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Quarterly DATA REPORT
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Employment Trends and Projections in Construction

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Beginning this year, CPWR will publish Quarterly Data Reports to illuminate the quickly changing construction industry and better serve construction stakeholders. These data reports, published on CPWR's website, will cover topics directly related to the safety and health of construction workers. They will be presented in a similar format to the CPWR Data Briefs, but will be published four times per year. Each report will focus on a specific topic (e.g., construction employment, fatal injuries) as well as emerging issues (e.g., safety and health in green construction), using large nationally representative data sources. Readers will be able to access the charts in PowerPoint and download the entire Quarterly Data Report as a PDF from cpwr.com.

This CPWR Quarterly Data Report, the first of its kind, describes the findings on the recovery of construction employment since the recent economic downturn and employment projections for the coming years.

WHAT'S INSIDE

Image Source: *Mike Siluk*

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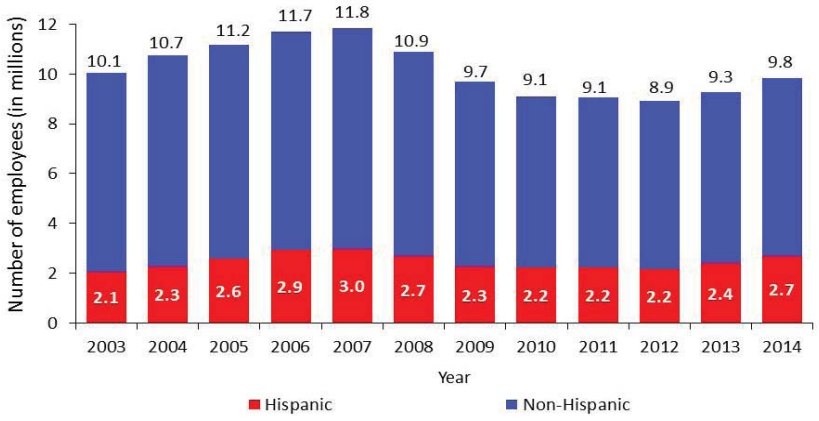
SECTION 1: Construction Employment through the Economic Decline

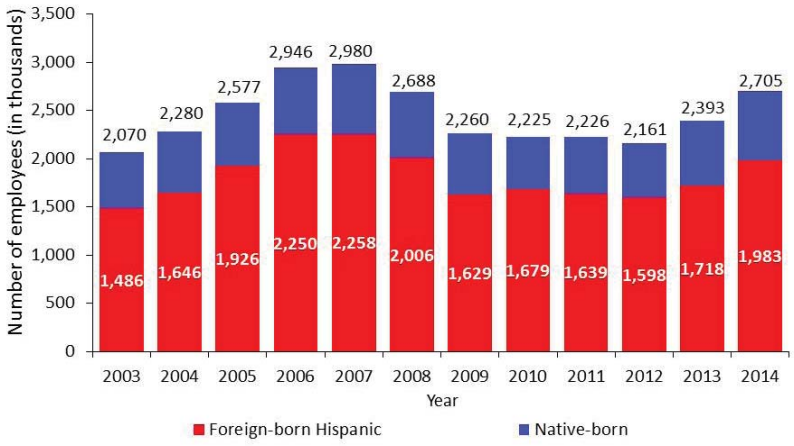
In 2013 and 2014, construction employment showed signs of recovery following the 2007-2009 recession. Construction employment grew to 9.8 million workers in 2014 from 8.9 million in 2012, reaching the highest level in six years (Chart 1).

Hispanic employment in construction has experienced considerable growth and reduction coinciding with the boom and collapse of the U.S. housing market. With the recovery of the industry, Hispanic workers were responsible for nearly 60% of the employment growth in construction, adding more than half a million jobs between 2012 and 2014; of these jobs, 385,000 were held by foreign-born Hispanics (Chart 2). Growth in Hispanic employment was higher than overall growth in the construction industry during the same period (25.2% vs. 10.5%).

