

Construction employment: a visual essay

Benjamin Cover

Construction occupations accounted for 4.9 million jobs in May 2010, down from 6.5 million in May 2006 when employment in construction-related occupations reached a peak. Since then, employment has declined among establishments whose primary output was construction or construction trade services and among workers performing construction-related activities in any industry. Employment in 40 of the 46 construction occupations decreased over this time, with some occupations declining by half. The employment declines were more extreme in some industries than others. Employment declines were often steeper among the lower-paid construction helper occupations.

U.S. average wages for construction occupations in May 2010 were \$21.12 per hour, about the same as the all-occupations average of \$21.35. Between May 2006 and May 2010, average hourly wages grew 2.7 percent per year for construction occupa-

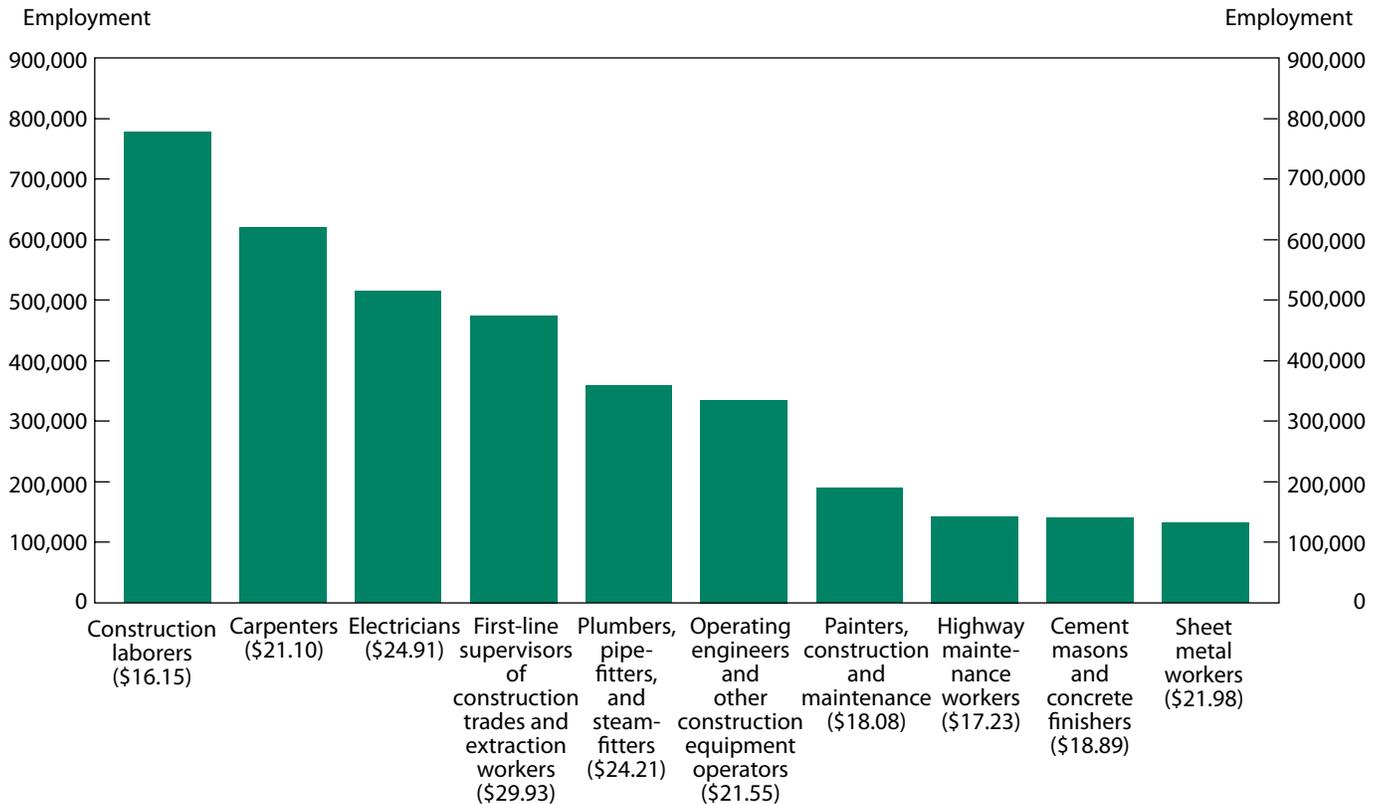
tions, less than the 3.2-percent growth in hourly wages for all occupations.

This visual essay examines employment and wages of workers in construction occupations in May 2010, when construction employment was at its lowest point in over a decade. Some comparisons are made with employment and earnings in May 2006.

The Occupational Employment Statistics survey is a survey of 1.2 million business establishments conducted in six semiannual panels over a 3-year period. Respondents are asked to list the occupation and wage range for each of their employees. Data from the six most recent panels are used each year to provide wage and employment estimates for about 800 occupations by area and industry.

