



## Education level and jobs: Opportunities by state

*Elka Torpey and Audrey Watson | September 2014*

Have a high school diploma? You might be wowed by Wyoming's large share of occupations for people with that level of education. Do you have a master's degree? Start dreaming of Delaware, where you may have more options than in other states.

The types of jobs available vary by state. Some states have a higher concentration of jobs in occupations that typically require a doctoral or professional degree. Others have a higher concentration of jobs in occupations that typically require a different level of education, from less education than a high school diploma to a master's degree.



Of course, broad education levels in jobs is just one way to look at employment opportunities by state. The specific field in which you have your education is important, too—especially for workers with higher levels of education. And job prospects vary by state for a number of reasons. For example, some states have more jobs or higher wages in a particular industry.

But state data showing job share by education level may be both interesting and helpful for jobseekers pondering career choice and geographic location. The first section of this article describes states with high concentrations of jobs in occupations that typically require one of several levels of education. The second section explains the data used for the analysis. And the third section suggests sources for more information.

This analysis focuses on the percentage of jobs, rather than on the number, because at every education level, heavily populated states (such as Texas and Illinois) have more jobs than less populated ones (such as Rhode Island and Alaska). Although the District of Columbia is a city and not a state, it is counted among the states analyzed in this article, for a total of 51.

## Jobs by education level

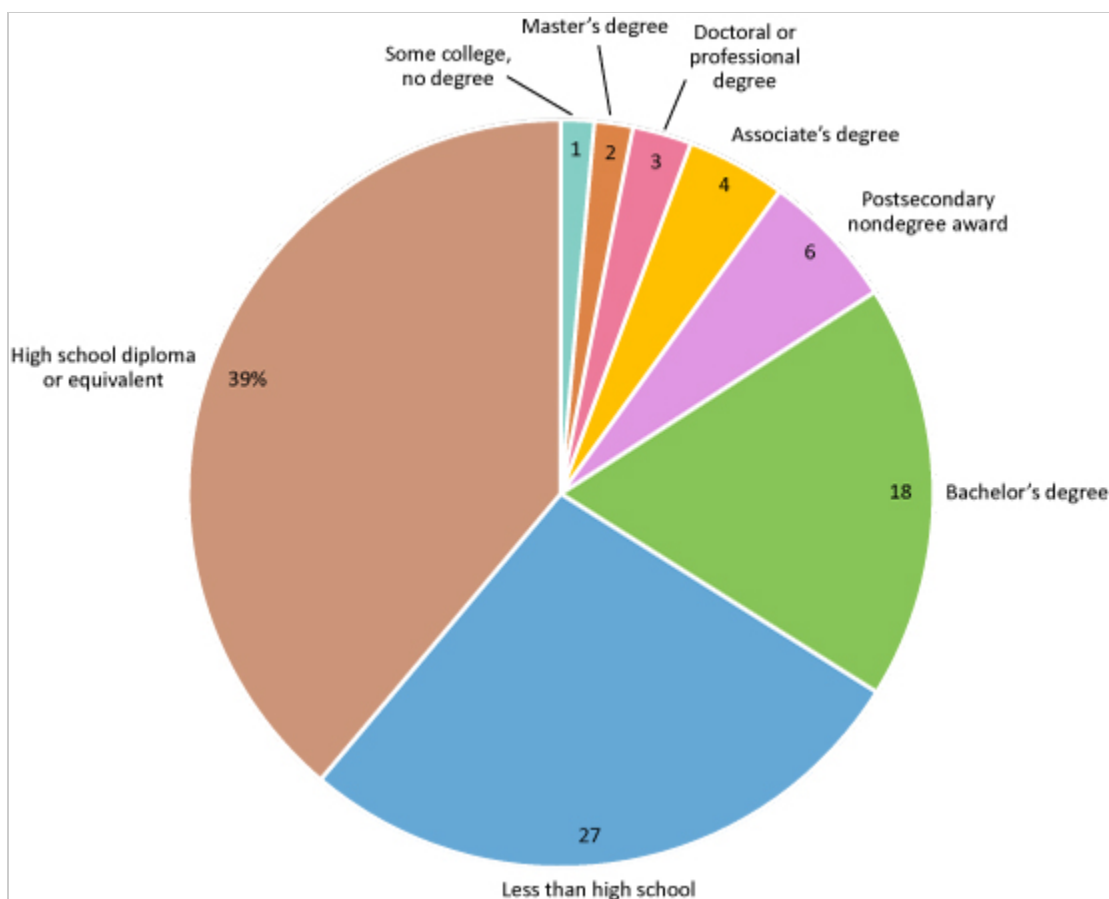
The U.S. Bureau of Labor Statistics (BLS) designates 1 of the following 8 education levels that workers typically need to enter an occupation:

