
CALIFORNIA EMPLOYMENT BY INCOME

A COMPARATIVE
ANALYSIS

MARCH 2016





Next 10 is an independent nonpartisan organization that educates, engages and empowers Californians to improve the state's future.

Next 10 is focused on innovation and the intersection between the economy, the environment, and quality of life issues for all Californians. We provide critical data to help inform the state's efforts to grow the economy and reduce greenhouse gas emissions. Next 10 was founded in 2003 by businessman and philanthropist F. Noel Perry.

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Data in this report can be accessed on www.Compare50.org, where users can chart and compare all 50 states on over 150 indicators.

Overview

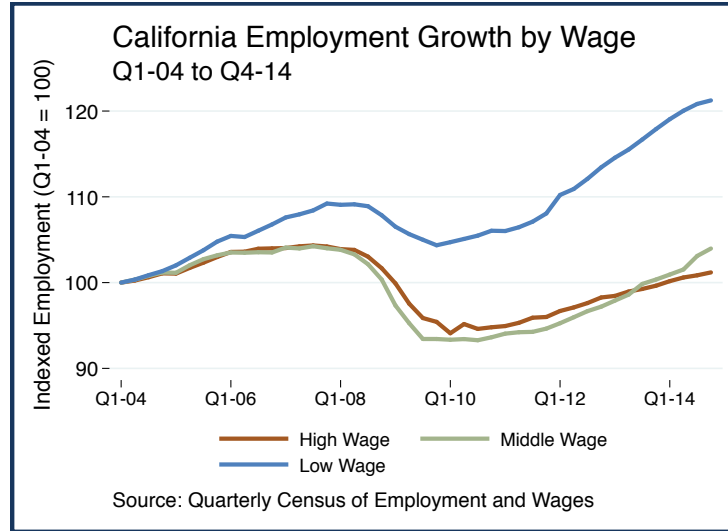
In June 2014, California's labor market finally recovered all of the jobs it had lost during the Great Recession. It was a landmark achievement and a testament to the resilience of the state's economy. California, after all, was one of the nation's hardest hit locations in the wake of the housing collapse, and had more ground to make up than most.

Many new jobs in California are in low-wage industries. Indeed, the post-recession period favored low-wage job growth over middle-wage and high-wage job growth throughout the state by a wide margin. However, California continues to contain a significant amount of jobs in middle-wage and high-wage industries as well. In fact, California has been leading the nation in both middle-wage and high-wage job creation during the post-recession recovery.

The main findings in this analysis include:

- Low-wage jobs in California are concentrated in a small number of high-level industries, such as Leisure and Hospitality, Retail, Health Care, and Agriculture. High-wage employment, on the other hand, is represented by a larger variety of smaller industries.
- Over the years, the share of employment in low-wage industries has risen in California and the nation overall.
- Low-wage job growth in California during the post-recession period ranked third highest in the nation. However, California was not the only large state to rank high in low-wage job growth: Florida and Texas were also in the top five.
- California is home to some of the leading high-wage industries in the nation, including the Professional and Technical Services industry. California ranked 11th highest amongst all states in terms of post-recession job growth in this sector. Additionally, compensation in high-wage industries in California is growing faster than the nation overall.
- California ranked 11th in terms of job growth in middle-wage industries from the fourth quarter of 2009 to the fourth quarter of 2014.

Overall, California, like other populous states, is a large producer of low-wage jobs. However, California is also a major job creator in a variety of middle-wage and high-wage industries.



High-, Middle-, and Low-Wage Industries in California

This analysis is based on the U.S. Bureau of Labor Statistics’ Quarterly Census of Employment and Wages (QCEW). Industries within the QCEW are organized according to the North American Industry Classification System (NAICS). The QCEW program publishes a quarterly count of employment and wages, as reported by employers, covering 98% of U.S. jobs by industry, and provides the most comprehensive picture of industry job growth available.

In this analysis, low-wage industries are those in the bottom 30% of jobs ranked by wage at the national level during 2014. Similarly, high-wage industries represent the top 30% of jobs ranked by wage. Those jobs between the 30th to 70th percentiles are considered middle-wage jobs.

High-wage employment in California spans a wide range of diverse industries. Indeed, the top ten grossing high-wage industries at the three-digit North American Industry Classification System (NAICS) level span across eight distinct super sectors: Professional, Scientific, and Technical Services; Health Care Services; Wholesale Trade; Government, Durable Goods Manufacturing; Finance and Insurance; Management of Companies and Enterprises; and Construction. Overall, this study estimates that there are roughly 5.4 million high-wage jobs in California—34% of all nonfarm jobs.