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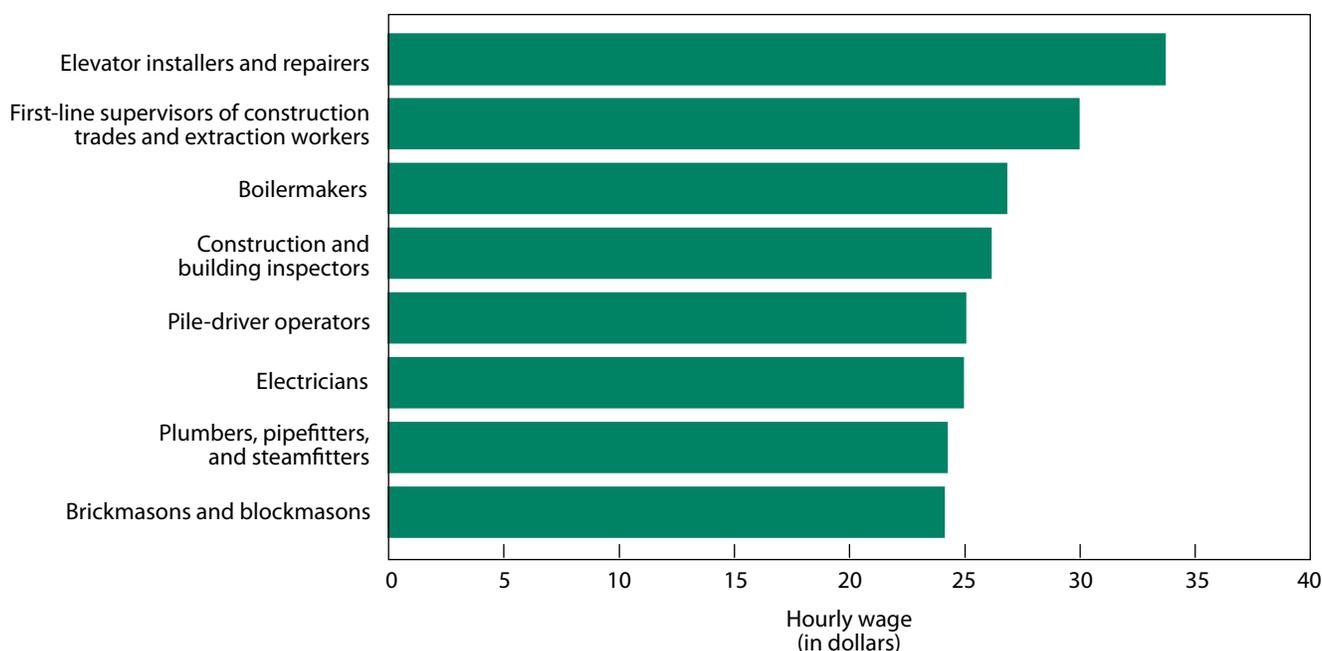
1. Employment and mean hourly wages for workers in the 10 largest construction occupations, May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Most of the largest construction occupations were the construction trades workers.
- The 10 occupations shown accounted for more than 76 percent of employment in construction occupations in May 2010.
- Construction laborers had the lowest wage among the 10 largest construction occupations.
- First-line supervisors of construction trades and extraction workers had the highest wage among the 10 largest construction occupations.

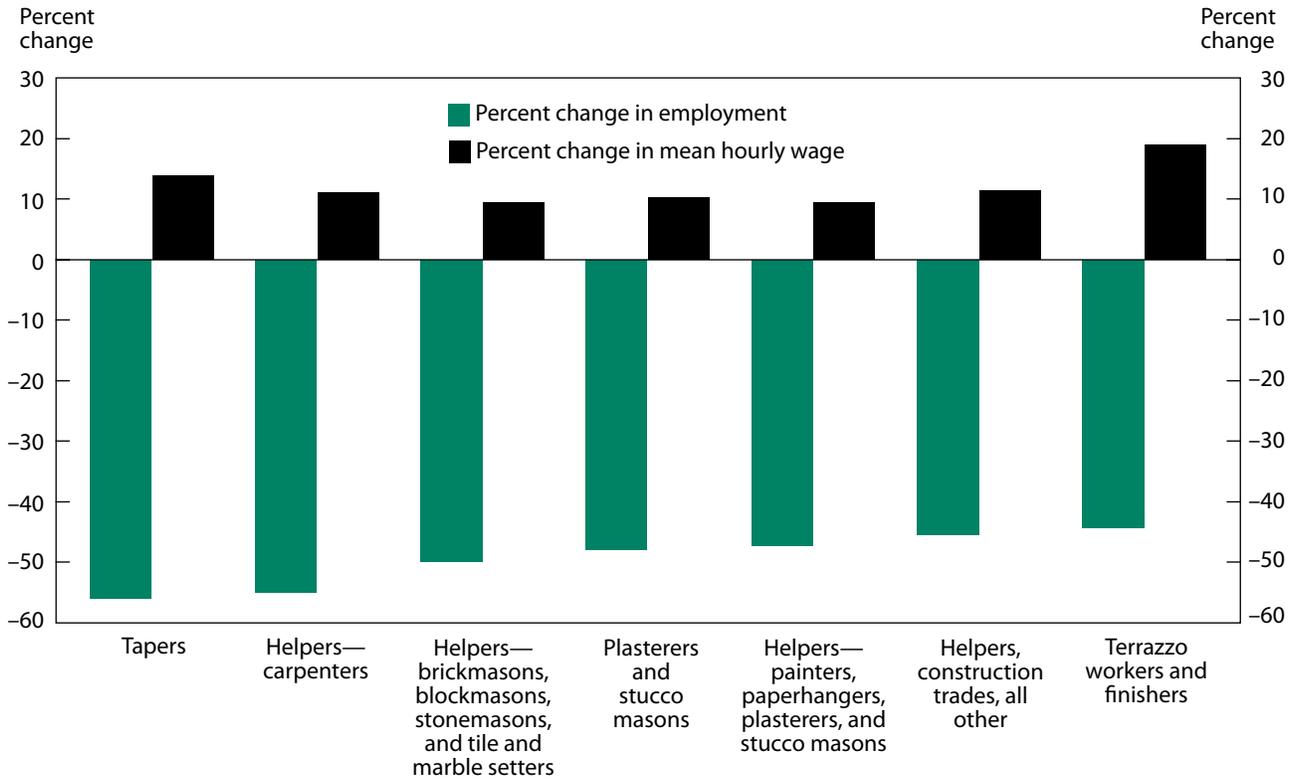
2. Construction occupations with the highest mean hourly wages, May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Construction workers earned an average of \$21.12 per hour in May 2010, about the same as the overall mean for all occupations.
- The eight highest paid construction occupations were specialized construction trade workers or their supervisors.
- Earning an average hourly wage of \$33.66, elevator installers and repairers had the highest wage among construction workers in May 2010.
- Three of the construction occupations with the highest wages were also among the 10 largest construction occupations—first-line supervisors of construction trades and extraction workers, electricians, and plumbers, pipefitters, and steamfitters.
- With 4,230 workers in May 2010, pile-driver operators was the smallest of the high-paying construction occupations.