- Less than high school
- High school diploma or equivalent
- Some college, no degree
- Postsecondary non-degree award
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctoral or professional degree

BLS education and training designations include on-the-job training and work experience in a related occupation, as well as education. This article analyzes data only by education level because it is often the first requirement that jobseekers must meet when applying for an entry-level position in an occupation.

The chart shows the proportion of jobs nationwide in May 2013 that were in occupations at each of the education levels. About 84 percent of jobs fall into three categories: high school diploma or equivalent, less education than a high school diploma, and bachelor's degree.

### **Jobs by designated education level of occupations, May 2013**



Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics survey (employment data) and Employment Projections program (occupational education-level designations).

States have similar overall patterns. For example, high school-designated occupations make up the largest percentage of jobs in all the states, just as they do for the country as a whole. However, the specific occupations within a given education level differ from one state to another.

Tables in the sections that follow show data in 10 states with the highest concentrations of jobs in occupations at each level of education. Accompanying text gives examples of occupations with employment rates that are higher in a particular state than they are nationally. The tables and text also provide the median annual wage for occupations at each education level for comparison with the national median for all occupations (\$35,080).

Some states—including Arizona, Georgia, Missouri, North Carolina, and Oregon—don't show up in any of these lists. In these states, the concentrations of jobs by education level are usually similar to those nationwide.

## Less education than a high school diploma

In May 2013, about 27 percent of all U.S. jobs were in occupations that typically require less education than a high school diploma for entry. These jobs had a median annual wage of \$20,350. BLS designates 100 occupations with this level of education. The states shown in table 1 have high concentrations of jobs in those occupations.

**Table 1. States with the largest shares of employment in occupations that typically require less education than a high school diploma, May 2013**

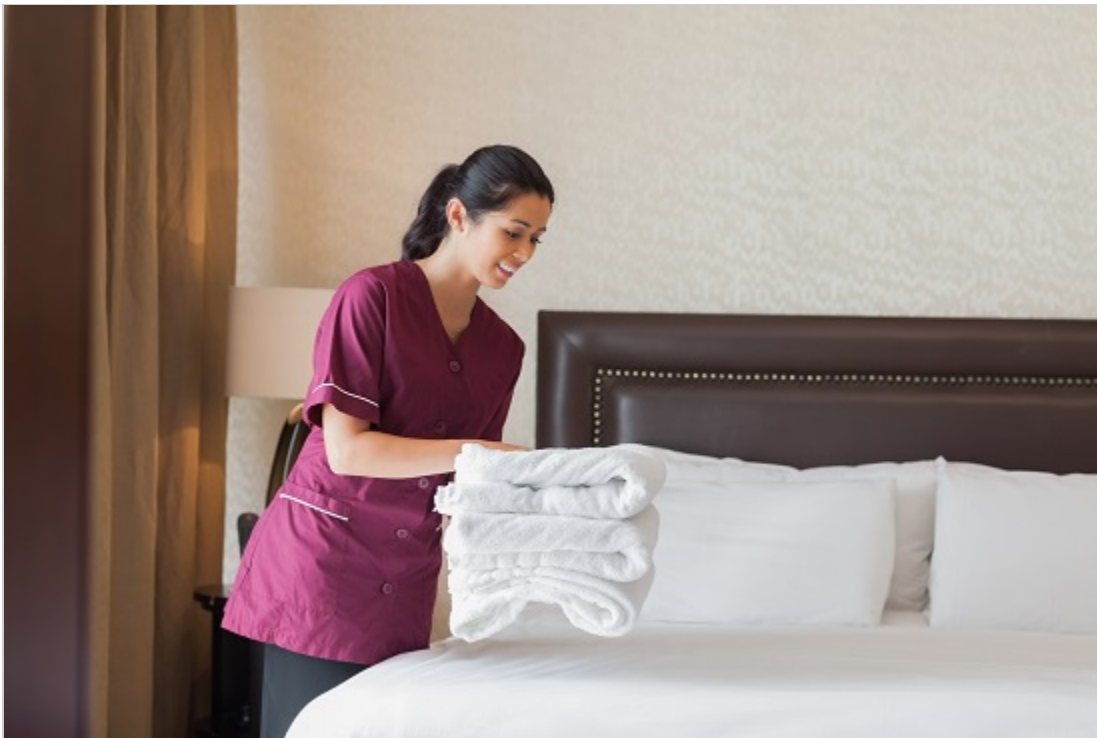
State	Employment share (percent)	Number of jobs	Median annual wage
See footnotes at end of table.			
United States, total	27.2%	36,116,050	\$20,350
Nevada	35.9	413,580	23,240
Hawaii	32.3	194,470	24,150
South Dakota	30.1	121,320	20,120
Florida	29.9	2,229,020	19,480
New Mexico	29.8	233,760	19,750
Louisiana	29.3	552,970	19,140
Mississippi	29.2	316,260	18,920
South Carolina	29.1	530,980	18,990
West Virginia	29.1	206,230	18,840
North Dakota	29.0	122,660	23,480