Top Ten High Wage Industries by Employment, Q4-14

Industry	Employment	Average Annual Wage
Professional and Technical Services	1,020,380	103,906
Hospitals	548,092	74,318
Merchant wholesalers, durable goods	312,444	76,662
Justice, public order, and safety activities	306,706	83,727
Computer and electronic product manufacturing	279,600	145,107
Credit intermediation and related activities	244,324	83,500
Merchant wholesalers, nondurable goods	243,099	61,492
Insurance carriers and related activities	204,500	83,720
Management of companies and enterprises	198,536	118,858
Construction of buildings	146,744	63,200

Source: Quarterly Census of Employment and Wages

In California, as of the fourth quarter of 2014, the Professional and Technical Services sector employed roughly one million Californians according to the QCEW, making up 19% of the state's high-wage employment. Drilling down to the four-digit NAICS level within the Professional and Technical Services industry presents a more detailed picture of the types of jobs that make up this sector. For instance, the top four-digit industries within the Professional and Technical Services sector are: computer systems design and related services; management and technical consulting services; and architectural and engineering services. Examples of jobs in these sectors include software engineers, managers, and architects.

Hospitals are the second largest of the state's high-wage sectors at the three-digit NAICS level. This sector represents 10% of high-wage employment in California with 548,100 employees. At the four-digit NAICS level, this sector is comprised of: general medical and surgical hospitals; psychiatric and substance abuse hospitals; and other hospitals.

Beacon Economics estimates that there are roughly 6.1 million middle-wage jobs in California—38% of all nonfarm jobs. The bulk of middle-wage jobs are in Educational services, which includes teachers, professors, and instructors, as well as education support staff. The QCEW data indicates that this industry includes more than 1.4 million employees, making up 24% of the state's middle-wage employment. Other major middle-wage industries include Administrative and support services, ambulatory health care services, and specialty trade contractors.

Top Ten Middle Wage Industries by Employment, Q4-14

Industry	Employment	Average Annual Wage
Educational services	1,452,719	51,545
Administrative and support services	794,123	38,584
Ambulatory health care services	578,297	65,364
Specialty trade contractors	410,141	54,600
Executive, legislative and general government	226,581	64,012
Real estate	189,142	59,644
Membership associations and organizations	165,203	40,768
Motor vehicle and parts dealers	161,344	50,596
Food manufacturing	144,091	45,032
Repair and maintenance	140,869	39,572

Source: Quarterly Census of Employment and Wages

Conversely, low-wage employment is less diverse, spanning fewer top-level sectors, as can be seen by the list of top ten low-wage industries in the table below. Overall, this study estimates that there are roughly 4.6 million low-wage jobs in California—29% of all nonfarm jobs. Furthermore, the bulk of low-wage jobs can be found in five primary sectors: Leisure and Hospitality; Private Households; Health Care Services; Retail Trade; and Agriculture. It is worth noting that the Health Care Services sector contains three-digit NAICS industries in both the high- and low-wage categories—underscoring the importance of drilling down into more detailed data rather than just looking at average wages at the super sector level.

Top Ten Low Wage Industries by Employment, Q4-14

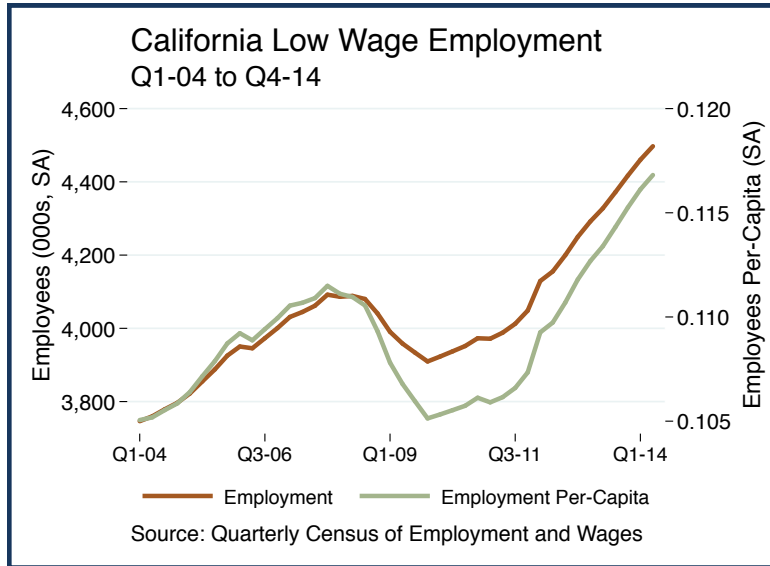
Industry	Employment	Average Annual Wage
Food services and drinking places	1,064,936	18,785
Food and beverage stores	328,943	28,010
Private households	317,810	28,094
General merchandise stores	283,611	24,102
Nursing and residential care facilities	242,279	31,150
Amusements, gambling, and recreation	234,660	26,832
Social assistance	226,470	17,689
Accommodation	208,863	32,023
Agriculture and forestry support activities	198,638	25,621
Crop production	186,150	31,473