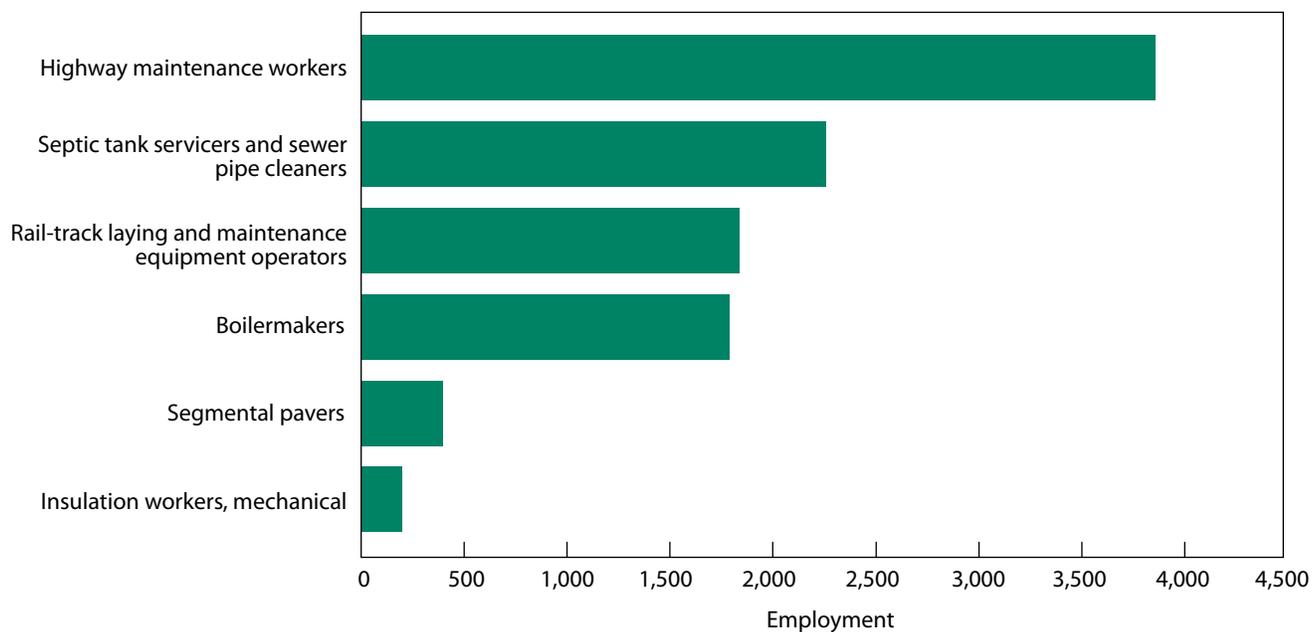
3. Change in mean hourly wages in construction occupations with the largest percent decrease in employment, May 2006–May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Employment decreased in 40 of the 46 construction occupations between May 2006 and May 2010.
- Overall, employment in construction occupations decreased 25 percent between May 2006 and May 2010.
- Four of the construction occupations with the largest percent decrease in employment between May 2006 and May 2010 were various helpers of construction trade workers.
- Employment for tapers and carpenter helpers fell by more than 50 percent. The employment decline was 22,400 for tapers and 57,290 for carpenter helpers.
- The average hourly wage in construction occupations grew 11 percent between May 2006 and May 2010, an average annual increase of 2.7 percent, slightly lower than the increase of 13 percent, or 3.2 percent per year, for all occupations.
- Hourly wage changes for the construction occupations with the largest percent decline in employment were similar to the average for total construction occupations.
- With a 37-percent decrease in employment over the 4-year period, carpenters experienced a smaller percent decrease than the occupations shown but had the largest overall decline in jobs, which fell by 365,580.

