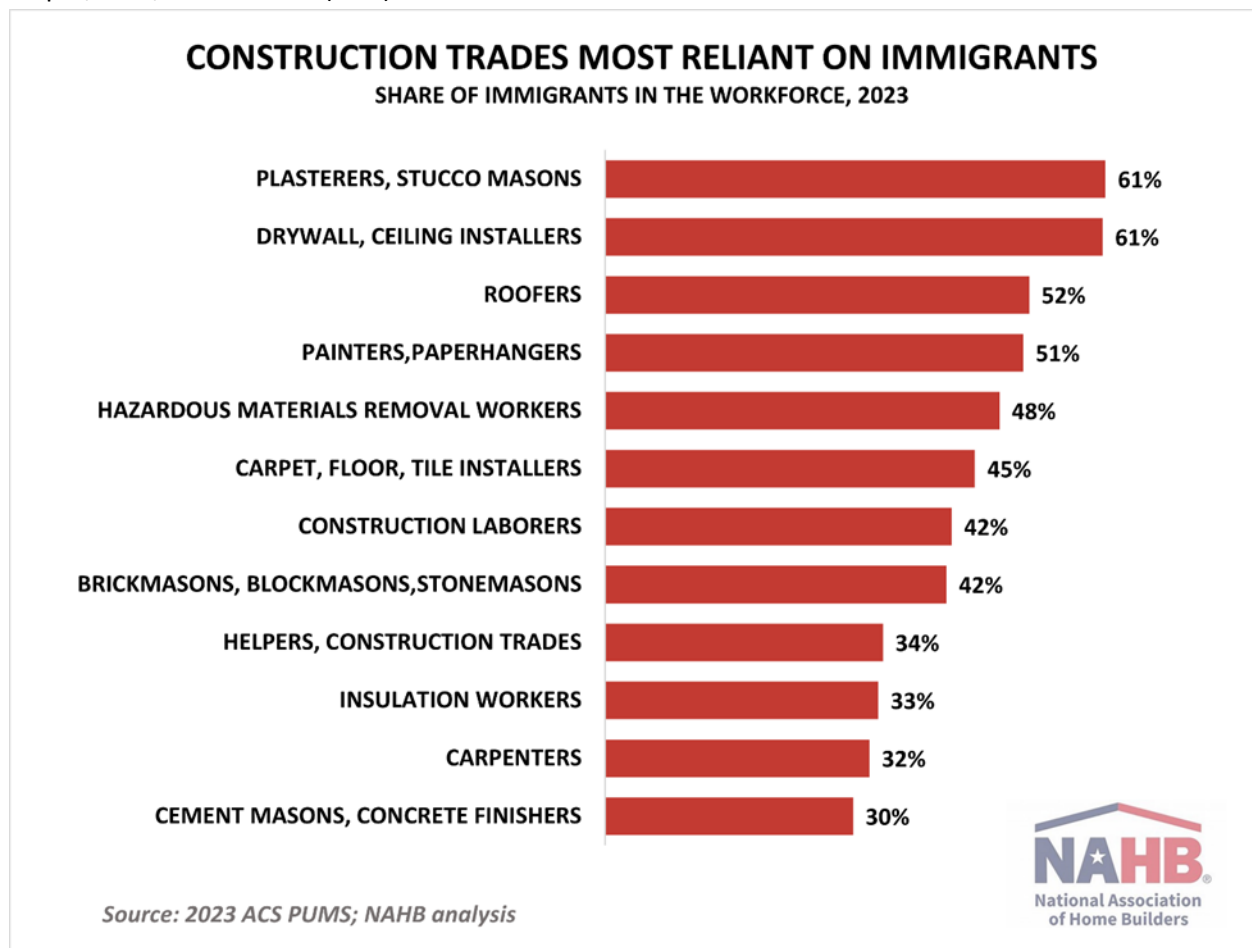
ACS.



While immigrants make up one in four construction workers, their share is significantly higher (32.5%) among construction tradesmen. According to the government’s system for classifying occupations, the construction industry employs workers in about 390 occupations. Out of these, only 28 are construction trades, yet they account for almost two-thirds of the construction labor force. The other one-third of workers are in finance, sales, administration, and other off-site activities.

The concentration of immigrants is particularly high in construction trades essential for home building, such as plasterers and stucco masons, drywall/ceiling tile installers (61%), roofers (52%), painters (51%),

carpet/floor/tile installers (45%).

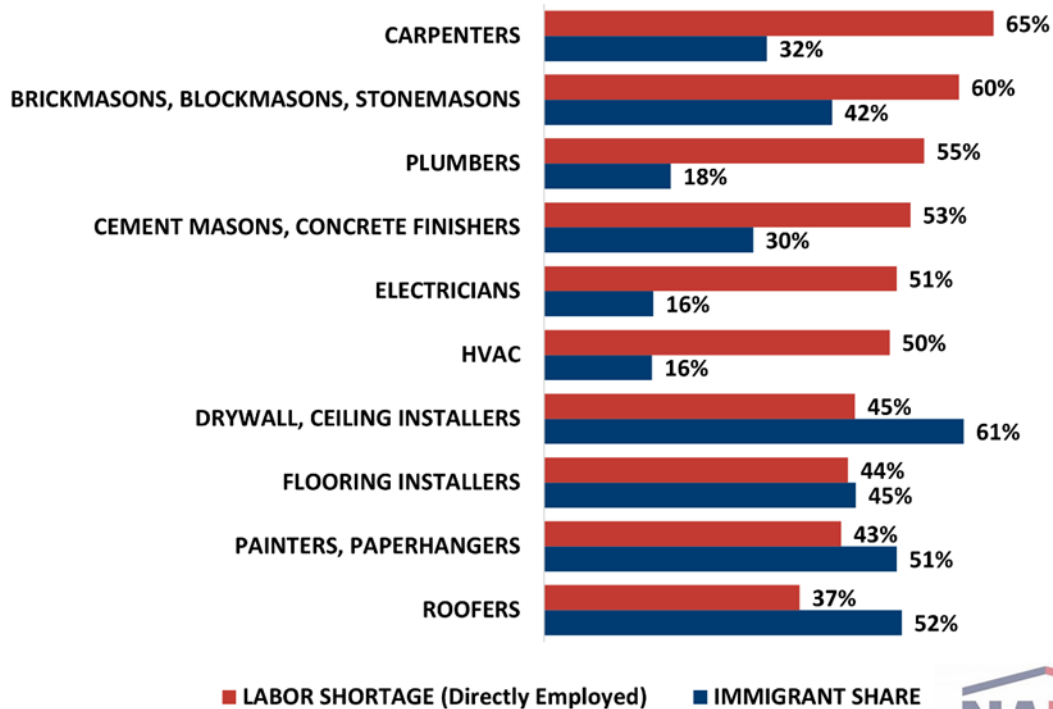


The two most prevalent construction occupations, laborers and carpenters, account for over a quarter of the construction labor force. A third of all carpenters and 42% of construction laborers are of foreign-born origin. These trades require less formal education but consistently register some of the highest labor shortages in the NAHB/Wells Fargo Housing Market Index (HMI) and NAHB Remodeling Market Index (RMI) surveys.