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics survey (employment and wage data) and Employment Projections program (occupational education-level designations).

Some of these states are popular vacation or retirement destinations and have many jobs in occupations related to leisure and hospitality—an industry with opportunities for workers who have little formal education. Other states have jobs in natural resources and mining, another industry with occupational options for people who have less education than a high school diploma.

**Nevada.** Nearly 36 percent of jobs in Nevada were in occupations that typically require less education than a high school diploma, the highest concentration of any state. These occupations include [taxi drivers and chauffeurs](#); [bartenders](#); and [ushers, lobby attendants, and ticket takers](#).

**Hawaii.** In the Aloha State, more than 32 percent of jobs were in occupations that typically require less education than a high school diploma. [Parking lot attendants](#), [maids and housekeeping cleaners](#), and [restaurant cooks](#) are among the occupations that have a higher concentration of jobs in Hawaii than in the United States as a whole.



**South Dakota.** About 30 percent of jobs in South Dakota were in occupations that typically require less education than a high school diploma. Examples include [agricultural products graders and sorters](#), [slaughterers and meat packers](#), and [carpenters' helpers](#).

**Florida.** Almost 30 percent of all jobs in Florida were in occupations that typically require less education than a high school diploma. These include [motion picture projectionists](#), [landscaping and groundskeeping workers](#), and [amusement and recreation attendants](#).

**New Mexico.** In New Mexico, nearly 30 percent of all jobs were in occupations that typically require less education than a high school diploma. Examples include [wellhead pumpers](#), [derrick operators](#), and [personal care aides](#).

**Other states.** Louisiana, Mississippi, South Carolina, West Virginia, and North Dakota rounded out the states with the highest concentrations of jobs in occupations that typically require less education than a high school diploma.

The occupations in these states varied. For example, North Dakota, which has significant employment in the natural resources and mining industry, had more than 20 times the concentration of [oil and gas roustabouts](#) as was typical nationwide.

## High school diploma or equivalent

In May 2013, about 39 percent of all jobs in the United States were in occupations that typically require a high school diploma or equivalent, with a median annual wage of \$35,580. BLS designates 358 occupations at this level of education—the most of any education level.

**Table 2. States with the largest shares of employment in occupations that typically require a high school diploma or equivalent, May 2013**

State	Employment share (percent)	Number of jobs	Median annual wage
See footnotes at end of table.			
United States, total	38.9%	51,519,730	\$35,580
Kentucky	41.7	742,710	32,130
Alabama	41.5	765,320	31,860
Wyoming	41.5	115,740	39,090
Louisiana	41.4	780,010	33,170
Indiana	41.3	1,180,040	33,430
Utah	41.3	512,630	33,620
Wisconsin	41.2	1,115,140	34,970
Oklahoma	40.7	635,050	31,370
Mississippi	40.7	440,650	29,720
Kansas	40.6	542,090	33,440

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics survey (employment and wage data) and Employment Projections program (occupational education-level designations).

Many of the states listed in table 2 had relatively large percentages of their employment in manufacturing, an industry with numerous occupations for people with a high school diploma or equivalent. Other states had high concentrations of jobs in occupations related to natural resources and mining, another industry with jobs for workers who have a high school diploma or equivalent.

**Kentucky.** The Bluegrass State had about 42 percent of its jobs in occupations that typically require a high school diploma or equivalent. These occupations include [mining roof bolters](#), [metal-refining furnace operators and tenders](#), and [team assemblers](#).