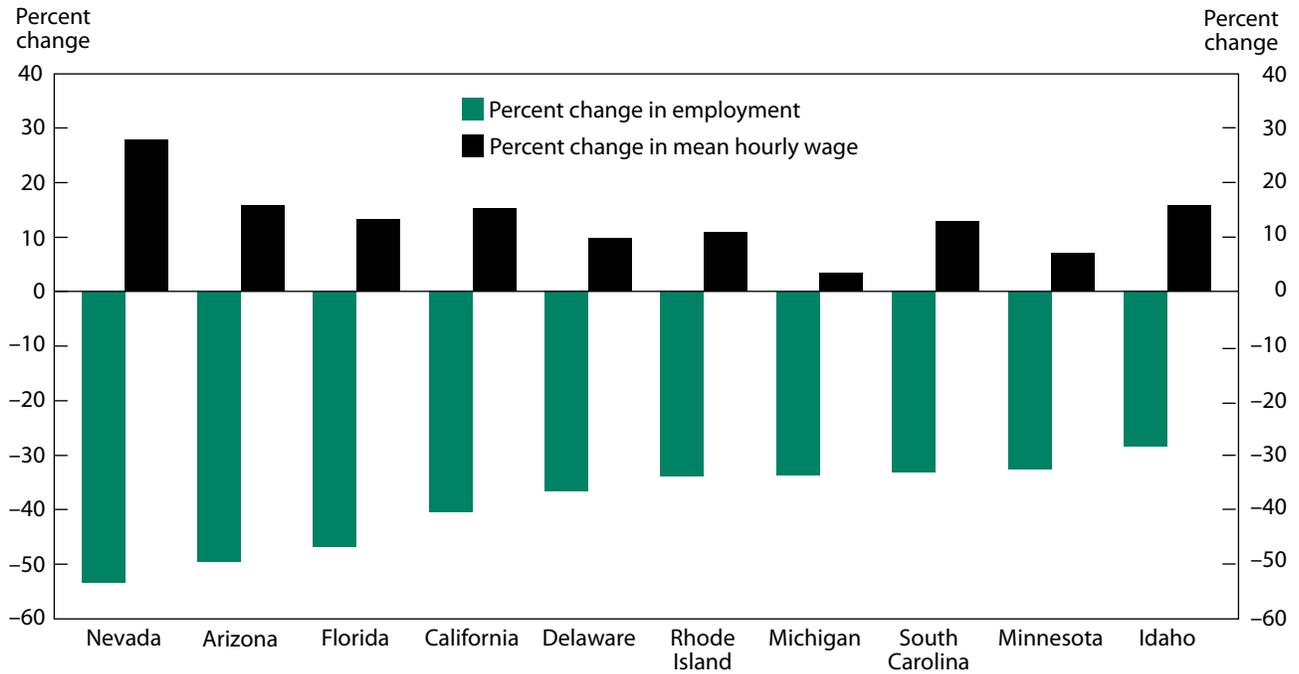
4. Construction occupations with the largest increase in employment, May 2006–May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Construction occupations that grew tended to be smaller occupations and were not related to new building construction.
- Employment for highway maintenance workers increased from 138,670 in May 2006 to 142,530 in May 2010.
- The increase in average hourly wages over the 4-year period for the occupations shown ranged from 2.1 percent for mechanical insulation workers to 16.6 percent for rail-track laying and maintenance equipment operators.

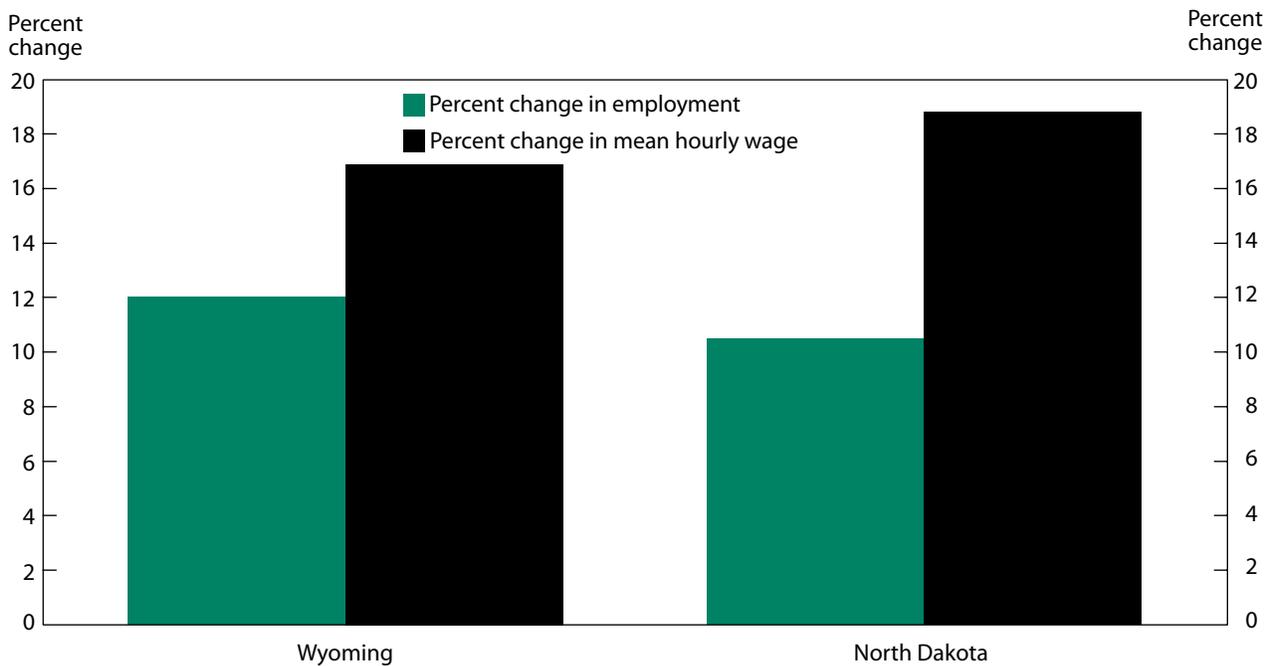
5. Change in employment and wages in States with the largest percent employment decrease in construction occupations, May 2006–May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Nevada had the largest percent decrease in construction occupations employment and the largest increase in mean wages for construction occupations from May 2006 to May 2010.
- Average hourly wages for detailed occupations may increase because of wage increases for individual workers or because lower paid workers are let go, while higher wage workers are retained.
- In Nevada, mean hourly wages for construction occupations had an annual average increase of 6.3 percent from May 2006 to May 2010.
- Part of the wage increase in Nevada was due to employment declining in helper occupations and rising in higher paying occupations, such as elevator installers and repairers.
- With a decline of 41 percent, California had the largest absolute decrease of employment in construction occupations from 815,510 in May 2006 to 485,120 in May 2010.
- Carpenter helpers had one of the largest declines in employment in all the States shown.