In the February 2024 HMI Survey, 65% of builders reported some or a serious shortage of workers performing finished carpentry. Among other tradesmen directly employed by builders, the shortage of bricklayers and masons is similarly acute, despite a high presence of immigrant workers in these trades.

Labor shortages are also high among electricians, plumbers, and HVAC technicians, with over half of surveyed builders reporting shortages of these craftsmen. In contrast, these trades demand longer formal training, often require professional licenses, and attract fewer immigrants.

## IMMIGRANTS IN CONSTRUCTION TRADES WITH HIGH LABOR SHORTAGES



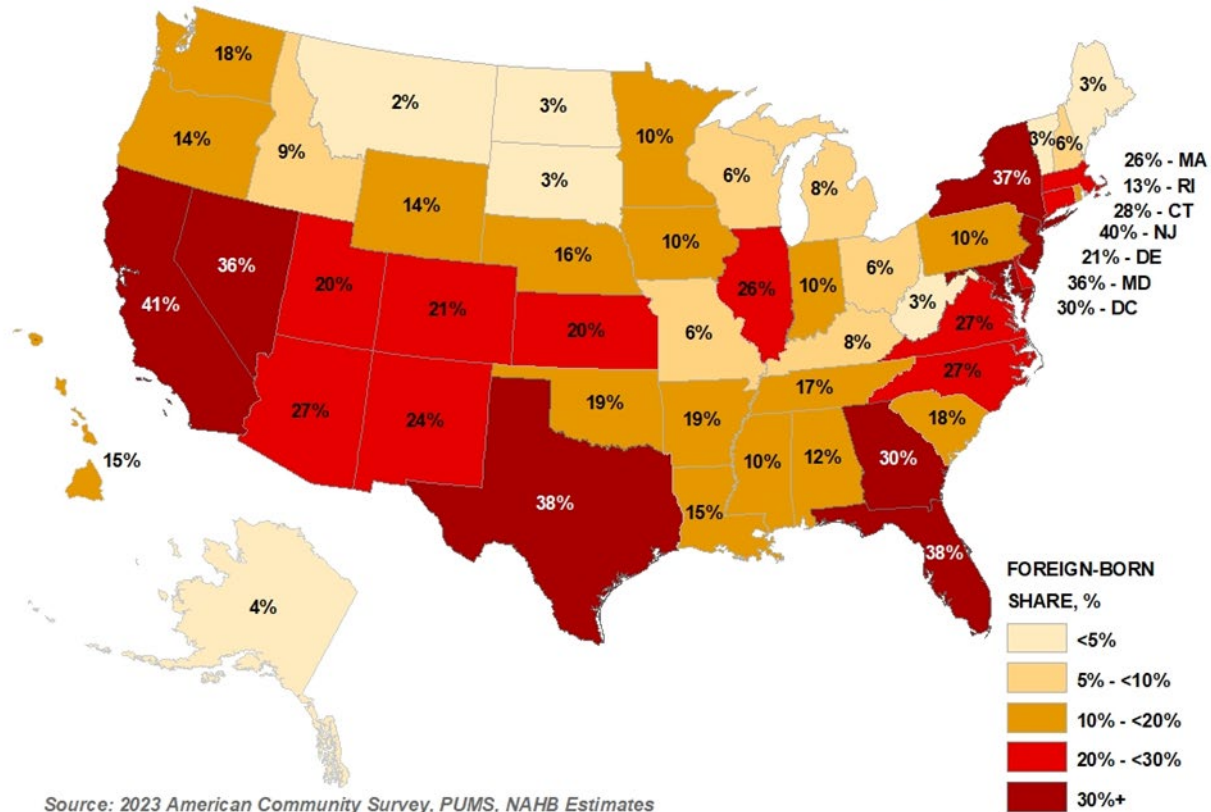
Source: 2023 ACS PUMS; NAHB analysis



More than half (53%) of the three million immigrant construction workers reside in the four most populous states in the U.S. – California, Texas, Florida, and New York. California and Texas have over half a million foreign-born construction workers each. Combined, these two states account for over a third (35%) of all immigrant construction workers. Florida and New York combined account for an additional 18%.

These are not only the most populous states in the U.S., but as traditional gateway states, they are also particularly reliant on foreign-born construction labor. Immigrants comprise over 40% of the construction workforce in California. In Florida and Texas, 38% of the construction labor force is foreign-born. In New York, 37% of construction industry workers come from abroad.