**Alabama.** Nearly 42 percent of jobs in Alabama were in occupations that typically require a high school diploma or equivalent, including [metal and plastic layout workers](#); [textile winding, twisting, and drawing out machine setters, operators, and tenders](#); and [industrial machinery mechanics](#).





**Wyoming.** This state had almost 42 percent of its jobs in occupations for people with a high school diploma or equivalent. Among these occupations are [operating engineers and other construction equipment operators](#); [first-line supervisors of construction trades and extraction workers](#); and [explosives workers, ordnance handling experts, and blasters](#).

**Louisiana.** In Louisiana, about 41 percent of jobs were in occupations that typically require a high school diploma or equivalent. These include [riggers](#); [chemical plant and system operators](#); and [crane and tower operators](#).

**Indiana.** More than 41 percent of jobs in Indiana were in occupations typically requiring a high school diploma or equivalent, including [boilermakers](#); [team assemblers](#); and [metal and plastic cutting, punching, and press machine setters, operators, and tenders](#).

**Other states.** Utah, Wisconsin, Oklahoma, Mississippi, and Kansas were the remaining states with the highest concentrations of jobs in occupations that require a high school diploma or equivalent.

Like the states described previously, many of these other states had relatively more jobs in occupations associated with manufacturing or natural resources and mining.

## Some college, no degree

About 1 percent of jobs in the United States in May 2013 were in occupations that typically require some college but no degree. These jobs had a median annual wage of \$29,100. In terms of occupational options, this is a small category; BLS designates only five occupations with this level of education. (This level of education requires a high

school diploma or equivalent and the completion of one or more courses after high school that did not result in a degree or award.)

**Table 4. States with the largest shares of employment in occupations that typically require some college but no degree, May 2013**

State	Employment share (percent)	Number of jobs	Median annual wage
See footnotes at end of table.			
<b>United States, total</b>	1.4%	1,909,330	\$29,100
<b>Vermont</b>	2.4	7,280	29,100
<b>New York</b>	1.9	167,480	30,170
<b>Kansas</b>	1.9	25,880	23,780
<b>Connecticut</b>	1.9	30,360	31,790
<b>New Jersey</b>	1.9	70,870	28,870
<b>New Hampshire</b>	1.8	11,350	30,740
<b>Minnesota</b>	1.8	47,410	31,970
<b>Washington</b>	1.7	48,480	32,920
<b>Maine</b>	1.7	9,900	31,450
<b>Massachusetts</b>	1.7	54,150	33,080

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics survey (employment and wage data) and Employment Projections program (occupational education-level designations).

One occupation in particular helped the states listed in table 4 to rise above the others: [teacher assistant](#). This occupation has a relatively low wage, which contributes to the relatively low wage for this level of education. Nationally, there were about 9 teacher assistant jobs for every 1,000 jobs, compared with higher concentrations in the states discussed in the paragraphs that follow.





**Vermont.** More than 2 percent of Vermont's jobs were in occupations that typically require some college but no degree. In May 2013, 19 of every 1,000 jobs in the state were for [teacher assistants](#).

**New York.** In the Empire State, about 2 percent of all jobs were in some college, no degree occupations. [Teacher assistants](#) constituted about 14 of every 1,000 jobs in the state.

**Kansas.** As in New York, in Kansas almost 2 percent of jobs were in occupations that typically require some college but no degree. [Teacher assistants](#) accounted for 14 of every 1,000 jobs in the state.

**Connecticut.** This state also had nearly 2 percent of its jobs in occupations that typically require some college but no degree. In addition to having a high proportion of jobs for [teacher assistants](#) (13 of every 1,000 jobs), Connecticut also had a higher concentration of [computer user support specialists](#) than did the nation overall.

**New Jersey.** Almost 2 percent of jobs in New Jersey were in some college, no degree occupations. [Teacher assistants](#) accounted for a higher percentage of jobs in this state than they did nationally—about 13 of every 1,000 jobs.

**Other states.** Among the other states with high proportions of occupations that typically require some college but no degree were New Hampshire, Minnesota, Washington, Maine, and Massachusetts. These states also had relatively high concentrations of [teacher assistant](#) jobs.

## Postsecondary non-degree award

About 6 percent of all U.S. jobs were in occupations that typically require a postsecondary non-degree award for entry. The median annual wage for jobs with this education level was \$35,120 in May 2013. BLS designates 39 occupations as typically requiring this level of education. (A postsecondary non-degree award requires the

completion of high school or the equivalent and formal schooling afterward that results in a certificate or other credential awarded by an educational institution.)