1. Construction employment in the United States, 2003-2014 (All employment)



2. Number of Hispanic workers in construction, foreign- vs. native-born, 2003-2014 (All employment)

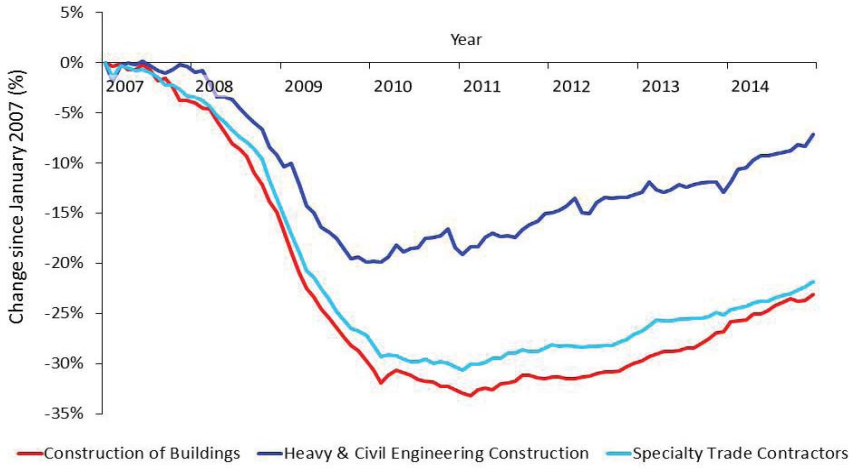


Source: U.S. Bureau of Labor Statistics, 2003-2014 Current Population Survey. Calculations by the CPWR Data Center.

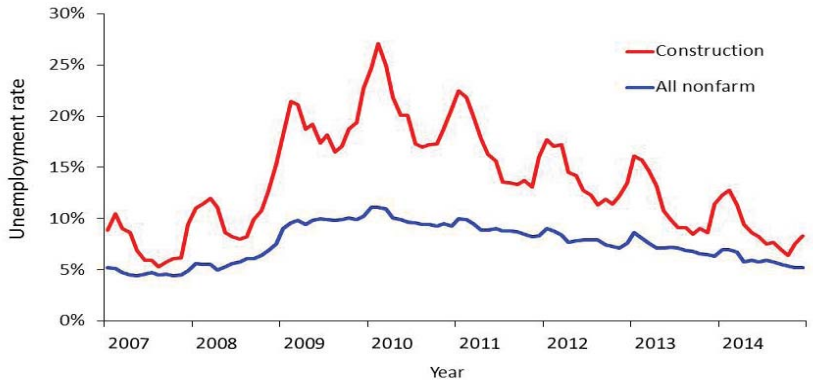
By the close of 2014, all three construction subsectors continued to show improvement in employment, though the numbers of construction workers were still far below their 2007 level. Compared to employment in 2007, Heavy and Civil Engineering remained 7% below, while Construction of Buildings and Specialty Trade Contractors were more than 20% down (Chart 3). Construction of Buildings and Specialty Trade Contractors fared poorly during the economic downturn, bottoming out 33% and 31% below 2007 employment, respectively.

Unemployment rates illustrate the recovery from the opposite perspective. Unemployment rates peaked in early 2010 for construction and all nonfarm industries; however, the rate in construction was more than twice as high as the rate in all nonfarm industries (27% vs. 11%; Chart 4). In addition, the cyclical nature of work and employment was more pronounced in construction when compared to all nonfarm industries. As the economy rebounded between 2010 and 2014, unemployment rates gradually declined and the within-year variation in construction unemployment diminished as well. In 2014, the unemployment rate in construction dipped to 6.4% in October, and 5.2% in all nonfarm industries for November and December.

3. Change in construction employment, by major subsector, 2007-2014 (Seasonally adjusted: private wage-and-salary workers)



4. Monthly unemployment rate, construction vs. all nonfarm, 2007-2014 (Not seasonally adjusted: private wage-and-salary workers)