## IMMIGRANT WORKERS IN THE CONSTRUCTION LABOR FORCE, 2023

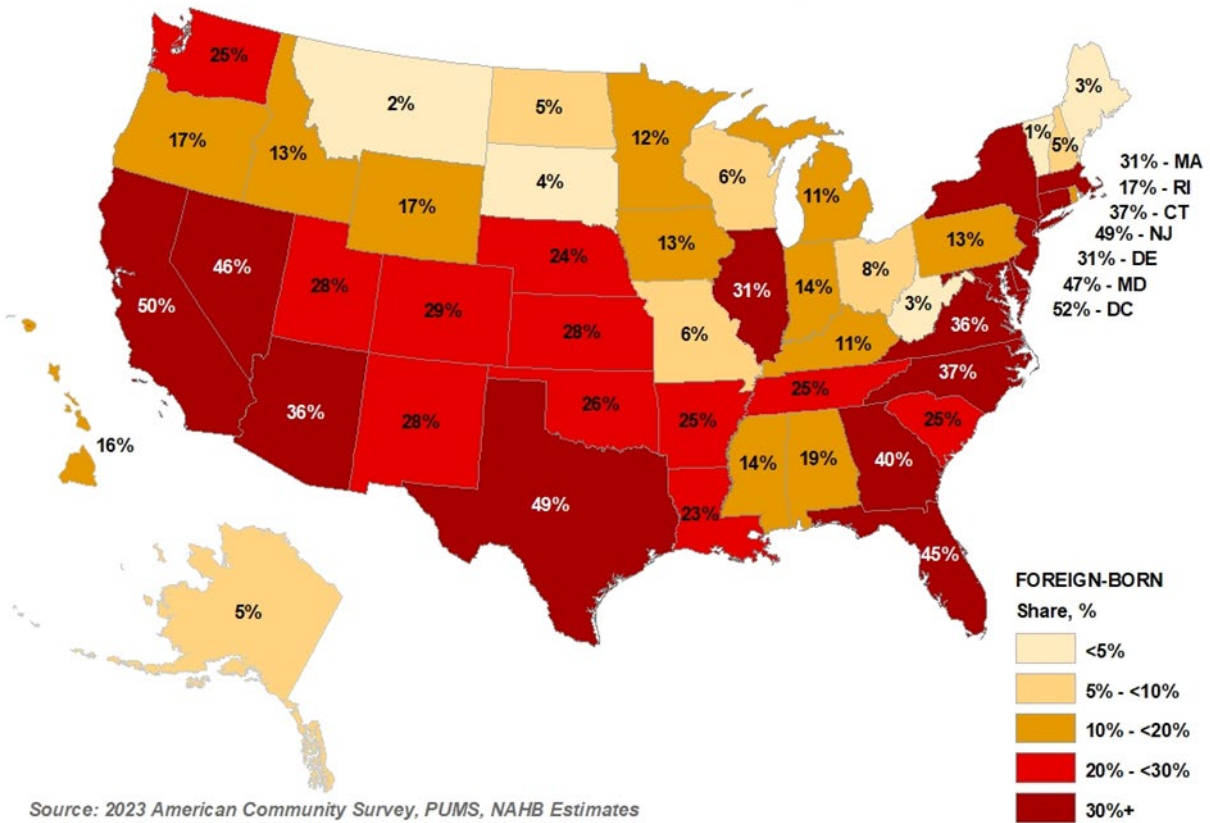


The reliance on foreign-born labor continues to spread outside of these traditional immigrant magnets. This is evident in states like New Jersey, which registered the second-highest share of immigrant workers, 40%, in 2023, closely following California. Nevada and Maryland, where immigrants (as of 2023) account for over a third of the construction labor force (36%), also illustrate spreading reliance on immigrant labor.

In Georgia, Connecticut, North Carolina, Virginia, Arizona, Massachusetts, and Illinois, more than a quarter of construction workers are foreign-born. At the other end of the spectrum, seven states - Montana, North and South Dakota, Vermont, Maine, West Virginia, and Alaska - have a share of immigrant workers of less than 5%.

Because immigrant workers are disproportionately concentrated within the construction trades, their presence among craftsmen is higher than their overall representation in the industry across all states. In California and DC, immigrant workers account for more than half of all tradesmen in construction. In New Jersey and Texas, these shares are similarly high at 49%. In Maryland, Nevada, Florida, New York, and Georgia, between 40% and 47% of craftsmen are foreign-born.

## IMMIGRANT CRAFTSMEN IN CONSTRUCTION TRADES, 2023



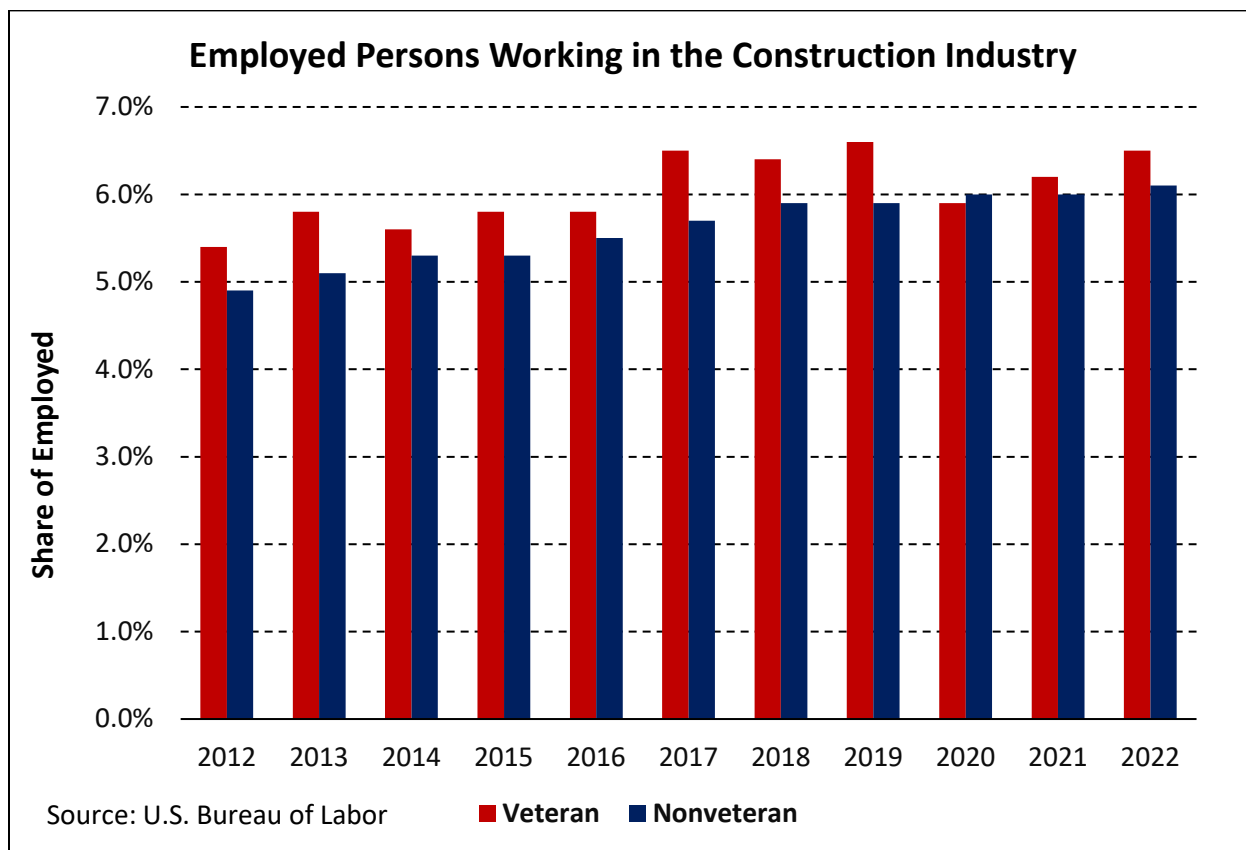
While most states draw most of their immigrant foreign-born workers from the Americas, Hawaii relies more heavily on Asian immigrants. European immigrants are a significant source of construction labor in New York, New Jersey, and Illinois.

