

Residential Construction Employment across States and Congressional Districts, 2015

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The most recent American Community Survey (ACS) data show that, including self-employed, 9.6 million people worked in construction in 2015. NAHB estimates that out of this total, close to 3.8 million people worked in residential construction, accounting for 2.5 percent of the US employed civilian labor force. These numbers reflect modest job gains that took place since 2011 when construction employment bottomed out. Nevertheless, the industry employment levels remain far below the peaks reached during the housing boom when more than 11 million worked in construction, and home building employed more than 5 million people, including self-employed workers.

NAHB estimates also allow analyzing the distribution of home building jobs across states and congressional districts. Congressional district estimates are particularly useful to highlight the importance of home building to voting constituency residing in the district. The NAHB estimates show that the average congressional district has close to 8,650 residents working in residential construction but that number is often significantly higher and actually exceeds 21,500 in Montana's single Congressional district.

New NAHB home building employment estimates only include workers directly employed by the industry and do not count [additional jobs created](#) when building material suppliers, furniture producers, landscaping and other dependent industries hire workers in response to shifting demand for their products and services triggered by residential construction.

Data Sources and Methodology

NAHB estimates of residential construction employment by state and congressional district rely on the two main sources of data: the [American Community Survey](#) from the US Census Bureau and the [Quarterly Census of Employment and Wages](#) (QCEW) compiled by the U.S. Bureau of Labor Statistics (BLS).

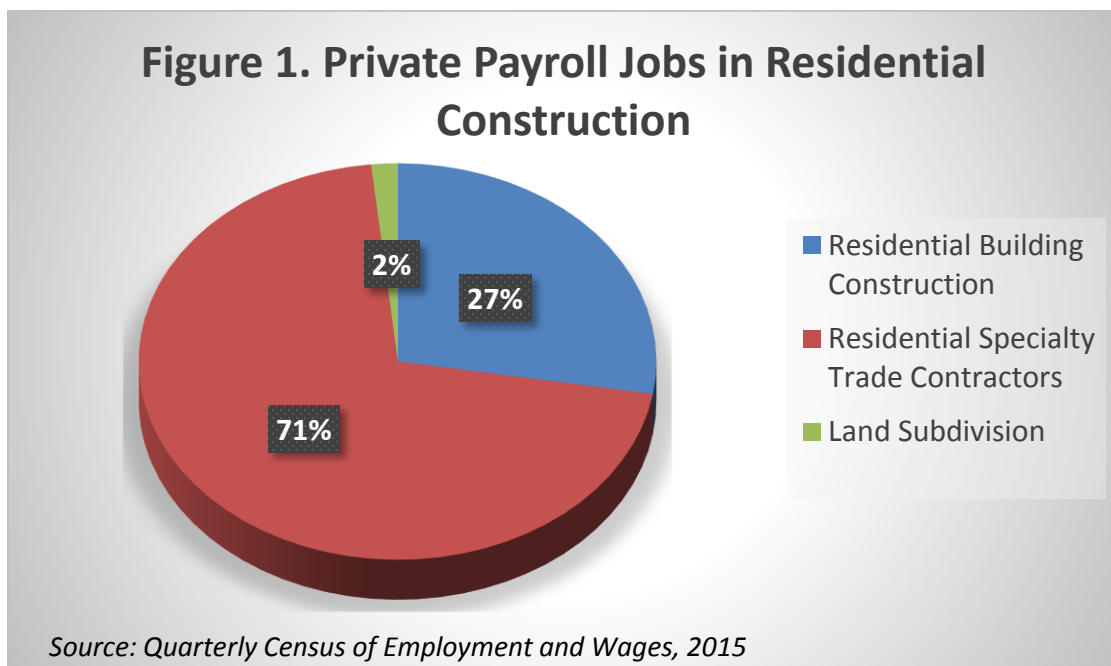
The ACS surveys households rather than businesses and, consequently, covers self-employed workers in addition to workers employed by private companies, government and non-profit groups. Because of this broader employment definition, the ACS employment numbers exceed the estimates based on surveys

of businesses with payroll employees, such as the QCEW, but count voting constituencies and reflect the political importance of home building more accurately. In addition, the ACS employment estimates are available not only by state and metro area but also by congressional district, something that no other employment data source can offer.