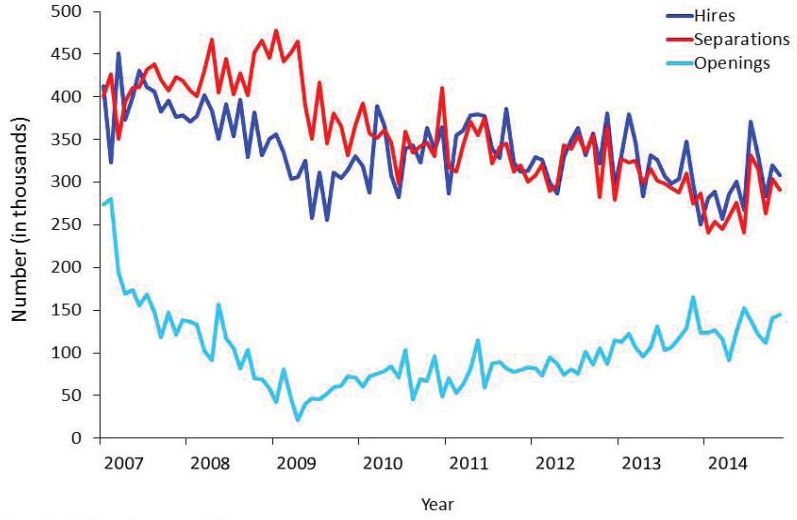


Note: Chart 3 - November and December 2014 numbers are preliminary.
Source: Chart 3 - US Bureau of Labor Statistics, 2007-2014 Current Employment Statistics. Calculations by the CPWR Data Center.
Source: Chart 4 - U.S. Bureau of Labor Statistics, 2007-2014 Current Population Survey.

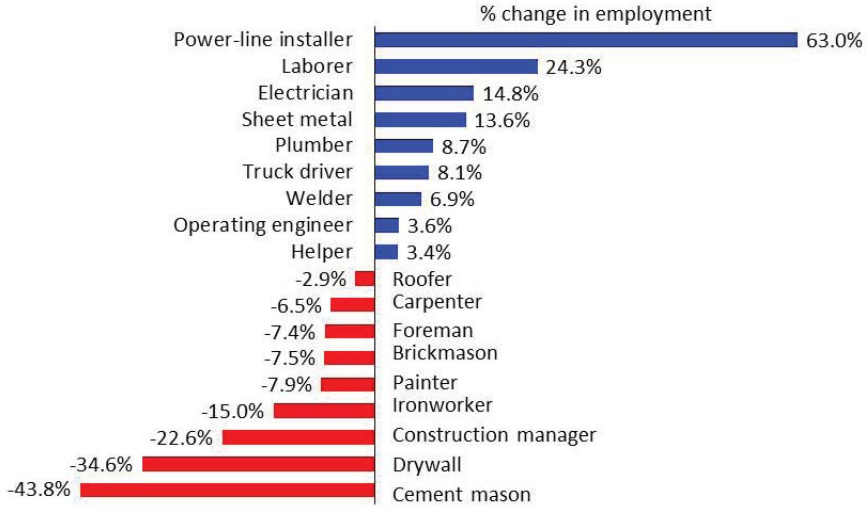
The numbers of job openings, separations, and hires confirm the construction employment recovery as well. On average, monthly hires outweighed separations by about 25,000 jobs per month in 2014 (Chart 5). Job openings have also seen a steady increase since the end of the recession. In 2009, separations peaked at nearly half a million jobs lost, and hires and openings fell to about a quarter of a million and 21,000, respectively.

While construction employment improved since the economic downturn, growth varied across occupations. Employment for power-line installers surged 63% between 2010 and 2013, followed by 24% growth among construction laborers (Chart 6). Despite overall growth in construction, some occupations continued to shrink. Employment for cement masons was down 44% and drywall installer employment was down 35% from 2010 to 2013.

5. Job openings, separations, and hires in construction, 2007-2014 (Seasonally adjusted: private wage-and-salary workers)