### Veterans

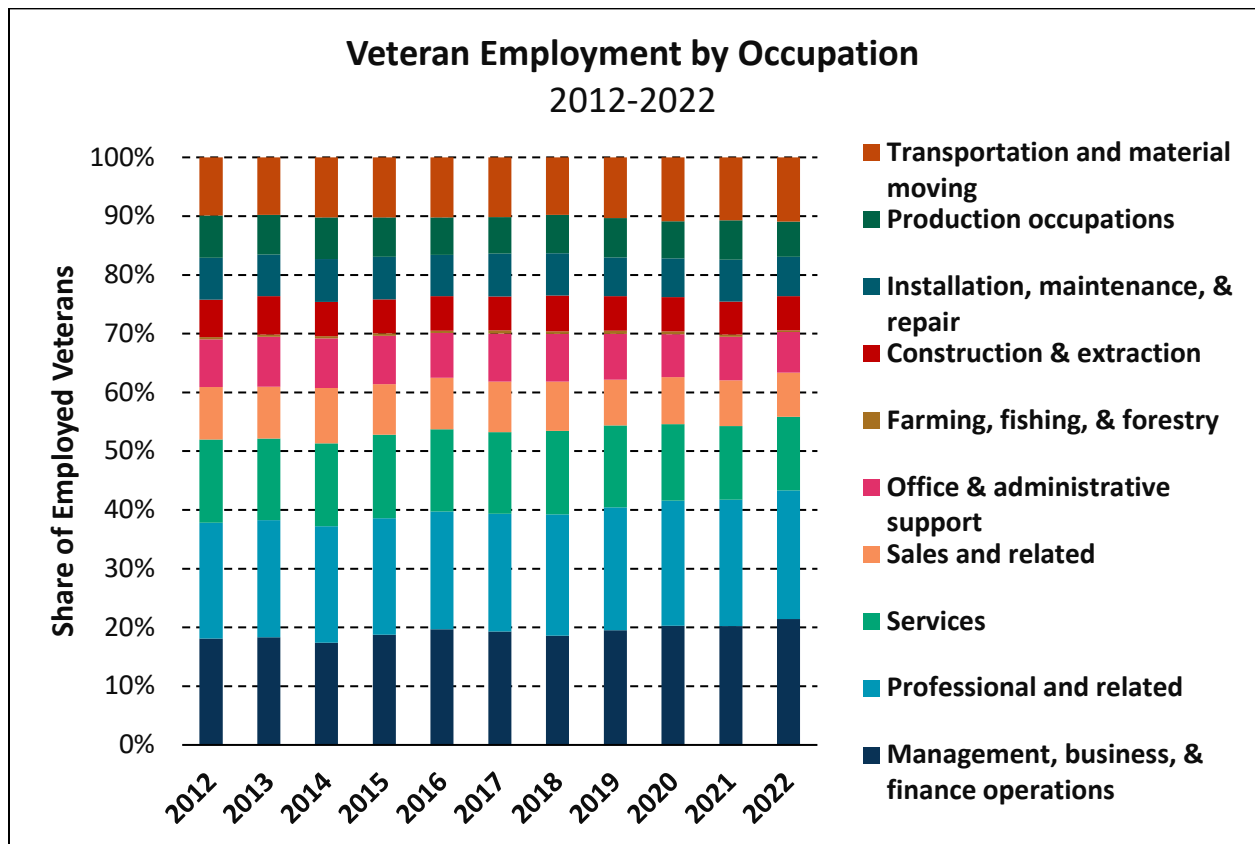
Military veterans are another group of potential workers that builders turned to in search of labor to fill job openings in the construction sector. According to the Employment Situation of Veterans report released by the U.S. Bureau of Labor Statistics, close to 560,000 veterans were employed in the construction industry in 2022. This total includes employed workers in residential construction and remodeling, as well as commercial and civil construction.

The 2022 total makes up 6.5% of all employed veterans. This stands in contrast to the 6.1% of non-veterans employed in construction.

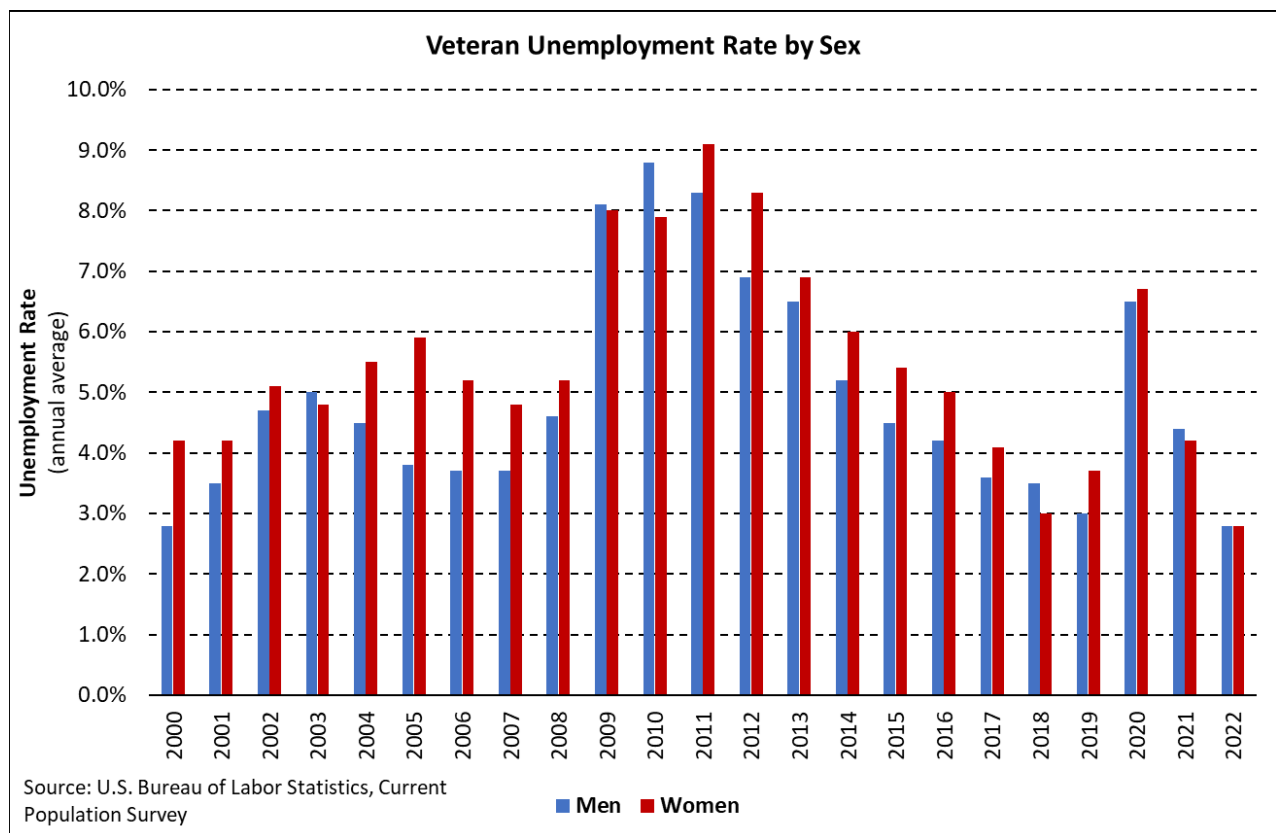
The share of employed veterans working in the construction industry increased in 2022, the second consecutive annual increase. The share has climbed 0.6 percentage points since 2020 and is just one-tenth lower than the most recent peak reached in 2019.



Across all industries, management, business, and financial operations, as well as professional and related occupations, account for the largest share of veterans' occupations, 43.3% of employment. The only other occupations that made up more than 10% were transportation and material moving and services occupations. Construction and extraction jobs made up 5.8% of the total.



The unemployment rate for all veterans declined from 4.4% in 2021 to 2.8% in 2022. The average unemployment rate among veterans was the same for men and women, in contrast to 2021, when the rate for women was 0.2% below that of men. Since 2000, the annual unemployment rate among veterans has averaged 0.6% higher for women than for men.