Counting self-employed is particularly important in the construction industry where they traditionally make up a larger share of the labor force. In fact, the construction sector registers one of the highest shares of self-employed among all industries. According to the 2015 ACS, over 23 percent of construction workers are self-employed, while an economy-wide average does not reach 10 percent of the employed labor force.

The drawback of the ACS is its limited construction industry information, particularly, it does not differentiate between residential and non-residential construction. In contrast, the Quarterly Census of Employment and Wages data specify whether employees work in commercial or residential building. Furthermore, the QCEW differentiates between residential building construction, land subdivision and residential specialty trade contractors. The QCEW data come from quarterly tax reports filed by employers covered by various unemployment insurance programs, and, in essence, amounts to a “virtual census” of businesses with payroll employees. However, it completely misses self-employed workers.

The 2015 QCEW data show that residential specialty trade contractors account for close to 71 percent of all private payroll jobs in the home building industry (see Figure 1). This is consistent with [a 2015 NAHB survey](#) showing that two thirds of single-family builders subcontract out at least 75 percent of their work. Residential building construction (which includes single-family and multifamily builders, whether they build on their own land or land owned by a homeowner or investor, and residential remodelers) accounts for 27 percent. The remaining 2 percent are in land subdivision.



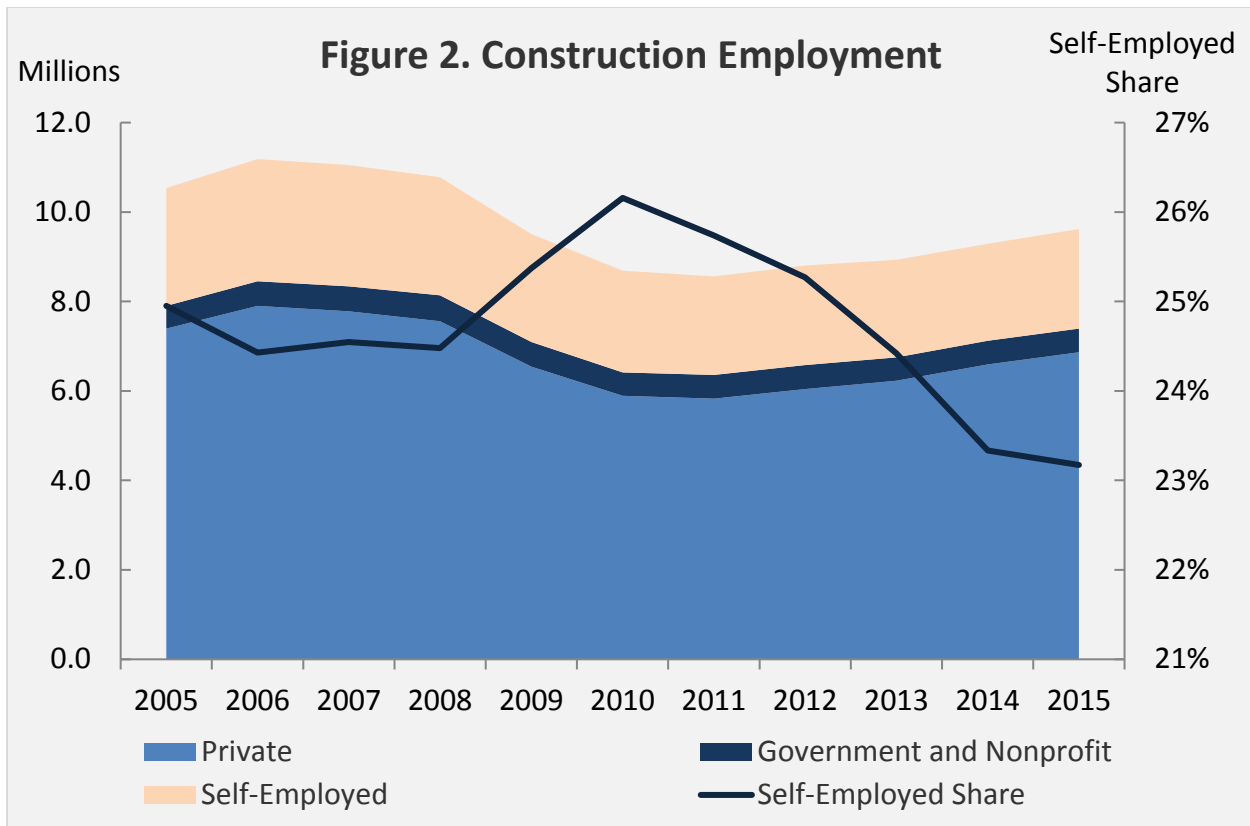
To account for self-employed workers and, at the same time, have access to the detailed industry structure information, NAHB Economics combines data from the ACS and QCEW. First, the share of residential construction is estimated for each state based on the QCEW data. Residential building construction, residential specialty trade contractors and land subdivision are combined to form “residential construction”, or “home building”. The resultant state shares are then applied to the ACS data to break construction workers into residential and non-residential. The estimates assume that, within each state, the share of construction workers who work in the home building industry is the same whether they are self-employed or working as employees of a construction company. This, probably, results in a somewhat conservative estimate, because the self-employed share in residential construction, especially, in remodeling, is likely to be greater than in non-residential.