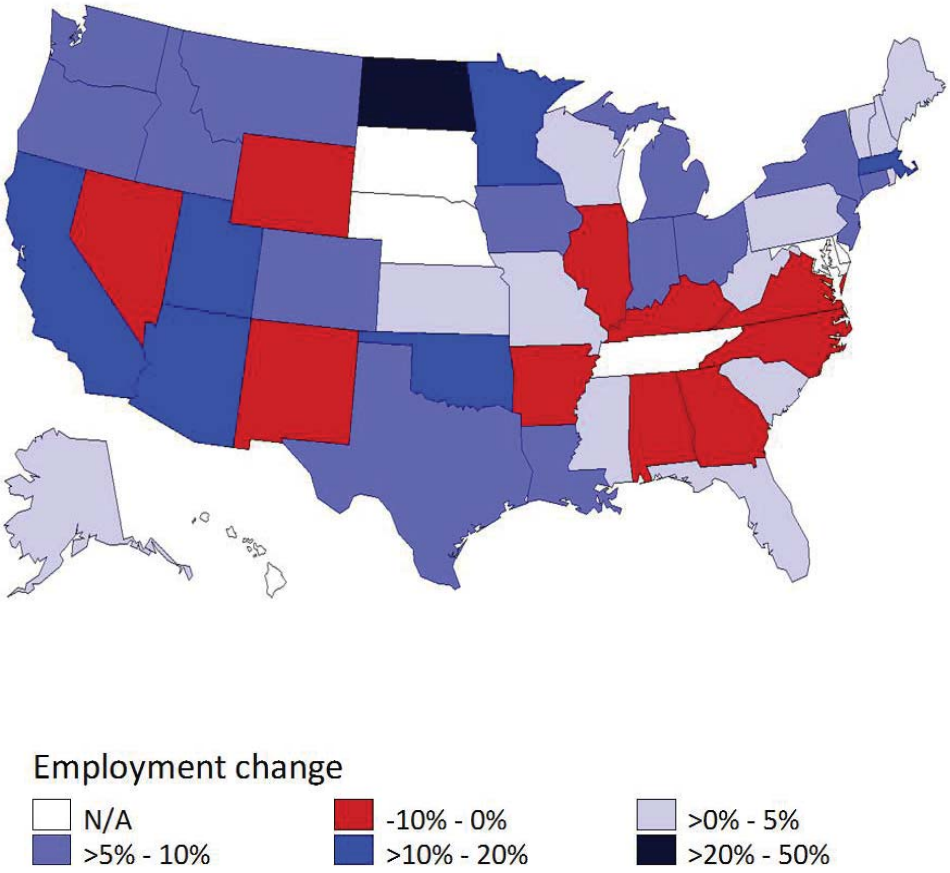
6. Change in construction employment, by occupation, 2010-2013 (All employment)



Note: Chart 5 - November 2014 numbers are preliminary
Source: Chart 5 - U.S. Bureau of Labor Statistics, 2007-2014 Job Openings and Labor Turnover Survey.
Source: Chart 6 - U.S. Bureau of Labor Statistics, 2010 and 2013 Current Population Survey. Calculations by the CPWR Data Center.

Across the U.S., the majority (68%) of states saw an increase in construction employment between 2010 and 2013 (Chart 7). Although the western states generally fared most favorably, employment in North Dakota jumped by 50%. In contrast, Alabama experienced the steepest decline (9%).

7. Change in construction employment, by state, 2010-2013
(Private wage-and-salary workers)



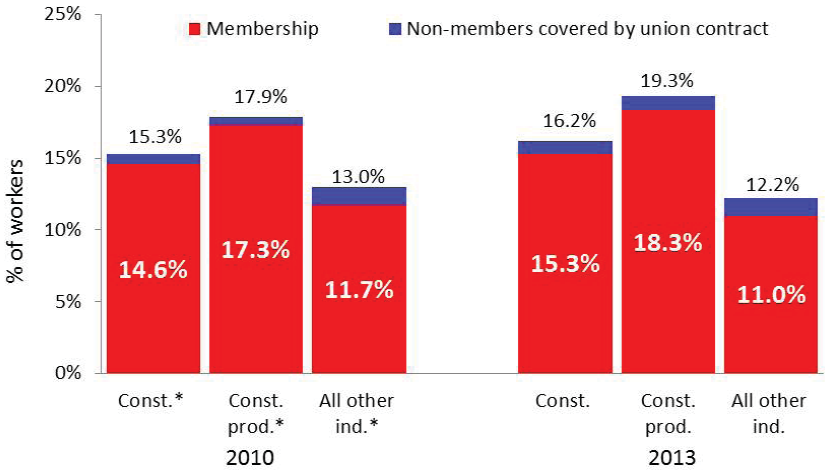
Source: U.S. Bureau of Labor Statistics, 2010 and 2013 Current Employment Statistics. Calculations by the CPWR Data Center.