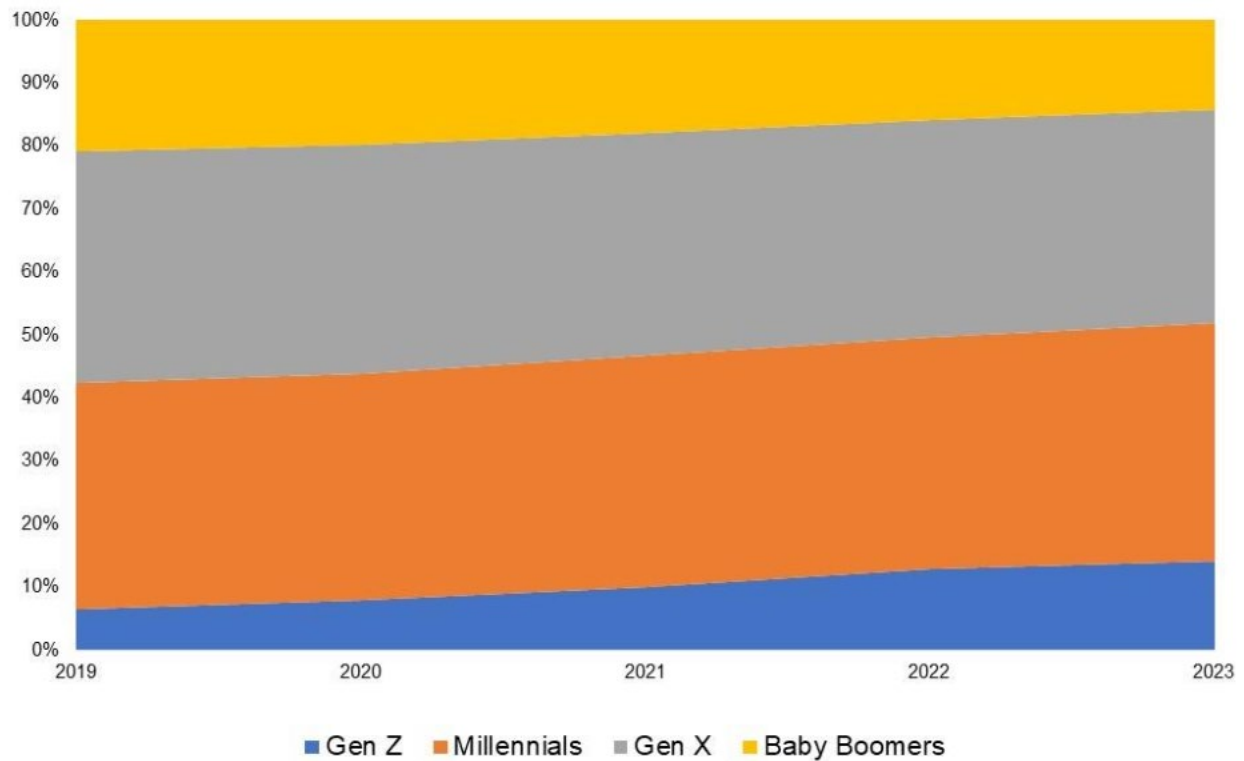
### Age of Construction Labor Force

Even as a slowing housing market has eased some pressure off the tight labor market, attracting skilled labor, especially younger generations, remains the primary long-term goal for the construction industry. The median age of construction workers is 42, one year older than a typical worker in the national labor force, according to NAHB analysis of the 2023 American Community Survey (ACS) data. As an encouraging development, the share and number of young people in the construction industry are rising.

Generational shifts are reshaping the construction labor force. Reflecting a growing pipeline of younger people, the share of Gen Z (those born between 1997 and 2012) has more than doubled, increasing from 6.4% in 2019 to 14.1% in 2023. The share of millennials also rose from 35.7% to 37.7% over the same period. In contrast, Gen X declined from 36.6% to 33.7%, while Baby Boomers fell sharply from 20.6% to 14.2% as older workers moved into retirement.

Analysis of the age distribution of workers in construction over time reveals that Gen Z is more likely to enter the construction industry than Millennials, when the latter were the youngest generation in the labor force. High costs of college education, competitive wages in construction, job security, innovations in modern construction technologies, and growth potential seem to draw younger workers to careers in the construction industry.

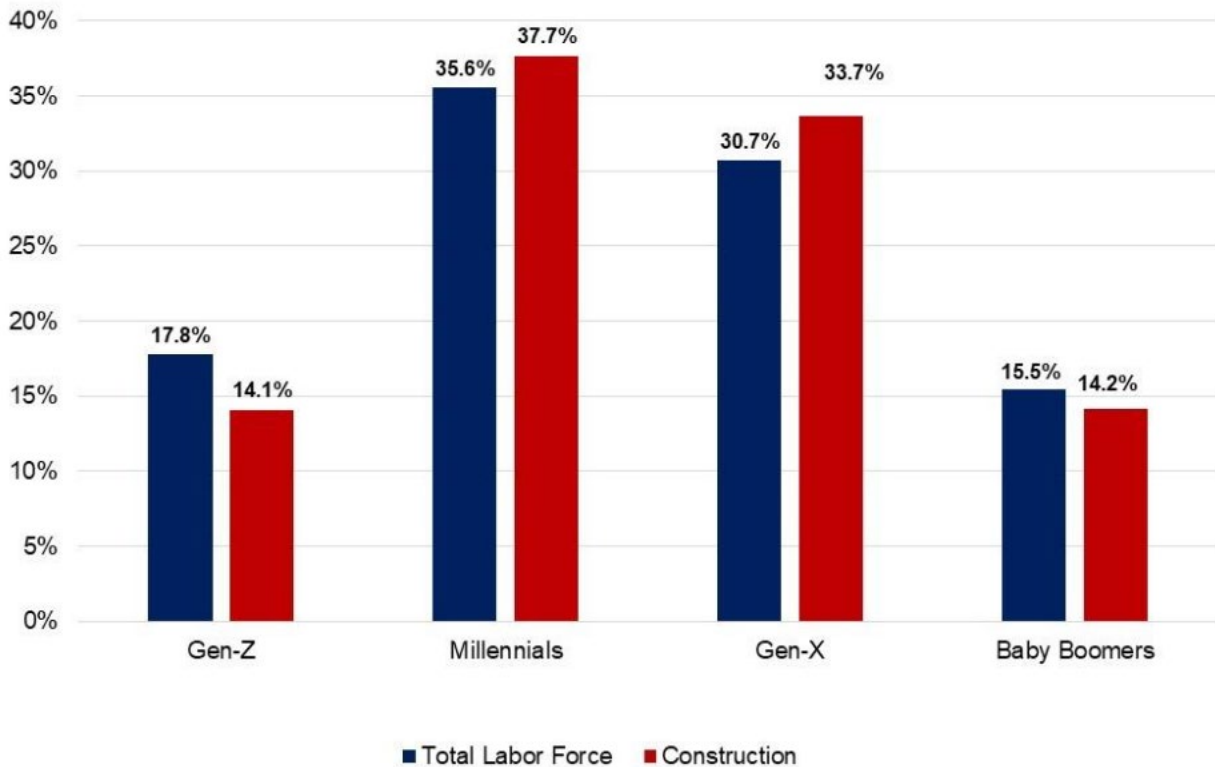
## Construction Labor Force by Generation (2019-2023)