Construction Self-Employed through the Housing Boom and Bust

The 2015 ACS shows that 9.6 million workers were employed by the construction industry in 2015. This is still 1.6 million fewer jobs than in 2006, at the peak of the housing boom. Nevertheless, it represents four consecutive years of steady job gains (see Figure 2).

The ACS data also highlight the high reliance of the industry on self-employed workers. The high self-employment rates in construction reflect a common practice of builders and remodelers to maintain relatively small payrolls and rely on subcontractors for a large share of the construction work. Interestingly, self-employment rates in the construction industry were rising during the housing downturn and increased from 24 percent in 2006 to more than 26 percent in 2010. Once the situation stabilized and construction started gaining jobs, the self-employment rates reversed their course in 2011 and fell close to 23 percent by 2015 (see Figure 2).

During the downturn builders and remodelers who were no longer able to maintain a steady work flow may have tried to manage costs by eliminating payroll positions and joining the ranks of the self-employed. It is also possible that some construction employees laid off during the downturn were able to stay in the industry by striking out on their own. The share of self-employed workers in construction peaked in 2010, exceeding 26%. Since then, the opposite hiring trends emerged, with construction picking up new payroll jobs but often losing self-employed construction workers. The ACS data show that from 2010 to 2015, construction gained close to 1 million private payroll jobs but the number of self-employed workers has not returned to the 2010 level. This helps explain why builders have reported more extreme [labor and subcontractor shortages](#) than commonly cited numbers based only on payroll employment suggest.



Source: American Community Survey, 2005-2015.

Residential Construction Employment across States

NAHB estimates that, out of 9.6 million people working in construction in 2015, close to 3.8 million people worked in residential construction, accounting for 2.5 percent of the US employed civilian labor force. This represents the fourth consecutive year of modest employment gains for home building. However, the number of residential construction jobs remains well below the peak levels the industry reached in 2006 when, according to the NAHB estimates, more than 5 million people worked in residential construction.

Not surprisingly, the most populous state—California—also has the most residential construction workers. More than half a million California residents worked in home building in 2015, accounting for 3 percent of the state employed labor force. Both numbers are still significantly down from the 2006 cyclical peak. At that time, California was home to over 788 thousand residential construction workers. Nine years later, California is still down more than 240,000 workers, or 31 percent of home building jobs.

Despite being one of the states most severely affected by the housing downturn, Florida comes in second with 334 thousand residential construction workers (still about 40 percent fewer than in 2006). Florida has fewer residents than Texas and about as many as New York but owing to its [large vacation](#)

[and seasonal housing stock](#), employs more residential construction workers. In Florida, residential construction workers account for a relatively high 3.7 percent of the employed state labor. Even though this share is well above the national average, it is drastically lower than in 2005 when Florida registered the highest share among all 50 states and the District of Columbia, 6.2 percent.

Among the states hardest hit by the housing downturn and slowest to recover home building jobs are Nevada, Arizona, and New Mexico still showing job losses of 48.8, 45.1, and 44.8 percent, respectively, compared to 2006. Despite these significant job losses, home building in Nevada and Arizona continues to employ a relatively high share of local workers – 2.9 and 3.1 percent of the employed civilian labor force.

Job losses across the states look massive but, in general, reflect the scale of the unprecedented housing downturn that the industry went through in recent years. Other measures of residential construction activity, such as total housing starts and permits, all capture the same familiar pattern with home building activity peaking in 2006 or 2007 in some states, plummeting to a historic low by 2010 -2011 and showing modest but steady recovery in recent years.