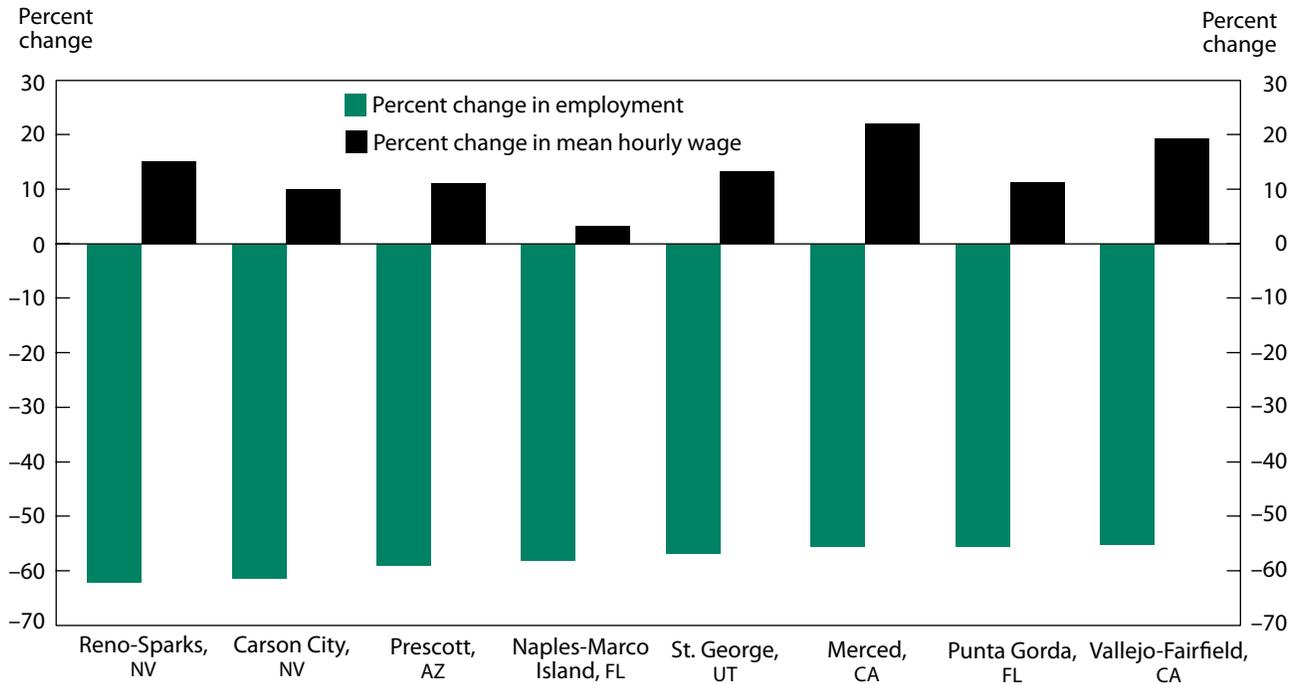
6. Change in employment and wages in the States with an increase in construction occupations employment, May 2006–May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Employment in construction occupations grew in only two States from May 2006 to May 2010.
- The increase of employment in construction occupations came from increases in different occupations in each of the two states.
- In North Dakota, employment for highway maintenance workers increased more than 65 percent. The occupation with the largest absolute increase in employment in North Dakota was first-line supervisors of construction trades and extraction workers.
- Operating engineers and other construction equipment operators and electricians contributed to the increase in employment for Wyoming.
- The growth in hourly wages for construction occupations in Wyoming and North Dakota was above the nationwide average.

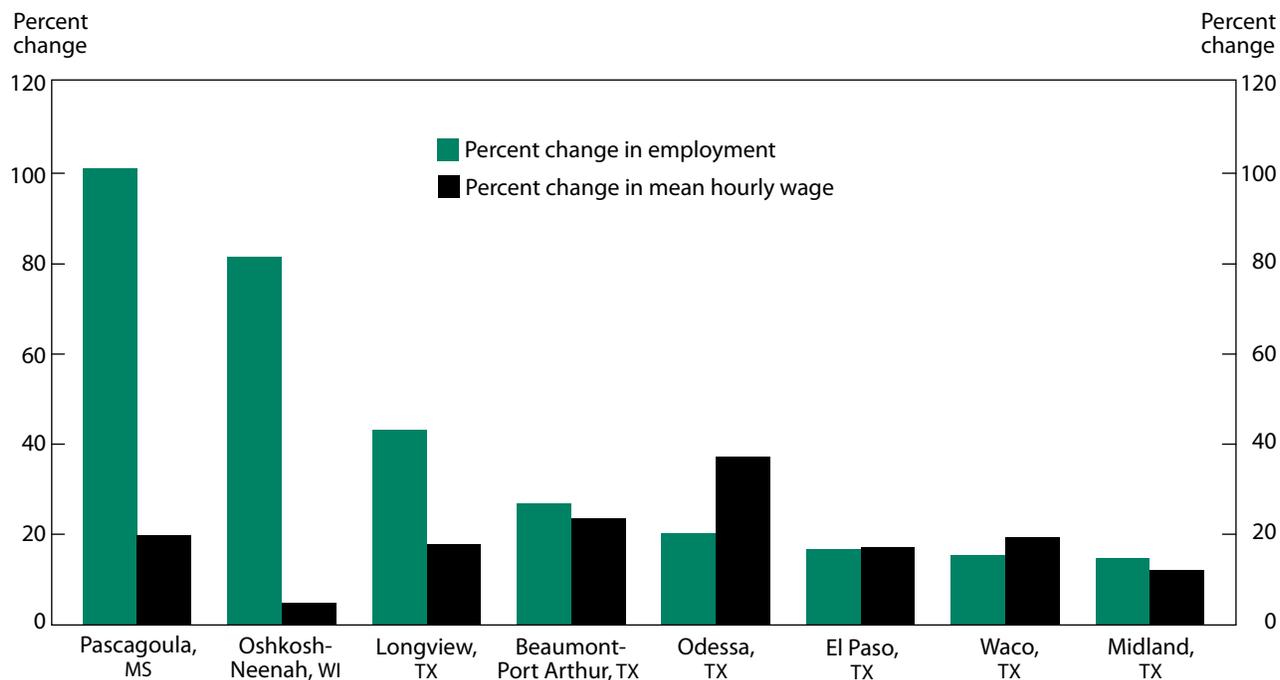
7. Change in employment and wages in metropolitan areas with the largest percent employment decrease in construction occupations, May 2006–May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Nine metropolitan areas in California, six metropolitan areas in Florida, and three metropolitan areas in Nevada showed at least a 50-percent decrease in employment in construction occupations from May 2006 to May 2010; the areas with the steepest employment declines in those States were Merced and Vallejo-Fairfield in California and Naples-Marco Island and Punta Gorda in Florida.
- Employment in construction occupations fell more than 60 percent from May 2006 to May 2010 in Reno-Sparks, NV, and Carson City, NV.
- Employment in construction occupations decreased more than 50 percent in Las Vegas, NV. Wages for construction occupations in Las Vegas, however, increased more than 30 percent.
- Construction hourly wages increased in each of the areas shown during the May 2006–May 2010 period, ranging from 3.4 percent in Naples-Marco Island, FL, to 22.1 percent in Merced, CA.