Source: NAHB Estimates, 2019- 2023 American Community Survey, PUMS data

Nevertheless, as of 2023, around 71% of the construction labor force are Millennials and Gen-Xers, who are considered in their prime working years, compared to 66% in the overall labor force. The relatively greater share of Gen X in the construction labor force demonstrates the current labor shortage challenges, as Gen X is a smaller generational group than the Baby Boomers. The share of Baby Boomers in the construction labor force is 14.2%, implying that a substantial portion of the labor force will retire in the near future. Only 14.1% of the construction labor force are Gen Z-ers.

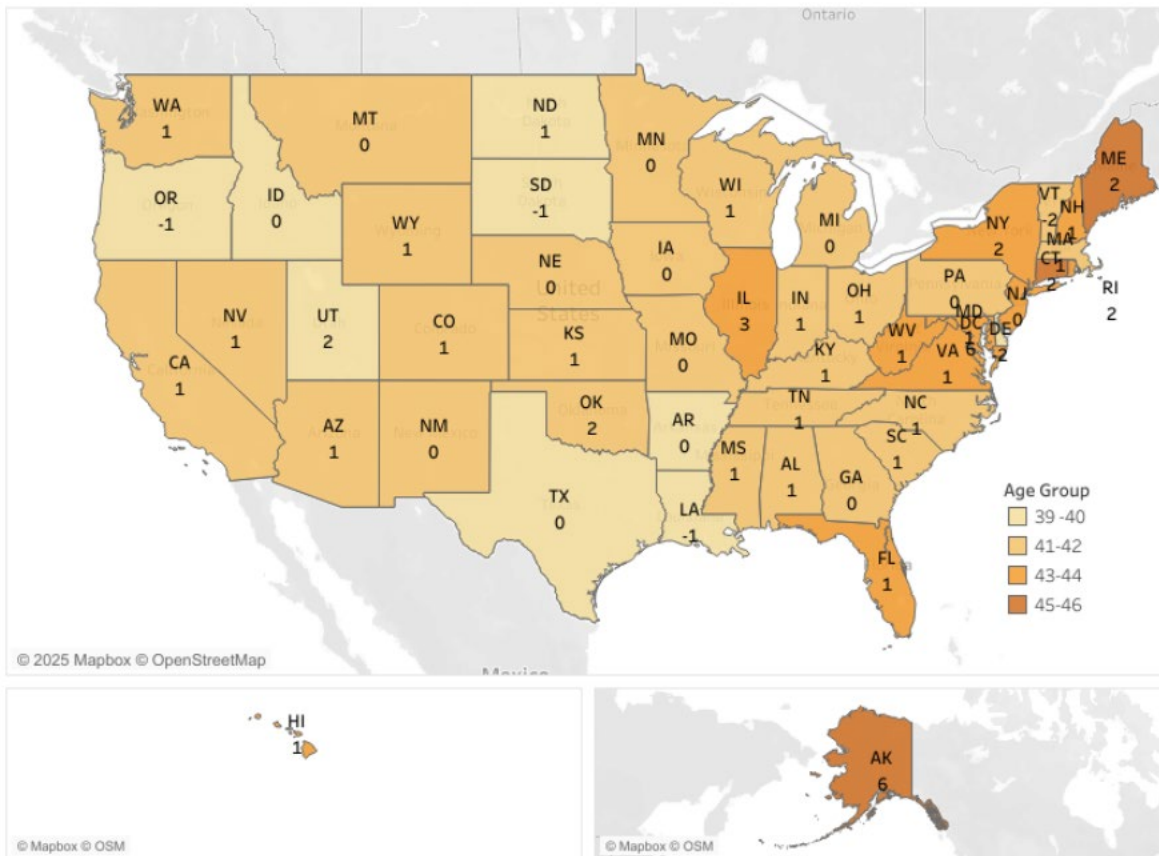
### Millennials and Gen-Xers Constitute 71% of Construction Labor Force 2023



Source: NAHB Estimates, 2023 American Community Survey, PUMS data

The median age of the construction labor force workers varies across states. The color coding in the map below tracks the median age of people working in the construction industry. The state with the oldest median age (46 years old) is Alaska, followed by Connecticut and Maine, where the median age of workers in construction is 45. The construction labor force is younger on average in the central part of the nation. For example, half of all people working in construction in Utah are under 39.

### Median Age of Construction Workforce By State 2023



Number under state name = median age of construction workforce-median age of total labor force  
Source: 2023 American Community Survey, NAHB Estimates

The second data series mapped above is the difference between the median age of workers in construction in each state and the median age of all industry workers. These estimates are reported as the numbers printed on each state. A positive number indicates that, on average, workers in construction are older than a typical worker in the state labor force. Alaska has the largest difference, with the median age in the construction labor force being 6 years greater than the overall median in the state. On the contrary, a negative number indicates the construction labor force is, in general, younger than the state labor force. In Vermont and Delaware, the median age in construction is 2 years younger than the state median.

## Work from Home Trends

Remote work may no longer dominate the U.S. labor force as it did during the height of the pandemic in 2020, but it still represents a substantial share of employment today. According to the latest data from the Current Population Survey (CPS), approximately 34.3 million employed people teleworked or worked at home for pay in April 2025. The telework rate, which represents the number of people who teleworked as a percentage of people who were working, was 21.6% in April, and it consistently ranged between 17.9% and 23.8% between October 2022 and April 2025.

Of those who teleworked in April, more than half teleworked for all their working hours, while the remaining teleworked for some, but not all, of their work hours.

The distribution of telework across the U.S. workforce continues to reflect deeper patterns shaped by gender, age, education, occupation, and industry. Women continue to outpace men in remote work participation. Nearly 25% of employed women worked from home in April 2025. In contrast, about 19% of employed men teleworked.

This gender gap reflects employment trends. Many women are employed in professional, administrative, or office-based roles. These fields transitioned smoothly to remote work during the pandemic and have largely maintained hybrid or fully remote options. Additionally, the growing rate of college completion among women has pushed more women into positions that are structurally suited to telework. Flexibility remains a priority, especially for women balancing work and caregiving responsibilities, further reinforcing the demand for work-from-home arrangements.