**Table 3. States with the largest shares of employment in occupations that typically require a postsecondary non-degree award, May 2013**

State	Employment share (percent)	Number of jobs	Median annual wage
See footnotes at end of table.			
<b>United States, total</b>	5.9%	7,874,230	\$35,120
<b>North Dakota</b>	8.6	36,390	38,620
<b>Arkansas</b>	8.3	95,460	31,050
<b>Nebraska</b>	7.8	72,170	34,400
<b>Iowa</b>	7.3	108,690	(1)
<b>Mississippi</b>	7.2	78,340	30,730
<b>Alabama</b>	7.1	130,840	32,400
<b>Maine</b>	7.1	41,310	32,250
<b>Tennessee</b>	7.1	190,390	33,210
<b>Indiana</b>	6.9	196,740	34,660
<b>Louisiana</b>	6.9	129,370	33,210

Footnotes: (1) Estimate not released by BLS.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics survey (employment and wage data) and Employment Projections program (occupational education-level designations).

One occupation helped bring several states to the forefront of employment at this education level: [heavy and tractor-trailer truck drivers](#). All of the states shown in table 3 had higher-than-average concentrations of jobs in this occupation. Some healthcare occupations that typically require a postsecondary non-degree award also had relatively high employment in these states.



**North Dakota.** With nearly 9 percent of its jobs in postsecondary non-degree award occupations, North Dakota was among the states with the highest concentrations of jobs in occupations that typically require this level of education. Compared with the nation as a whole, this state had relatively more jobs for [heavy and tractor-trailer truck drivers](#), [electronic home entertainment equipment installers and repairers](#), and [nursing assistants](#).

**Arkansas.** In this state, more than 8 percent of jobs were in postsecondary non-degree award occupations, including [embalmers](#), [heavy and tractor-trailer truck drivers](#), and [licensed practical and licensed vocational nurses](#).

**Nebraska.** Almost 8 percent of jobs in the Cornhusker State were in occupations that typically require a postsecondary non-degree award. Among these are [transportation equipment electrical and electronics installers and repairers](#), [medical transcriptionists](#), and [nursing assistants](#).

**Iowa.** About 7 percent of Iowa's jobs were in occupations with this level of education. Examples of these include [heavy and tractor-trailer truck drivers](#), [nursing assistants](#), and [library technicians](#).

**Mississippi.** This state had more than 7 percent of its jobs in postsecondary non-degree award occupations. [Ophthalmic medical technicians](#), [surgical technologists](#), and [licensed practical and licensed vocational nurses](#) are some occupations that had higher rates of employment in Mississippi than elsewhere.

**Other states.** Alabama, Maine, Tennessee, Indiana, and Louisiana also were among the states with the highest concentrations of jobs in occupations that typically require a postsecondary non-degree award.

Several of the occupations that helped these states make the list are related to the electronics field. For example, Alabama had more than 3 times the national percentage of jobs for [powerhouse, substation, and relay electrical and electronics repairers](#).

## Associate's degree

Nationally, about 4 percent of jobs were in occupations that typically require an associate's degree for entry. The median annual wage for these jobs was \$58,240 in May 2013. BLS designates 49 occupations with this education level.

**Table 5. States with the largest shares of employment in occupations that typically require an associate's degree, May 2013**

State	Employment share (percent)	Number of jobs	Median annual wage
See footnotes at end of table.			
United States, total	4.3%	5,719,860	\$58,240
Massachusetts	5.2	169,010	66,460
Vermont	5.1	15,360	55,320
South Dakota	5.1	20,490	46,560
West Virginia	5.0	35,580	49,080
Rhode Island	4.9	22,450	66,060
Delaware	4.9	20,220	62,970
Michigan	4.9	194,970	56,770
Ohio	4.8	245,980	55,730
Montana	4.7	20,560	52,210
Maine	4.7	27,170	56,090

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics survey (employment and wage data) and Employment Projections program (occupational education-level designations).

Many of the states shown in table 5 had relatively high employment in hospitals, which have jobs in a variety of occupations that typically require an associate's degree. For example, most of these states had higher concentrations of jobs for [registered nurses](#) than did the nation as a whole.