SECTION 2: Union Membership and Coverage

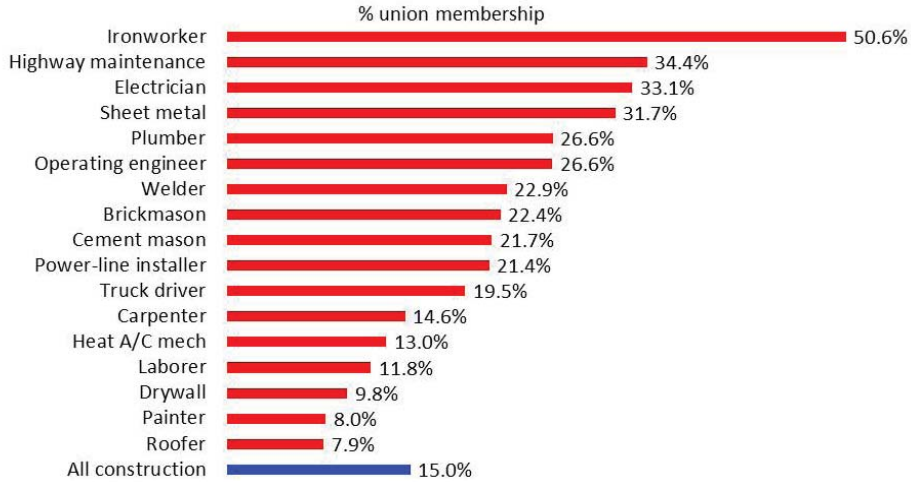
Throughout the economic recovery, the number of union members among construction workers increased from 953,700 in 2010 to 1,058,600 in 2013, and those who were covered by a union contract in construction increased from 47,600 to 60,700 during the same period (Chart 8). The majority of the gain was among construction production (i.e. blue-collar) workers—increasing from 17.9% in 2010 to 19.3% in 2013. In all other industries, union membership and coverage dropped marginally from 13.0% to 12.2%.

Union membership varies dramatically across occupations in construction. On average, union membership was highest among ironworkers between 2011 and 2013, and lowest among roofers and painters (Chart 9).

8. Union membership and coverage in construction and other industries, 2010 and 2013 (Wage-and-salary workers)



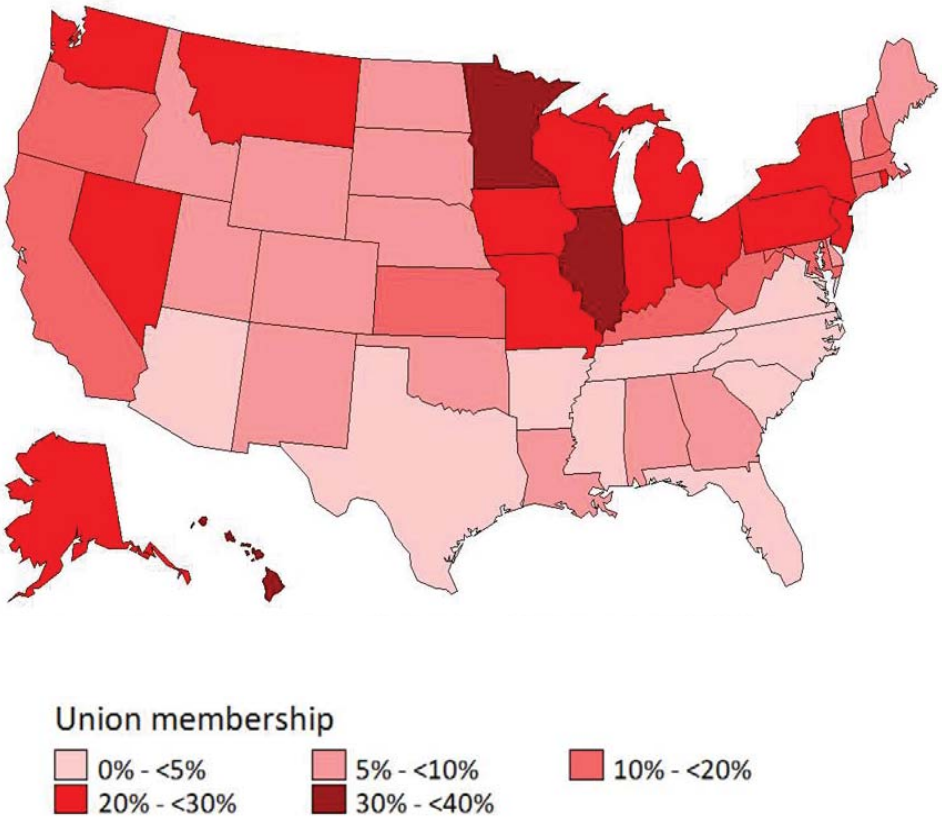
9. Union membership, selected construction occupations, 2011-2013 average (Wage-and-salary workers)



Note: Chart 8 - *Const. = construction; prod. = production; ind. = industry.
Source: Chart 8 - U.S. Bureau of Labor Statistics. 2010 and 2013 Current Population Survey. Calculations by the CPWR Data Center.
Source: Chart 9 - U.S. Bureau of Labor Statistics, 2011-2013 Current Population Survey. Calculations by the CPWR Data Center.