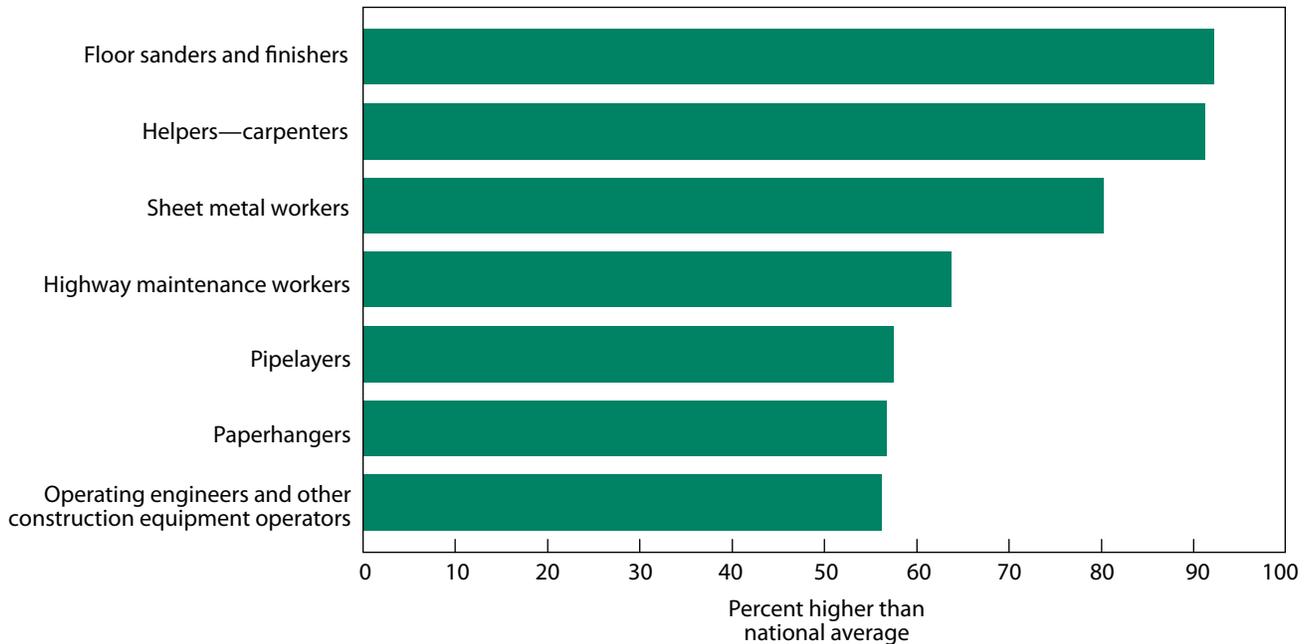
8. Change in employment and wages in the metropolitan areas with at least a 15-percent employment increase in construction occupations, May 2006–May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Employment in construction occupations more than doubled in Pascagoula, MS, and increased by more than 80 percent in Oshkosh-Neenah, WI, from May 2006 to May 2010.
- Employment increased in 20 out of 25 construction occupations in Pascagoula, MS.
- Although the overall employment in construction occupations decreased by 1 percent in Texas from May 2006 to May 2010, employment increased in 13 of the State's 26 metropolitan areas.
- Nearly all the areas with substantial employment growth in construction occupations also had above the U.S. average wage growth from May 2006 to May 2010. The sole exception was Oshkosh-Neenah, WI, where wages grew by only 5 percent.