Source: Quarterly Census of Employment and Wages

The Food Services and Drinking Places three-digit industry makes up the bulk of employment at the low end of the wage spectrum and includes jobs such as waiters and kitchen staff. The QCEW data indicates that this industry is home to 1.1 million employees, making up 23% of the state's low-wage employment. This industry is comprised of restaurants and bars, which provide some of the lowest average annual wages in California at \$18,785 per year. Among the largest low-wage industries by jobs is the Social Assistance Services industry. With an average annual wage of \$17,689, it is the lowest wage industry in the state.

Low-Wage Industry Growth in the United States

In the time since the Great Recession, from the fourth quarter of 2009 to the fourth quarter of 2014, low-wage employment in California has expanded by 16.1%. This represents the third highest growth rate in the nation over this time period. North Dakota held the number one rank with a 20.7% increased over the same time period.



Although California ranks high among the fifty states for low-wage employment growth since the recession, it is not the only large state experiencing these trends. Florida ranks number two in low-wage job growth since the fourth quarter of 2009 and Texas, a state often compared to California, comes in at number four for fastest low-wage job growth. New York was eighth on the list.

One important consideration for low-wage job growth is the Tourism industry, which is doing quite well across the nation. Food Service and Accommodation employment are some of the largest low-wage industries, and labor demand among these establishments stems primarily from tourism and recreational activities. Business travel will also support these industries, but the fact that these jobs are expanding is an indication of a growing economy where individuals and businesses are able to increase travel spending. Ultimately, this is a sign of strength for the economy.

State	Q4-14 Employment	Post-Recession Growth (%)	Population Growth (%)
North Dakota	116,568	20.7	11.2
Florida	2,350,387	16.2	6.7
California	4,560,546	16.1	5.0
Texas	2,748,083	15.1	8.7
Oregon	507,254	13.6	4.2
Colorado	633,040	13.2	7.7
Delaware	116,577	12.8	4.9
New York	2,293,686	12.6	2.3
Massachusetts	883,135	12.0	3.5
Utah	299,613	11.2	8.1

Source: Quarterly Census of Employment and Wages

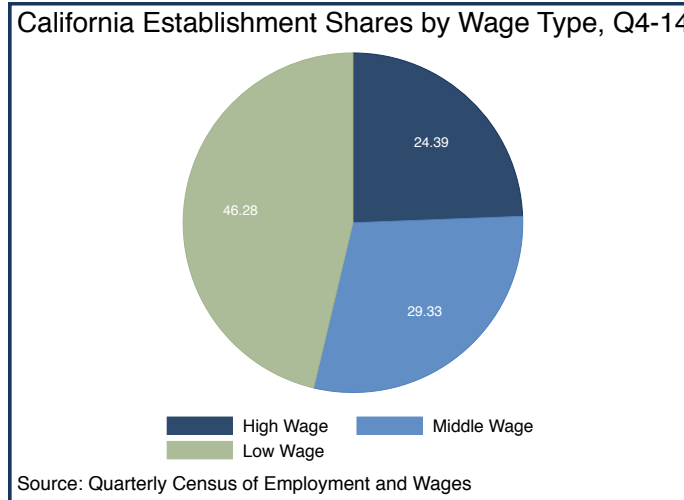
Low-Wage Share of Industries in California

The share of employment in low-wage industries has gradually risen over the years in both California and the nation overall. In 1999, the share of employment in low-wage industries was 23.9% in California and 23.7% in the nation overall. As of 2014, the shares have risen to 28.6% and 26.2%, respectively.

