

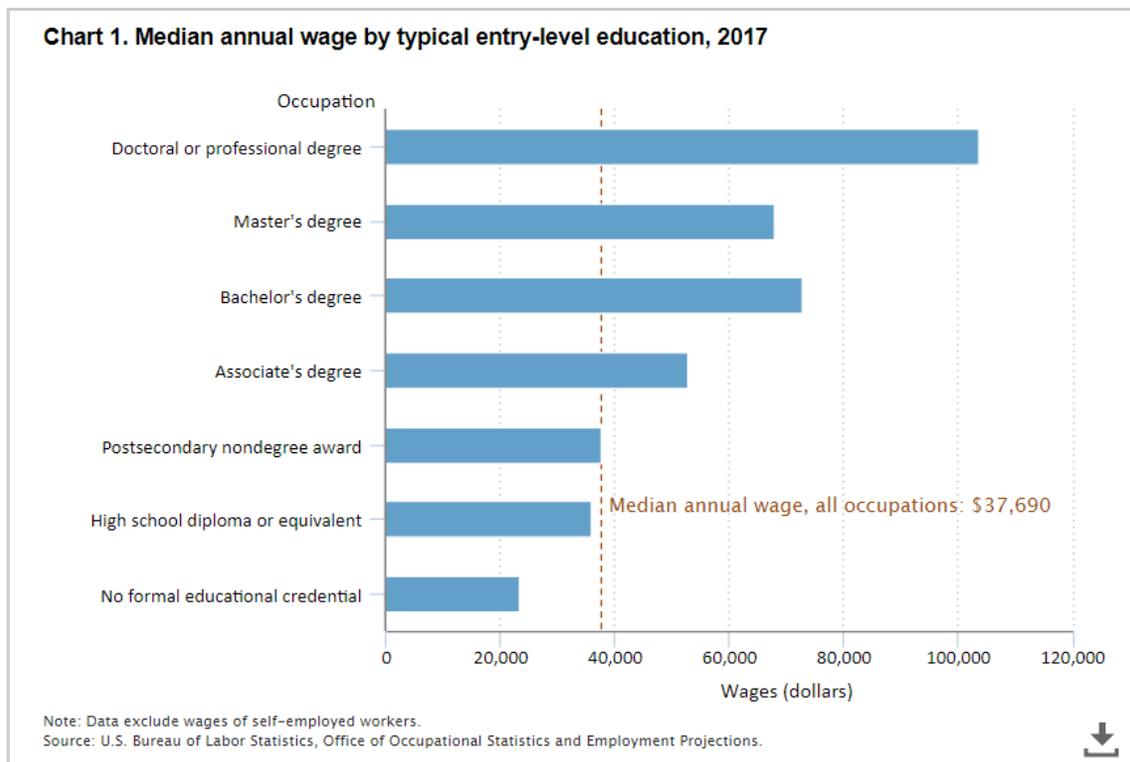


High-wage occupations by typical entry-level education, 2017

Elka Torpey | January 2019

Overall, wages are higher in occupations typically requiring a degree for entry than in occupations typically requiring less education. But that's not always the case.

The U.S. Bureau of Labor Statistics (BLS) assigns occupations to education categories on the basis of what is typically required to enter those occupations. As chart 1 shows, the median annual wage in occupations that typically require a degree at the entry level was higher than \$37,690, the median wage for all occupations in 2017. (A median wage is the point at which half of workers earned more than this amount and half earned less.)



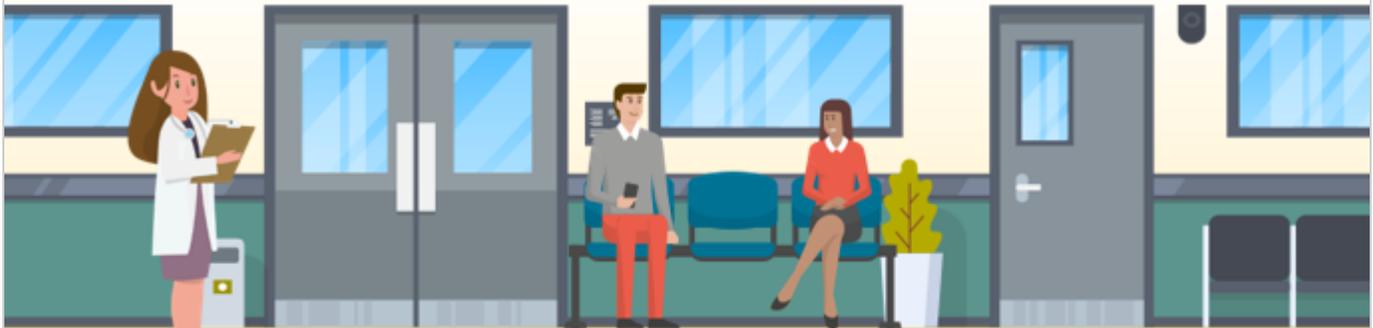
The top-paying occupations that typically don't require a degree for entry also exceeded \$37,690, even though the overall median annual wage for occupations in these categories paid less than that. The tables that follow show some of the variation among high-wage occupations in different education categories. For example, the best-paying occupations in which the typical entry-level education is a high school diploma had a median wage topping that of some of the highest paying associate's degree-level occupations in 2017.

For each occupation listed, the tables also show the experience typically required at the entry level; on-the-job training typically required to attain competency; and annual openings, on average, projected from 2016 to 2026.