Union membership rates also differed among states, with the greatest membership in the North and Midwest (Chart 10). Union membership averaged nearly 40% among construction workers in Illinois between 2011 and 2013, higher than any other state in the U.S. In contrast, less than 1% of construction workers in North Carolina were union members during the same time period.

10. Percentage of union membership in construction, by state, 2011-2013 average (Wage-and-salary workers)



Source: U.S. Bureau of Labor Statistics, 2011-2013 Current Population Survey. Calculations by the CPWR Data Center.

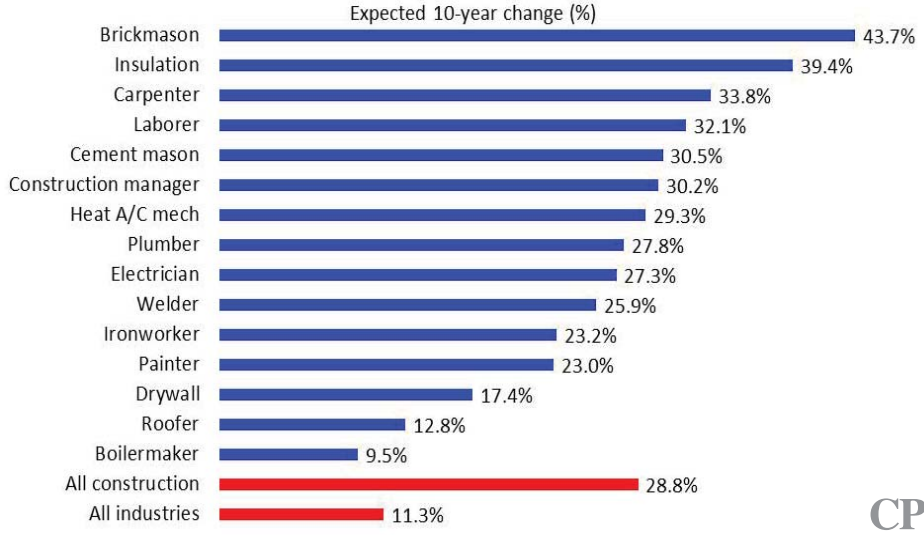
SECTION 3: Employment Projections in Construction

With the economy showing modest improvement since the recession, employment projections provide an estimate of future growth to 2022. The projections are bright for the construction industry, with growth of nearly 30% expected from 2012 to 2022—an annual increase of about 2.6% (Chart 11). In particular, Residential Building is projected to expand by almost 50% within the 10-year period. Land Subdivision may grow the least of any subsector in construction (11%); however, this rate is in line with the growth expected for all industries combined. Even so, construction employment in 2022 is not expected to reach the peak level of the last decade.

Some occupations are also expected to grow well above average by 2022. For example, from 2012 to 2022, brickmason jobs may increase by 44%, followed by 39% for insulation jobs and 34% for carpentry jobs (Chart 12). Among construction occupations, jobs for boilermakers show the lowest expected growth—10% during this 10-year period.