	1999	2004	2009	2014
United States				
Low Wage	23.7	24.6	25.6	26.2
Middle Wage	39.9	40.5	39.6	39.7
High Wage	36.4	34.9	34.8	34.1
California				
Low Wage	23.9	25.3	27.0	28.6
Middle Wage	38.8	39.1	37.8	37.7
High Wage	37.3	35.6	35.2	33.8

Source: Quarterly Census of Employment and Wages

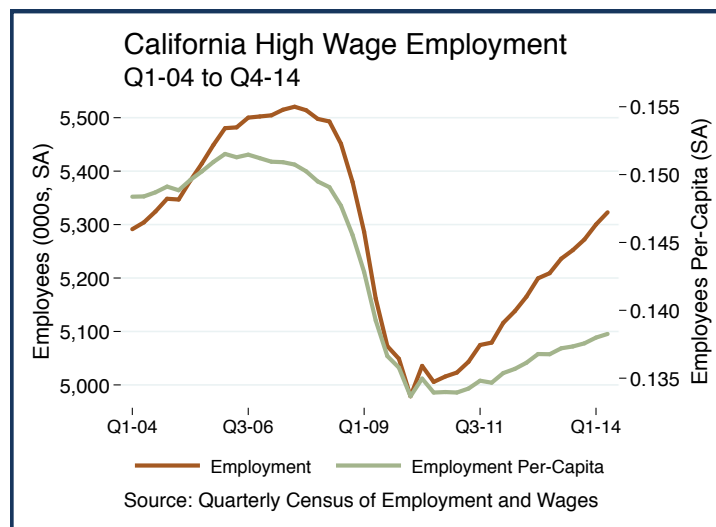
As mentioned previously, low-wage jobs in California are concentrated in fewer industries than are high-wage jobs. Out of the 100 industries at the three-digit NAICS level, 19 are classified as low-wage. Thirty-seven industries are classified as middle-wage, and 44 are considered high-wage.



While low-wage jobs are found in a narrower spectrum of industries in California, the same cannot be said for the number of establishments in the state. As of the fourth quarter of 2014, the number of business establishments in low-wage industries made up 46.3% of all establishments. California ranks highest in the nation in its share of establishments in low-wage industries. The national average is 29.8%, with Utah having the lowest share at 20.1%.

Leading High-Wage Industries in California

California is a leader in high-wage job creation. Not only does it have some of the fastest growing high-wage industries, but compensation for these jobs has grown faster in California than in the nation overall. Over the last ten years compensation growth in high-wage industries averaged 3.7%. In contrast, compensation in high-wage industries in the nation overall grew by 3.3%.



First and foremost among leading high-wage industries is California’s Professional and Technical Services sector. Since the labor market hit bottom in the fourth quarter of 2009, employment in this industry has grown by 18.1%—the eleventh fastest growth rate in the nation over that time period. The state with the fastest growth for Professional and Technical Services employment was North Dakota, where jobs in this sector grew by 38.0% over the same time period.

California’s growth ranking for the Professional and Technical Services industry is more impressive when considering the states ranked at the top. With the exception of Texas at number four and Michigan at number six, the others are relatively small states.

California has by far the largest Professional and Technical Services industry in the nation. As of the fourth quarter of 2014, this industry had 1.2 million employees, representing 13.9% of the national industry. In fact, California has produced more Professional and Technical Services jobs post-recession than the top five growth states combined—including Texas.

State	Q4-14 Employment	Post-Recession Growth (%)
North Dakota	18,158	38.0
Utah	86,201	32.5
Oregon	88,443	25.0
Texas	701,765	24.9
Delaware	28,821	21.3
Michigan	270,418	21.3
Georgia	261,349	21.2
Colorado	202,481	20.5
South Carolina	87,794	18.6
North Carolina	215,496	18.2
California	1,192,591	18.1

Source: Quarterly Census of Employment and Wages

California’s third largest high-wage industry, Merchant Wholesalers of Durable Goods, has also been leading the nation in job growth since the fourth quarter of 2009. During the post-recession period employment in Merchant Wholesalers of Durable Goods grew by 10.1%, greater than the 7.5% growth seen nationwide. The industry in California ranked 16th in growth out of the 50 states. North Dakota again ranked number one with a 57.1% growth rate over the same time period. Much like the Professional and Technical Services industry, the higher-ranked states had smaller bases to begin with and are seeing faster growth rates from those smaller bases. California already had a sizeable employment base in these industries.

The Management of Companies industry, the ninth largest high-wage industry in California, has also done well post-recession—expanding by 16.4% since the fourth quarter of 2009. For this industry, California ranked 31st in growth amongst the 50 states and trailed the nation overall at 18.2%. Texas took the number one spot with a 50% rate of increase over the same time period.