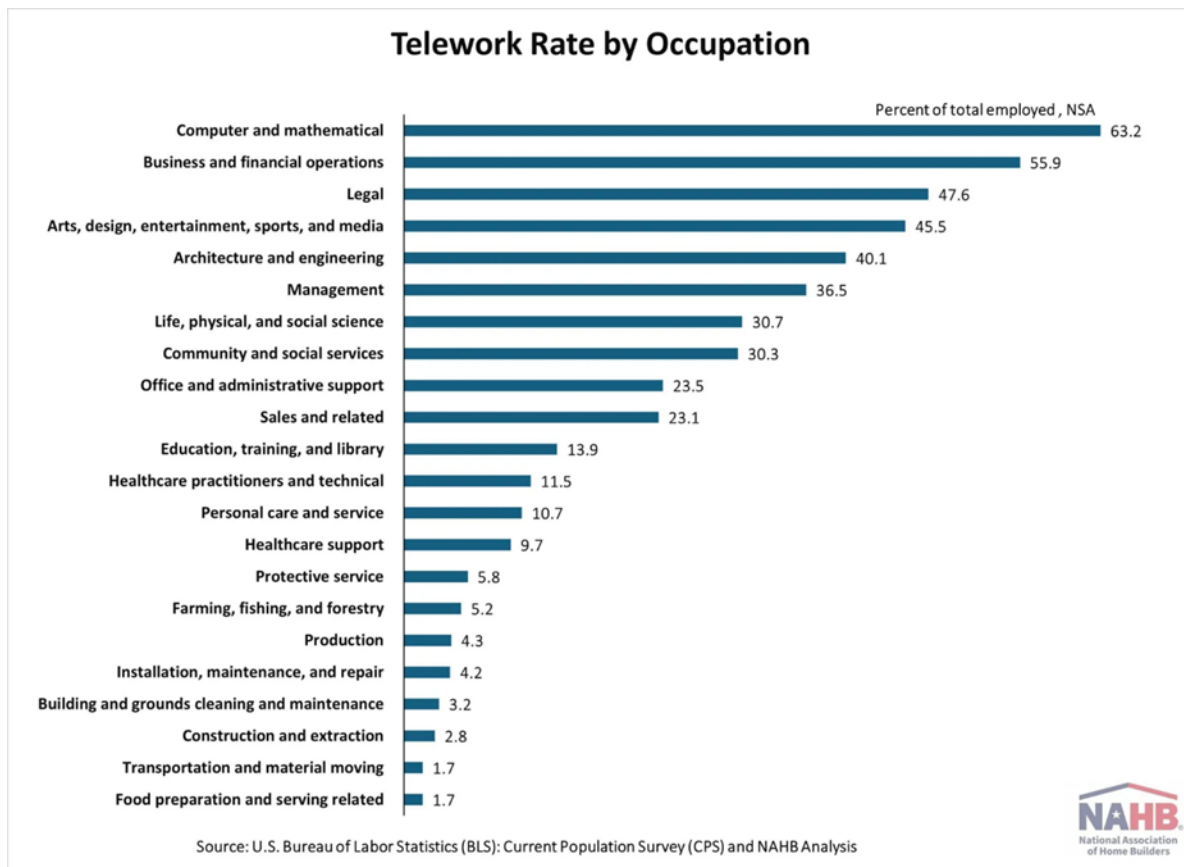
Age also plays a major role in who works remotely. Workers aged 25 and older are more likely to telework than their younger counterparts. Among younger workers aged 16-24, only 6.2% worked from home. In contrast, 24% of adults aged 25-54 reported teleworking. Older adults aged 55+ reported a similar incidence of remote work at 23%.

Younger workers tend to fill entry-level roles in retail, hospitality, and service sectors that require in-person attendance. Meanwhile, older workers are more likely to have progressed in their careers into managerial or specialized roles where remote work is feasible or even expected.

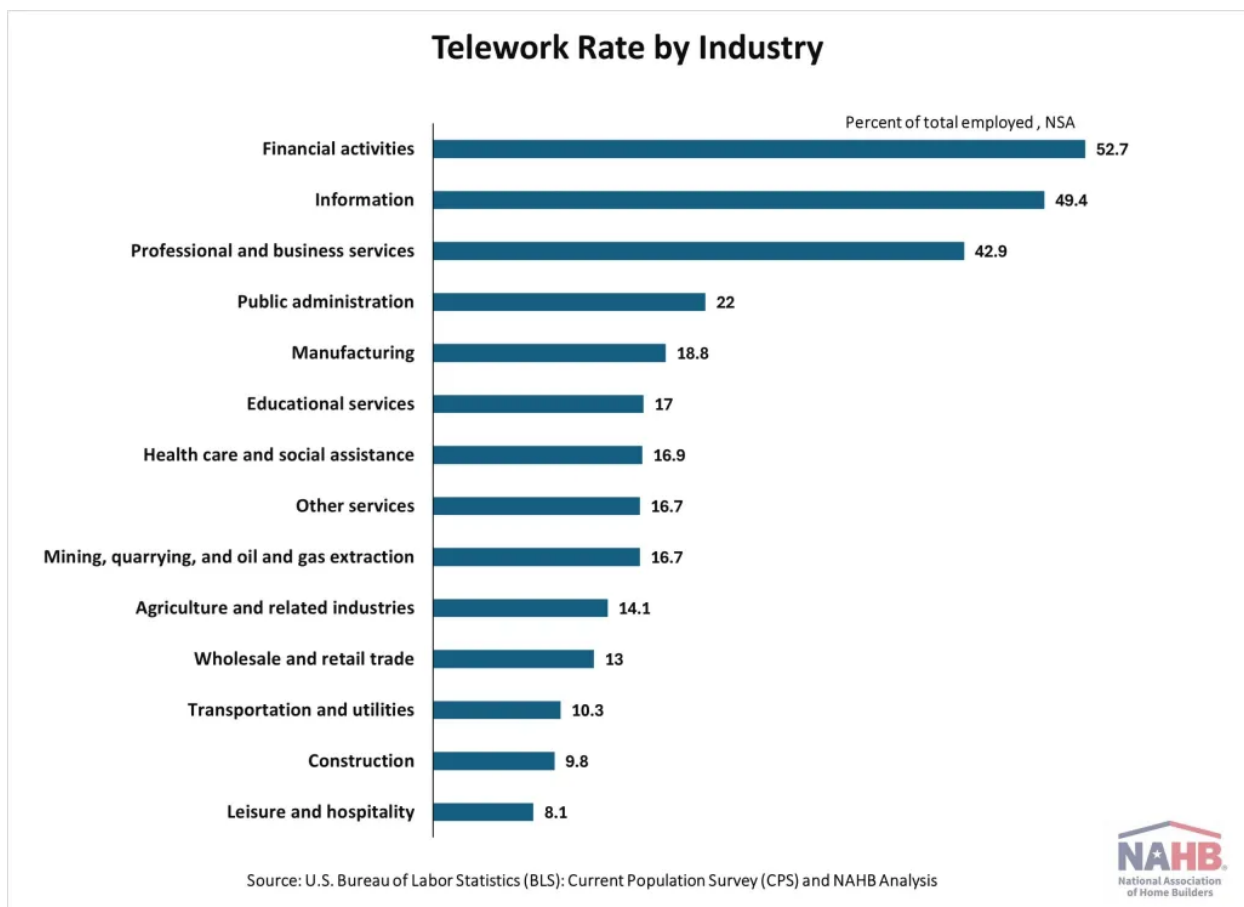
Education remains one of the strongest predictors of telework status. Higher educational attainment is positively associated with a higher telework rate. Only 3.1% of workers with no high school diploma worked remotely. Among high school graduates, the share increased to 8.4%. For those with some college or an associate degree, the incidence of working from home increased to 17.3%. Workers with bachelor's degrees or higher reported the highest share of 38.3% of working remotely.