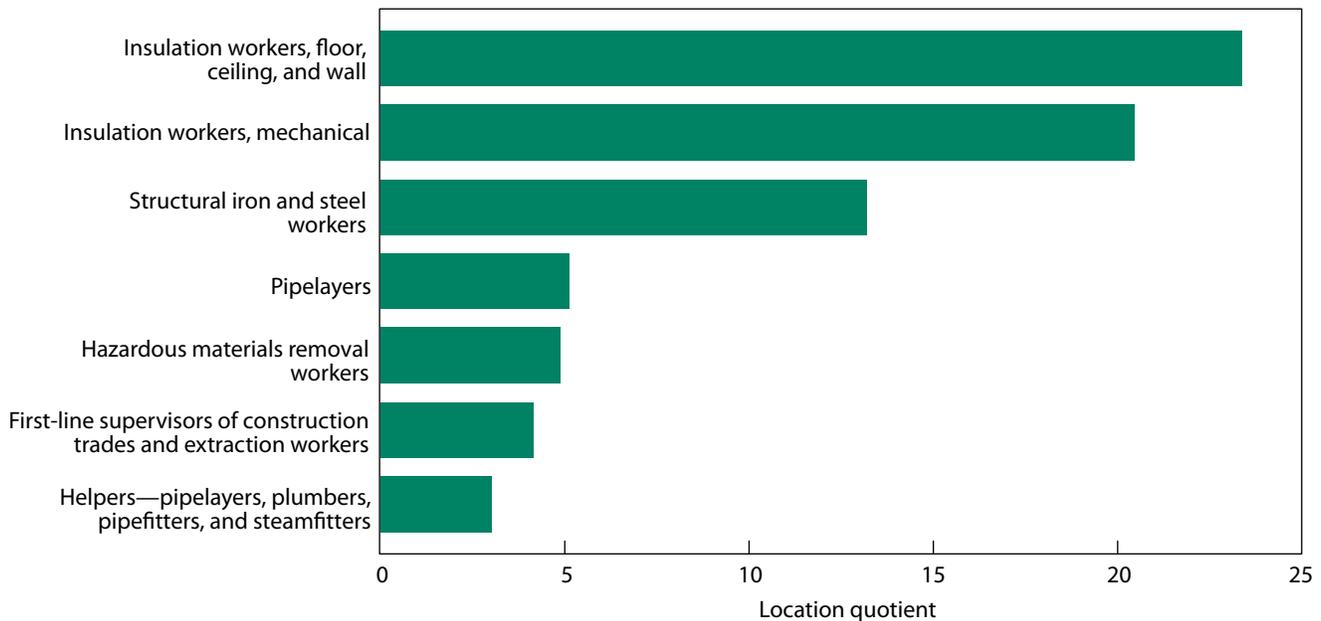
9. Construction occupations in the San Francisco-San Mateo-Redwood City, CA, metropolitan division with mean wages at least 55 percent higher than the national average for that occupation, May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- The San Francisco-San Mateo-Redwood City, CA, metropolitan division had the highest mean wage in May 2010 for construction workers at \$30.14.
- The San Francisco-San Mateo-Redwood City, CA, metropolitan division had above average hourly wages for all occupation groups, but construction occupations had the highest wage premium of all the major occupational groups.
- Floor sanders and finishers and carpenter helpers in San Francisco-San Mateo-Redwood City earned almost twice the national average hourly wage for their occupation.
- Most occupations in this metropolitan division with the highest wage premiums were construction trade occupations. With the exception of carpenter helpers, most helper occupations had a below average premium.
- Although the wages for construction occupations were higher, on average, in the San Francisco-San Mateo-Redwood City, CA, metropolitan division, employment in construction occupations accounted for a relatively small share of the area's overall employment. Construction occupations accounted for 4 percent of employment nationwide and 3 percent in San Francisco-San Mateo-Redwood City.

10. Location quotients for construction occupations in Pascagoula, MS, May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Pascagoula, MS, had a larger share of its employment in construction occupations than did any other metropolitan area in the United States, with over three times the national average.
- The concentration of employment in every construction occupation in Pascagoula, MS, was higher than the national average, with the exception of highway maintenance workers.
- At \$19.07, the mean wage for construction occupations in Pascagoula, MS, was below the U.S. average for construction occupations at \$21.12.
- Of the occupations shown, only helpers—pipelayers, plumbers, pipefitters, and steamfitters had a mean hourly wage higher than the U.S. average for that occupation.