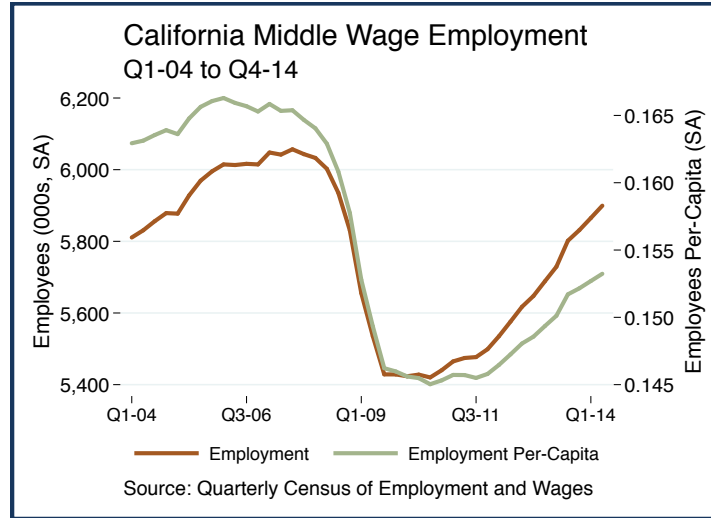
One of the main reasons California is not higher in the rankings for high-wage job growth is due to the Hospitals industry, the second largest high-wage industry in the state, and one that has lagged the rest of the nation significantly. From the fourth quarter of 2009 to the fourth quarter of 2014, California employment in the Hospitals industry has contracted by 4.3%. In contrast, Hospital industry employment in the nation overall grew by 2.3%. This places California 48th in the growth rankings.

A handful of California's other large, high-wage industries have lagged other states during the post-recession period and have dragged down overall high-wage employment growth. In particular, employment growth in the Credit Intermediation and the Insurance Carrier industries has trailed the national average, contracting by 1% and 5.1%, respectively. This largely reflects the fact that mortgage lending has yet to resume at a faster pace.

Middle-Wage Industries in California

Similar to high-wage industries, California's middle-wage industries have experienced rising employment counts that surpass the nation overall accompanied by faster growing compensations. Over the last ten years, the average wage in middle-wage industries rose by 2.9% in California versus 2.6% in the nation, leaving the average wage in California 12.4% higher than the national average. Higher wages in California reflect employers' willingness to pay a premium, either because the local workforce is more productive or because there is a shortage of workers in these industries.

The Education services industry is one of the middle-wage industries that appears to have a shortage of workers. The average wage in the industry was \$51,545 in 2014, 12.4% more than the national average wage in the industry. California is rich in high-ranking universities that attract students from all over the world. Apart from hiring well-known professors, these universities pay respectable salaries to their support workers. In all, the average wage at colleges and universities in California is 18.5% greater than in the nation.



Summary

This report examined low-, middle-, and high-wage industry growth in California and illustrated how that growth compares to the rest of the nation. While California does rank high in low-wage job creation post-recession, it is also home to numerous high-wage industries that are leading the country in high-wage job creation. Additionally, compensation in high-wage and middle-wage industries in California are growing faster than in the nation overall.

The trend of low-wage job creation is not unique to California. Both Florida and Texas were among the top ten states for low-wage job growth during the post-recession period. In fact, there were so many large population states in the rankings that the national average for low-wage job growth fell just behind twelfth-ranked New York, rather than in the middle of the pack.

In California, and throughout the United States, there have been a large number of low-wage jobs created during the post-recession period. And while this has not helped to raise household incomes over the last few years, it is not necessarily a sign of a weak economy. Several of the low-wage industries experiencing major employment increases are part of the broader tourism and travel industry. Recreation and business travel have increased over the years as the overall economy has recovered from the recession. Demand for these types of services is ultimately a sign of strength. Perhaps, more importantly, is that the state and nation overall are also creating high-wage jobs for skilled workers.

Ultimately, wages are a function of skills and the demand for those skills. Given California's role as a leader in both tourism and technology, the state should expect to continue creating a mix of high-, middle- and low-wage jobs as businesses invest, construction picks up, consumers increase spending, and tourists continue to travel. California needs to maintain its focus on growing the most skilled and educated workforce in the nation in order to unlock high-wage opportunities for more of its

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residents and enable the high-tech sectors that have become synonymous with the state to flourish. However, California also needs to provide jobs for those who have yet to seek higher-skilled training opportunities. With jobs growing across the spectrum of wage categories and general economic conditions continuing to improve, there is now breathing room available to begin tackling that challenge strategically.