11. Projected change in construction employment, by subsector, 2012-2022

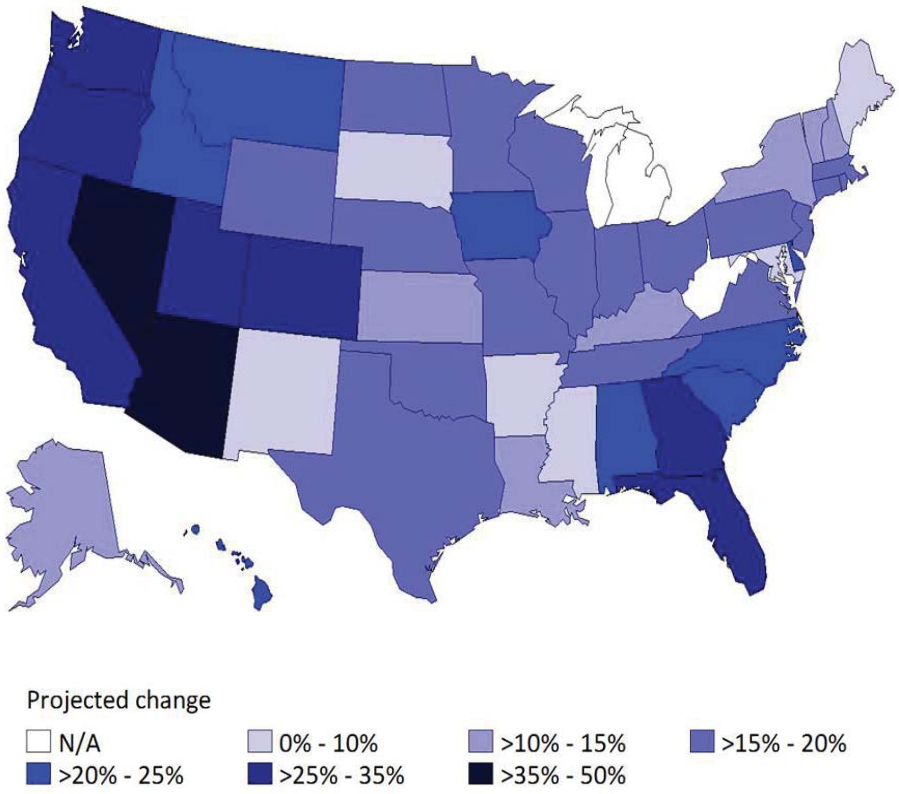
12. Projected change in construction employment, by occupation, 2012-2022



Source: U.S. Bureau of Labor Statistics, 2012-2022 Employment Projections.

Geographically, construction employment in Florida, Georgia, and the western states is expected to increase by more than 25% between 2012 and 2022 (Chart 13). In Nevada, the growth in employment may reach close to 50%, compared to only 3% in Maine.

13. Projected change in construction employment, by state, 2012-2022



Note: Some data are missing for GA, HI, IL, LA, MA, MS, NY, RI, SC, SD, VT, and WY.
Source: Projections Central: State Occupational Projections – Long Term Projections (through 2022). Calculations by the CPWR Data Center.

Conclusion

Construction employment increased in 2013 for the first time since the economic downturn. Hispanic employment in construction gained nearly a quarter million jobs between 2012 and 2013, accounting for more than two-thirds of the employment growth in this industry. Although construction employment in 2014 was still below the 2007 level, the economy showed continued signs of improvement since 2010. New hires outweighed job losses in 2014, and the number of job openings in construction continued to rise. In addition, union membership in construction increased by 104,900 workers between 2010 and 2013, while it decreased somewhat for all other industries.

The future of construction employment also appears promising. From 2012 to 2022, construction employment is expected to grow by 29% compared to just 11% for employment in all industries. Residential Building may experience almost 50% growth in employment. Employment as brickmasons should see a significant rise as well (44%). Much of this growth may occur in western states, as well as in Florida and Georgia. Increasing needs for job training and safety and health intervention programs are expected in the following years, in particular for those subgroups and geographic areas with faster growth.

Data Sources

- Bureau of Labor Statistics. 2007-2014 Current Employment Statistics http://www.bls.gov/ces/
- Bureau of Labor Statistics. 2003-2014 Current Population Survey http://www.bls.gov/cps/
- Bureau of Labor Statistics. 2012-2022 Employment Projections http://www.bls.gov/emp/
- Bureau of Labor Statistics. 2007-2014 Job Openings and Labor Turnover Survey http://www.bls.gov/jlt/
- Projections Central: State Occupational Projections – Long Term Projections (through 2022) http://www.projectionscentral.com/Home/Index

About the CPWR Data Center

The CPWR Data Center is part of CPWR – The Center for Construction Research and Training. CPWR is a 501(c)(3) nonprofit research and training institution created by North America's Building Trades Unions, and serves as its research arm. CPWR has focused on construction safety and health research since 1990. The Quarterly Data Reports – a new series of publications analyzing construction-related data, is part of our ongoing surveillance project funded by the National Institute for Occupational Safety and Health (NIOSH).

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