Higher educational attainment often leads to employment in knowledge-based sectors such as finance, information technology, consulting, and research. These roles often depend on digital communication tools and independent project-based tasks, making them well-suited for remote settings.

Not surprisingly, occupation heavily influences access to teleworking. Jobs that require physical presence, such as those in food service, transportation, manufacturing, and construction, naturally offer limited remote opportunities. In contrast, people employed in professional and technical fields report the highest telework rate, especially those working in computer and mathematical roles.



Industry trends mirror these occupational divisions. Certain sectors have fully embraced telework, particularly finance, information services, and professional and business services. These industries often prioritize flexibility and are structured in ways that make remote work not only possible but efficient. On the other hand, industries like construction, leisure, and hospitality remain firmly grounded in physical spaces and in-person involvement. In these fields, work is inherently tied to locations and equipment that cannot be replicated remotely. The construction industry had a telework rate of just 9.8% in April, and leisure and hospitality reported an even lower rate of 8.1%.



### AI's Role in Reshaping Home Building

The rapid rise of artificial intelligence (AI), particularly machine learning and generative AI (GenAI), is reshaping industries, creating new economic opportunities, and raising critical questions about its long-term impact on jobs and economic growth.

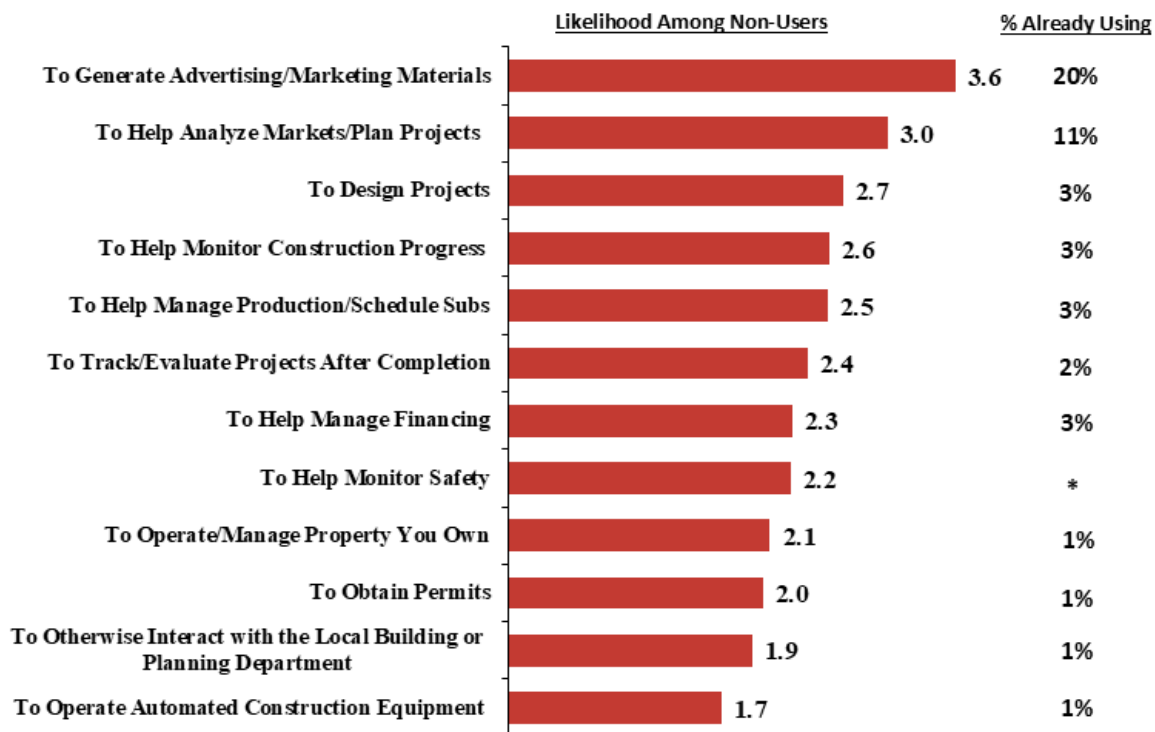
In the home building industry, on the supply side, AI can potentially transform how homes are designed and built. Technologies, such as AI-powered design tools, robotic bricklayers, and automated construction equipment, can help streamline construction processes. These innovations can eventually reduce the need for manual labor in certain areas, leading to lower costs and shorter project timelines and helping address ongoing labor shortages. Simultaneously, AI is likely to increase demand for workers skilled in AI system management, data analysis, and digital design, continuing a shift toward more technologically integrated and highly skilled roles.

For the time being, the impact of Artificial Intelligence on the home building industry is limited but is likely to evolve in the coming years. According to the July 2025 survey for the NAHB/Wells Fargo Housing Market Index (HMI), the majority of single-family home builders do not currently use AI in their businesses. For the highest use, 20% of builders use AI to generate advertising/marketing materials, and 11% to help analyze markets/plan projects. Less than 5% of surveyed builders currently use it for the other 10 business functions, ranging from designing projects to operating automated construction

equipment, as summarized in the chart below.

## Share of Builders Already Using AI – Likelihood of Using in Next Two Years

(Avg. Rating, 1=not at all likely and 5=very likely)



\*Less than 0.5%.

Source: NAHB/Wells Fargo Housing Market Index



Builders not currently using AI were asked about the likelihood they would start doing so in the next two years (using a scale from 1 to 5, where 1=not at all likely and 5=very likely). Not surprisingly, the two areas most likely to see new builders adopting AI are the generation of advertising/marketing materials (average rating 3.6) and the analysis of markets/plan projects (3.0)—the tasks that already boast the largest adoption rates.

Meanwhile, the chance that builders will take up the use of AI in any of the other business functions is much lower, as all 10 received average likelihood ratings below 3.0. The two areas where builders are least likely to start using AI in the next two years are in the operation of automated construction equipment (average rating: 1.7) and to interact with the local building or planning department (1.9).

On the demand side of the housing market, the impact of AI could potentially be far-reaching, bringing short-term disruption to labor markets and eliminating office jobs in metro areas. Such transitions in labor markets will alter housing demand until the economy produces new jobs in an AI-adopting economy.



The Home Builders Institute (HBI) wishes to thank the Economics Group of the National Home Builders Association for its invaluable contributions to this report.

# HBI.ORG