While most states were not yet able to recover home building jobs lost during the housing downturn, residential construction in North and South Dakota, fueled by the local oil fracking boom, employed more people in 2015 than in 2006. The positive job creation momentum even spilled over to neighboring Nebraska where home building generated more jobs in 2015 than in 2006.

Similarly to Florida, other states with a high prevalence of seasonal, vacation homes top the list of states with the highest share of residential construction workers in 2015. Montana with 4.4 percent of the employed labor force working in home building takes the top spot on the list. In addition to Montana and Florida, eight other states register shares of residential construction workers that exceed 3 percent: Idaho (3.8 percent), Vermont (3.6 percent), Utah (3.4 percent), Colorado (3.3 percent), Maine (3.3 percent), North Carolina (3.1 percent), Arizona (3.1 percent), and New Hampshire (3.1 percent).

Interestingly, construction workers in these states are more likely to be self-employed. Notably, Montana, Vermont, Maine and New Hampshire have the highest shares of self-employed construction workers in the nation, with more than a third of their construction workforce being self-employed. In Montana the share of self-employed actually reaches 39 percent. It is likely that long distances between home building sites in Montana make moving workers between job sites logistically difficult and expensive and force local builders to look for subcontractors or independent contractors more conveniently located to a particular job or housing start. [The New England states are where it takes the longest time 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 payrolls¹. As a result, a greater share of work is done by independent entrepreneurs, thus explaining high self-employment shares in these states that go together with elevated shares of residential construction workers in local

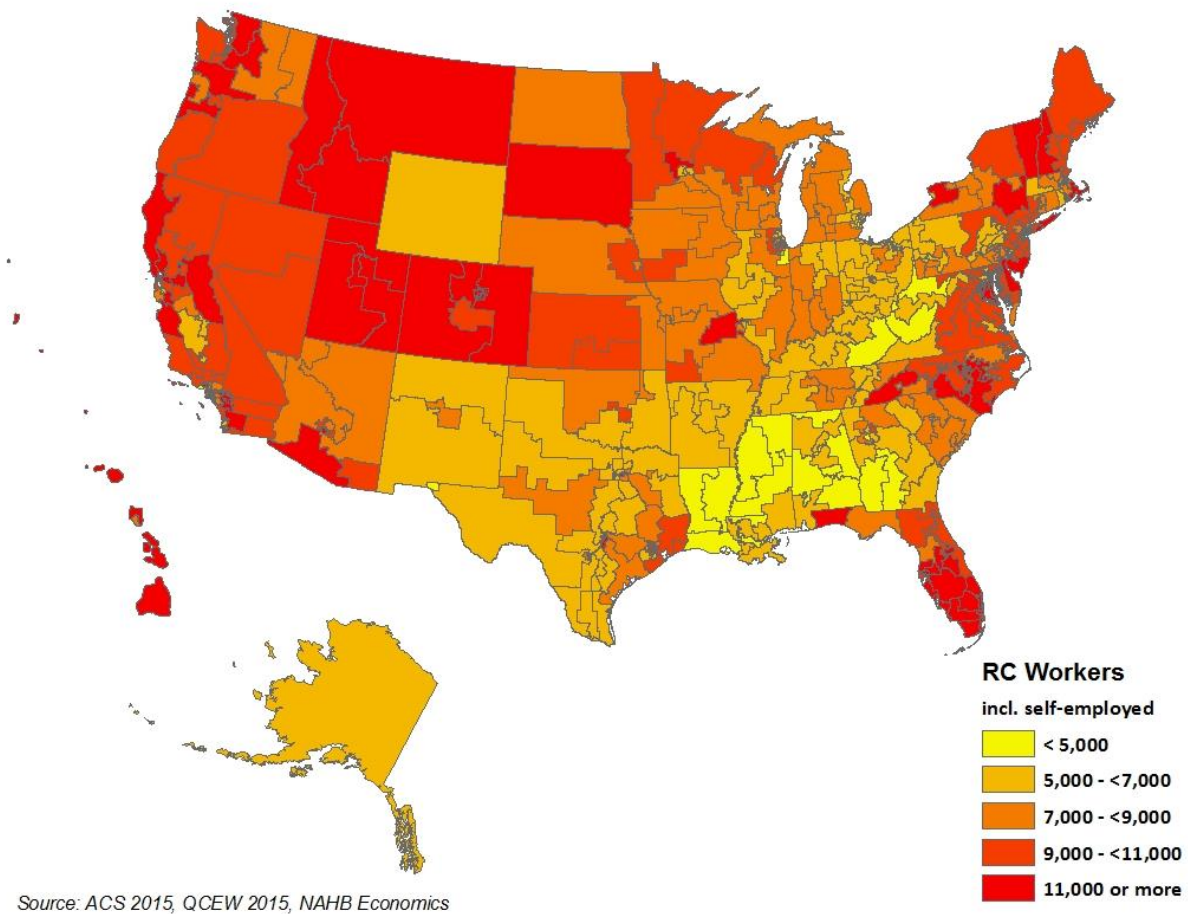
¹ The 2012 Economic Census data show that specialty trade contractors in Montana, Maine, Rhode Island, Vermont, Idaho, New Hampshire have the smallest payrolls in the nation with 5 to 6 workers, on average. Whereas, the national average is close to 9 workers.