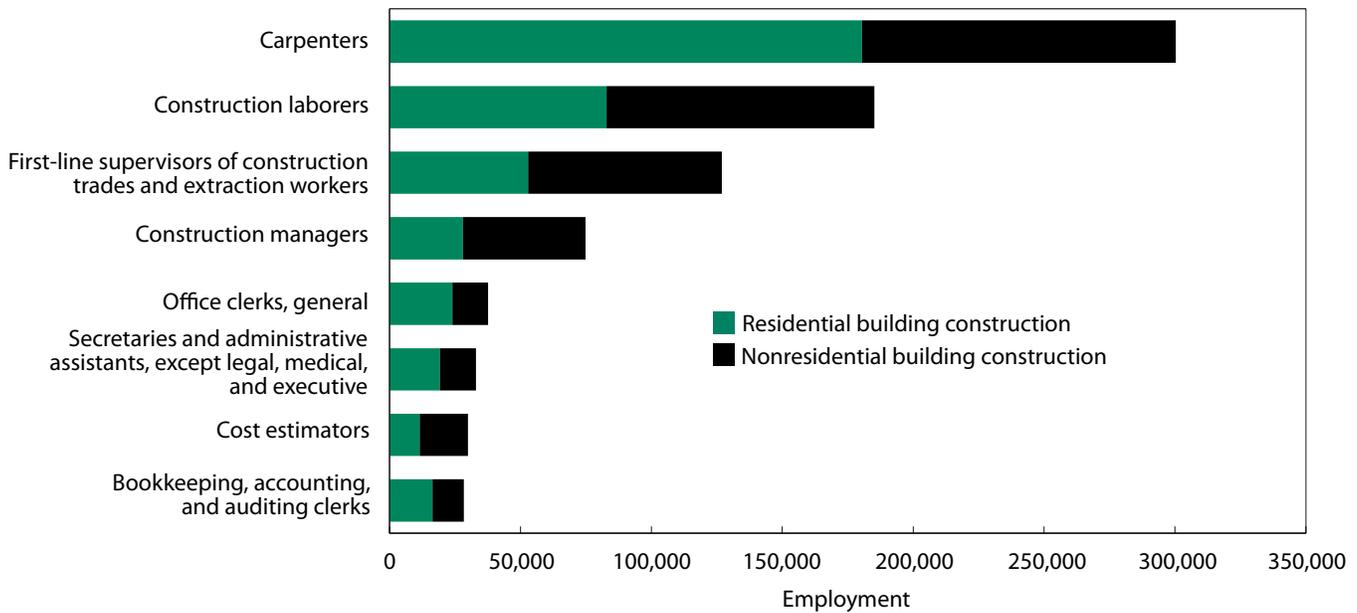
11. Change in employment and mean hourly wages for construction occupations in the residential and nonresidential building construction industries, May 2006–May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Residential construction occupations had a larger employment decline and lower hourly wage growth than did nonresidential construction occupations.
- From May 2006 to May 2010, employment declined 42 percent in residential construction, compared with 16 percent in nonresidential construction.
- Employment in the largest construction occupation, carpenters, decreased 45 percent in residential construction compared with 23 percent in nonresidential construction.
- The average annual hourly wage growth from May 2006 to May 2010 was 1.8 percent in residential construction and 2.7 percent in nonresidential construction compared with 3.2 percent for all industries combined.

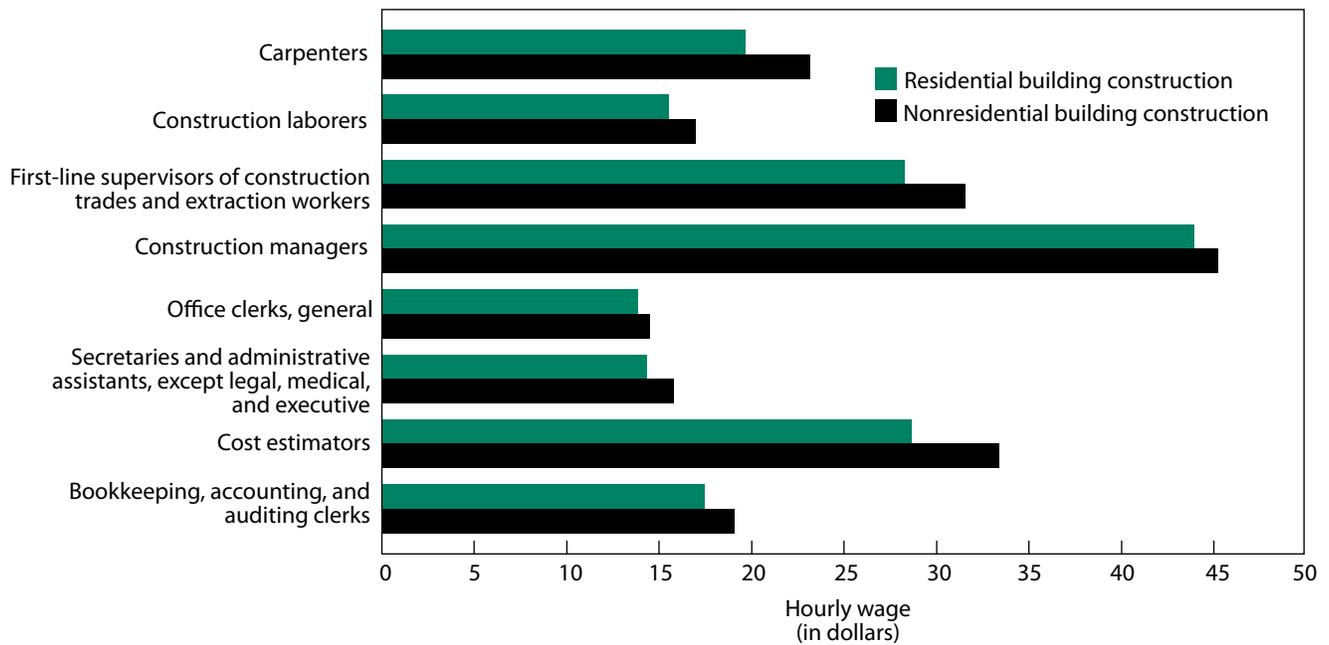
12. Employment in the largest occupations in the building construction subsector, by residential and nonresidential industry group, May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Construction occupations accounted for 64 percent of employment in residential building construction and 62 percent of employment in nonresidential building construction.
- Carpenters made up almost half of the construction occupation employment in residential building construction but accounted for less than a third of the nonresidential building construction employment.
- First-line supervisors of construction trades and extraction workers and construction managers were more prevalent in nonresidential building construction than in residential building construction, accounting for about 4 percentage points more of the overall construction occupations employment.

13. Mean hourly wages for the largest occupations in the building construction subsector, by residential and nonresidential industry group, May 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Wages were consistently higher among workers in nonresidential building construction than those in residential building construction.
- The mean hourly wage for construction occupations was \$19.55 in residential building construction, compared with \$22.64 in nonresidential building construction.
- Cost estimators had the largest nominal difference in mean hourly wages with a \$4.74 spread between nonresidential and residential building construction.
- Carpenters had the largest percent difference in mean hourly wages—17.6 percent—between nonresidential and residential building construction.