**Massachusetts.** More than 5 percent of jobs in this state were in occupations that typically require an associate's degree. Among these are [electro-mechanical technicians](#), [social science research assistants](#), and [dietetic technicians](#).

**Vermont.** About 5 percent of jobs in the Green Mountain State were in associate's degree-level occupations. [Respiratory therapy technicians](#); [preschool teachers, except special education](#); and [dental hygienists](#) are some of the occupations with higher concentrations of jobs in Vermont than in the country as a whole.

**South Dakota.** This state had about 5 percent of its jobs in associate's degree occupations such as [agricultural and food science technicians](#), [nuclear medicine technologists](#), and [radiologic technologists](#).

**West Virginia.** With 5 percent of its jobs in associate's degree-level occupations, West Virginia had higher-than-average concentrations of jobs for [geological and petroleum technicians](#), [funeral service managers](#), and [dietetic technicians](#).

**Rhode Island.** In this state, nearly 5 percent of all jobs were in occupations that typically require an associate's degree. Examples include [magnetic resonance imaging technologists](#), [civil engineering technicians](#), and [paralegals and legal assistants](#).

**Other states.** Other states with high concentrations of jobs in associate's degree-level occupations were Delaware, Michigan, Ohio, Montana, and Maine.

Occupations with high employment in these states varied, with differences sometimes arising from a distinguishing feature of the state. For example, forest-rich Montana had nearly 21 times the national rate of [forest and conservation technicians](#).



## Bachelor's degree

In May 2013, about 18 percent of all jobs in the United States were in occupations that typically require a bachelor's degree, with a median annual wage of \$68,190. BLS designates 166 occupations in this category.

**Table 6. States with the largest shares of employment in occupations that typically require a bachelor's degree, May 2013**

State	Employment share (percent)	Number of jobs	Median annual wage
See footnotes at end of table.			
United States, total	18.0%	23,829,150	\$68,190
District of Columbia	32.2	214,640	92,340
Massachusetts	22.7	740,620	79,470
Virginia	22.3	808,730	76,360
Maryland	22.0	557,570	77,710
Connecticut	21.7	354,330	78,880
Washington	21.0	593,320	75,190
California	20.3	2,989,710	79,680
Colorado	20.2	463,740	69,400
New York	19.6	1,688,300	78,900
Delaware	19.4	79,820	72,930
Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics survey (employment and wage data) and Employment Projections program (occupational education-level designations).			

Occupations in the finance and insurance industry and the professional, scientific, and technical services industry, both of which have relatively more bachelor's-level occupations than some other industries, had high concentrations of jobs in the states listed in table 6.

**District of Columbia.** The Nation's Capital had the highest concentration of jobs in bachelor's degree-level occupations, more than 32 percent of all jobs. Among the occupations are [public relations specialists](#), [reporters and correspondents](#), and [management analysts](#).



**Massachusetts.** Nearly 23 percent of jobs in Massachusetts were in occupations that typically require a bachelor's degree. [Microbiologists](#), [biomedical engineers](#), and [systems software developers](#) are among the occupations with higher rates of employment in this state than nationally.

**Virginia.** In Virginia, more than 22 percent of all jobs were in bachelor's degree-level occupations. Some of the occupations with relatively high rates of employment are [ship engineers](#), [nuclear engineers](#), and [information security analysts](#).

**Maryland.** About 22 percent of jobs in Maryland were in occupations that typically require a bachelor's degree. These include [budget analysts](#), [atmospheric and space scientists](#), and [middle school special education teachers](#).

**Connecticut.** With almost 22 percent of the state's jobs in occupations that typically require a bachelor's degree, Connecticut had a high concentration of [actuaries](#), [aerospace engineers](#), and [marketing managers](#).

**Other states.** Washington, California, Colorado, New York, and Delaware also had high concentrations of jobs in occupations that typically require a bachelor's degree. For example, New York had more than 6 times the national rate of [fashion designers](#).

## Master's degree

About 2 percent of the nation's jobs were in occupations that typically require a master's degree. In May 2013, the median annual wage for those jobs was \$64,510. BLS designates 39 occupations at this level of education.

**Table 7. States with the largest shares of employment in occupations that typically require a master's degree, May 2013**

State	Employment share (percent)	Number of jobs	Median annual wage
See footnotes at end of table.			
United States, total	1.7%	2,214,480	\$64,510
District of Columbia	3.8	25,560	82,360
Massachusetts	2.7	86,660	67,720
Vermont	2.5	7,520	57,980
Maryland	2.2	55,680	75,960
Delaware	2.1	8,670	66,710
Idaho	2.1	12,760	49,620
Maine	2.0	11,880	61,830
New York	2.0	173,230	70,970
Montana	2.0	8,620	51,950
Rhode Island	2.0	8,950	69,920

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics survey (employment and wage data) and Employment Projections program (occupational education-level designations).