labor force. Nevertheless, with the exception of Montana, these high shares are below the self-employment peak levels these states registered in the midst of the severe housing downturn.

Residential Construction Workers in Congressional Districts

The detailed geographic coverage in the ACS also allows RC employment to be estimated by Congressional district (see Table 2). In 2015, the average Congressional district had around 8,650 residents working in residential construction, considerably down from the average of more than 11,000 workers in 2005. Figure 3 helps visualize the distribution of RC workers across the Congressional districts. Perhaps somewhat surprisingly, many areas that were once booming and consequently hardest hit by the housing downturn still show higher than average numbers and shares of residential construction workers.

Figure 3. Residential Construction Employment, 2015



Montana's lone Congressional district (Rep. Ryan Zinke – R) registers the record number of residential construction workers among all districts – 21,540. Florida's 27th in far South Florida (Rep. Ileana Ros-

Lehtinen – R) comes second with more than 18,780 employed in home building. Florida’s 19th District (Rep. Curt Clawson – R) that serves an area on the west coast of Florida from Fort Myers to Marco Island is third with just under 17,400 residential construction workers residing there. Two additional districts in the state of Florida made the top ten list – Florida’s 25th (Rep. Mario Díaz-Balart – R) and Florida’s 22nd (Rep. Lois Frankel – D) – with almost 16,600 and 15,300 residents working in home building, respectively. California’s 41st (Rep. Mark Takano – D) in Western Riverside County has close to 17,300 residential construction workers. Arizona 7th (Rep. Ruben Gallego – D) includes much of inner Phoenix and has close to 16,400 workers. Texas 29th that serves the eastern portion of the Greater Houston area has over 16,000 people employed in home building. Two districts from Colorado conclude the top ten list – the 7th district (Rep. Tony Cardenas - D) and 1st (Rep. Duncan D. Hunter - R) – with more than 15,000 residents working in the home building industry.

By design, Congressional districts are drawn to represent roughly the same number of people. So generally, large numbers of residential construction workers translate into high shares of RC workers in their district employed labor forces. The 19th District of Florida has the highest share of residential construction workers in its employed labor force, 5.6 percent. California’s 41st and Florida’s 27th Districts are close behind with 5.3 percent. Arizona’s 7th also register the share of residential construction workers in excess of 5 percent.

At the other end of the spectrum there are several districts that contain parts of large urban areas: the District of Columbia (Rep. Eleanor Holmes Norton – D), the 12th of New York (Rep. Carolyn Maloney – D), located in New York City, Pennsylvania’s 2nd that includes areas of the city of Philadelphia, and Illinois’s 7th District (Rep. Danny K. Davis – D) that includes downtown 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 residing in the district, around 1,500. At the same time, it has a disproportionately large share of public administration workers. The 12th District of New York, as well as the 7th District of Illinois are home to a very 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.

Conclusion

The new estimates show that despite losing thousands of jobs during the housing downturn, the home building industry employs a substantial number of workers in most parts of the country. The average Congressional district has close to 8,650 residents working in residential construction but the number can be twice as high or higher, and actually exceeds 21,500 in Montana’s At-Large Congressional District.

Considering that the estimates only include workers directly employed by the industry and do not count jobs created in related industries– such as design and architecture, furniture making, building materials, landscaping, etc. - the true impact of residential construction on local employment is underestimated.