Many of the states shown in table 7 are the same as those with high concentrations of jobs for associate's, bachelor's, and doctoral and professional degree-level occupations. Occupations commonly found in government and social assistance industries are among those with relatively high concentrations of jobs in these states.

**District of Columbia.** With nearly 4 percent of its jobs in occupations that typically require a master's degree, the District of Columbia had the highest concentration of jobs at this education level. [Political scientists](#), [economists](#), and [historians](#) are among the occupations that are more heavily concentrated in this city than in the states.

**Massachusetts.** This state had almost 3 percent of its jobs in occupations that typically require a master's degree. Among these occupations are [industrial-organizational psychologists](#), [statisticians](#), and [healthcare social workers](#).

**Vermont.** About 3 percent of all jobs in Vermont were in occupations that typically require a master's degree. These occupations include [urban and regional planners](#), [nurse midwives](#), and [mental health counselors](#).



**Maryland.** In this state, more than 2 percent of jobs were in occupations that typically require a master's degree. Occupations that have higher concentrations of jobs in Maryland than in the country as a whole include [statisticians](#), [mathematicians](#), and [epidemiologists](#).

**Delaware.** The First State also had more than 2 percent of its jobs in occupations that typically require a master's degree. [Marriage and family therapists](#), [urban and regional planners](#), and [nurse anesthetists](#) are some of the occupations that had relatively high rates of employment in this state.

**Other states.** Other states with high percentages of jobs in master's degree-designated occupations included Idaho, Maine, New York, Montana, and Rhode Island.

Occupations that are concentrated more in these states than nationwide varied. For example, [elementary and secondary school education administrators](#) were concentrated in Maine, and [librarians](#) were concentrated in Rhode Island.

## Doctoral or professional degree

About 3 percent of all jobs in the United States were in occupations that typically require a doctoral degree (Ph.D.) or first professional degree, such as in law or medicine. In May 2013, the median annual wage for those jobs was \$97,550. BLS designates 64 occupations with this level of education.

**Table 8. States with the largest shares of employment in occupations that typically require a doctoral or professional degree, May 2013**

State	Employment share (percent)	Number of jobs	Median annual wage
See footnotes at end of table.			
United States, total	2.6%	3,405,980	\$97,550
District of Columbia	8.0	53,320	136,120
New York	3.5	306,360	105,860
Massachusetts	3.5	115,380	102,420
Vermont	3.2	9,590	85,690
Rhode Island	3.2	14,410	96,380
Maryland	3.1	79,770	100,650
Delaware	3.0	12,390	110,130
Connecticut	2.9	47,380	103,370
New Jersey	2.9	109,310	107,050
Pennsylvania	2.8	158,690	96,020

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics survey (employment and wage data) and Employment Projections program (occupational education-level designations).

Many of the states listed in table 8 have a relatively high number of colleges and universities, which are one of the main employers of [postsecondary teachers](#)—an occupation that typically requires a doctoral degree. Other states have significant employment in scientific research and development services, another industry with many jobs at the doctoral degree level.

**District of Columbia.** About 8 percent of jobs in the District of Columbia were in occupations typically requiring a doctoral or professional degree. Most notably, the District had nearly 11 times the rate of employment for [lawyers](#) than the country had as a whole. Other occupations with high concentration of jobs at this education level are [postsecondary political science teachers](#) and [physicists](#).

**New York.** New York had almost 4 percent of its employment in occupations that typically require a doctoral or professional degree. Occupations include [postsecondary law teachers](#), [psychiatrists](#), and [judges, magistrate judges, and magistrates](#).

**Massachusetts.** This state also had about 4 percent of its jobs in occupations typically requiring a doctoral or professional degree. Compared with other states, Massachusetts had higher rates of employment for occupations such as [biochemists and biophysicists](#); [medical scientists, except epidemiologists](#); and [postsecondary architecture teachers](#).





**Vermont.** More than 3 percent of jobs in Vermont were in occupations that typically require a doctoral or professional degree. Among them are [postsecondary environmental science teachers](#), [general pediatricians](#), and [veterinarians](#).

**Rhode Island.** The Ocean State also had more than 3 percent of jobs in occupations that typically require this level of education, including [postsecondary library science teachers](#), [computer and information research scientists](#), and [podiatrists](#).

**Other states.** Maryland, Delaware, Connecticut, New Jersey, and Pennsylvania also had relatively high concentrations of jobs in doctoral or professional degree-level occupations. For example, [judicial law clerks](#) was one of the occupations that had a higher rate of employment in Pennsylvania than elsewhere: nearly 3 times the concentration of jobs compared with the country as a whole.

## How we got the numbers

This article uses several BLS data sources to analyze state employment by education level.

### Employment

We started with data from the BLS [Occupational Employment Statistics \(OES\) survey](#), a measure of jobs at the national, state, and local level for more than 800 occupations. This article uses information collected on the number of jobs in each occupation by state in May 2013.

## Education levels

Economists in the BLS [Employment Projections program](#) designate the education level, on-the-job training, and work experience in a related occupation that are typically required to enter an occupation. Although this article discusses only the education portion of these designations, training and experience are included in other BLS occupational analyses.

**On-the-job training.** Some workers acquire the skills they need to become competent in an occupation by training on the job. On-the-job training designations include internship/residency, apprenticeship, long-term, moderate-term, short-term, and none.

**Work experience.** To enter some occupations, workers need experience in a related occupation. For example, a [school principal](#) usually must have first worked as a [teacher](#).

In other occupations, such as [computer and information systems managers](#), work experience in a related occupation is a commonly accepted substitute for formal education or training.

Work experience designations include 5 years or more, less than 5 years, and none.

**Other paths to entry.** People sometimes enter the same occupation with different levels of education, training, and experience. The BLS designations are based on what is typical, but many occupations have multiple paths to entry.

For example, many [teacher assistants](#) have a high school diploma. Others have a bachelor's or associate's degree. BLS designates this occupation as typically requiring some college but no degree as the most common requirement for entry-level teacher assistant jobs. But jobseekers with other levels of education may apply for entry-level jobs, and some employers may prefer to hire candidates who have more education than what is typical.

## Putting it together

After combining the information from the OES survey and the Employment Projections program, we looked more broadly at state occupational employment by education level. Then, we identified occupations with relatively high concentrations of jobs by state.



## Learn more

Knowing where an occupation is concentrated is one way to begin thinking about job options. Information from BLS and the U.S. Department of Labor can help you explore this topic in other ways.

For a state-by-state listing of May 2013 jobs by occupation, visit the [Occupational Employment Statistics program](#).

Visit the Employment Projections program online for [tables of the education and training levels designated by BLS](#) and [tables of education attained by workers in detailed occupations](#).

The [Occupational Outlook Handbook](#) provides information about nearly 600 occupations in 334 profiles that describe job tasks, wages, outlook, and more.

The data used in this analysis appear in other BLS publications. For example, [these charts](#) highlight the outlook for some occupations by education and training level. And the [August 2014 Spotlight on Statistics](#) includes several charts that use education category data.

Recent articles from the *Career Outlook* staff cover education-related topics. These include:

- [“College to career: Projected job openings in occupations that typically require a bachelor’s degree”](#)
- [“Paying for college: Strategies to afford higher education today”](#)
- [“High wages after high school—without a bachelor’s degree”](#)
- [“Certificates: A fast track to careers”](#)

Articles related to using state-focused data in career planning include:

- [“Using OES occupation profiles in a job search”](#)

- [“Mapping out a career: An analysis of geographic concentration of occupations”](#)

Another way to explore careers is to learn more about industries. Recent industry-focused articles, including those describing some of the industries mentioned in this article, include:

- [“Got skills? Think manufacturing”](#)
- [“Healthcare: Millions of jobs now and in the future”](#)
- [“STEM 101: Intro to tomorrow’s jobs”](#)

In addition, *Career Outlook* [interviews with workers](#) in a variety of occupations highlight the career paths people take that may differ from the typical ones designated by BLS.

With [My Next Move](#), sponsored by the U.S. Department of Labor, you can search for occupational information by keyword, industry, or area of interest. Links to state and national job banks help you to find job openings in that occupation.

Visit your [state employment agency](#) website for other state-specific information and resources.

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## RELATED CONTENT

[Mapping out a career: An analysis of geographic concentration of occupations](#)

[Using OES occupation profiles in a job search](#)

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