Doctoral or professional degree

The highest paying education category is occupations that typically require a doctoral or professional degree for entry. The BLS Occupational Employment Statistics program does not publish wages for occupations that have a median annual wage greater than or equal to \$208,000. Therefore, table 1 shows mean, rather than median, wages.

Table 1. Highest paying occupations that typically require a doctoral or professional degree for entry, 2017



Occupation	Mean annual wage, 2017 [1]	Work experience in a related occupation	On-the-job training	Occupational openings, projected 2016–26 annual average
Anesthesiologists	\$265,990	None	Internship/residency	1,400
Surgeons	251,890	None	Internship/residency	1,900
Oral and maxillofacial surgeons	242,740	None	Internship/residency	300
Obstetricians and gynecologists	235,240	None	Internship/residency	900
Orthodontists	229,380	None	Internship/residency	300
Psychiatrists	216,090	None	Internship/residency	1,100
Family and general practitioners	208,560	None	Internship/residency	5,600

[1] Data exclude wages of self-employed workers. The Occupational Employment Statistics program does not publish wages for occupations with a median annual wage that is greater than or equal to \$208,000. Occupations in this category include most doctoral and professional degree-level occupations. Therefore, mean wages are shown.

Source: U.S. Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections.

The occupation of [family and general practitioners](#) is projected to have 5,600 openings each year, on average, from 2016 to 2026, the most of the highest paying occupations that typically require a doctoral or professional degree for entry.

Master's degree

All of the occupations listed in table 2 pay more than \$100,000 per year at the median. This is the only educational category in which all of the highest wage occupations typically don't have requirements for experience or on-the-job training.

Table 2. Highest paying occupations that typically require a master's degree for entry, 2017



Occupation	Median annual wage, 2017 [1]	Work experience in a related occupation	On-the-job training	Occupational openings, projected 2016–26 annual average
Nurse anesthetists	\$165,120	None	None	2,800
Political scientists	115,110	None	None	700
Computer and information research scientists	114,520	None	None	2,500
Physician assistants	104,860	None	None	10,600
Nurse practitioners	103,880	None	None	14,400
Mathematicians	103,010	None	None	300
Economists	102,490	None	None	1,600

[1] Data exclude wages of self-employed workers.

Source: U.S. Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections.

The occupation of [nurse practitioners](#) is projected to have 14,400 openings annually, on average, from 2016 to 2026, the most of the highest paying occupations that typically require a master's degree for entry.

Bachelor's degree

The bachelor's-level occupations shown in table 3 paid more than six of the seven highest paying master's-level occupations—and [chief executives](#) tops even the highest paying master's-level occupation, [nurse anesthetists](#). However, all but [petroleum engineers](#) typically require work experience in a related occupation for entry.



The occupation of [financial managers](#) is projected to have 56,900 openings each year, on average, from 2016 to 2026—the most of all the highest paying occupations shown in each education category.

Associate's degree

The highest paying occupation in table 4 is [air traffic controllers](#), which had a wage that was more than triple the median wage for all workers. In this occupation, workers typically need long-term on-the-job training to become competent in their job tasks.

Table 4. Highest paying occupations that typically require an associate's degree for entry, 2017



Occupation	Median annual wage, 2017 [1]	Work experience in a related occupation	On-the-job training	Occupational openings, projected 2016–26 annual average
Air traffic controllers	\$124,540	None	Long term	2,400
Radiation therapists	80,570	None	None	1,200
Nuclear technicians	80,370	None	Moderate term	800
Funeral service managers	78,040	Less than 5 years	None	2,000
Nuclear medicine technologists	75,660	None	None	1,300
Dental hygienists	74,070	None	None	17,500
Diagnostic medical sonographers	71,410	None	None	5,400

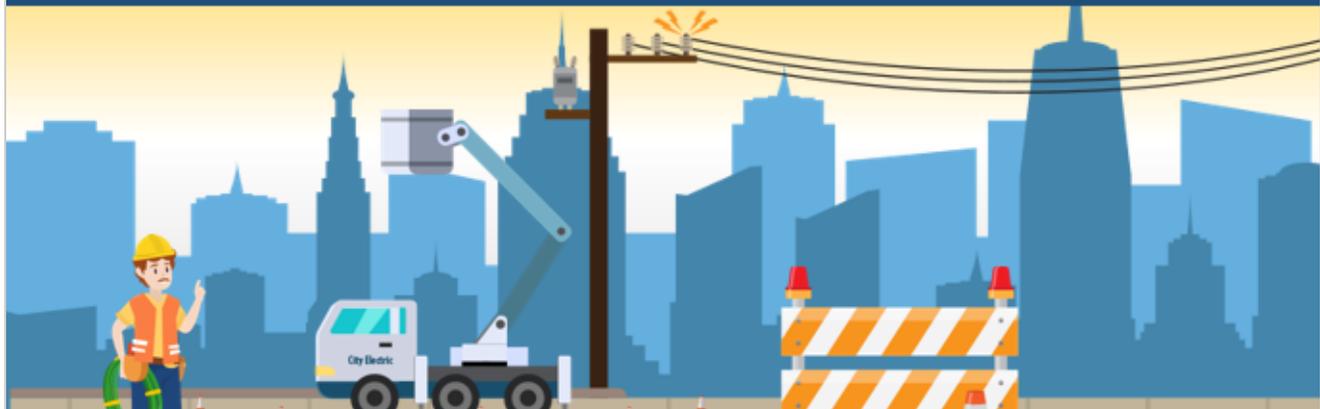
[1] Data exclude wages of self-employed workers.
 Source: U.S. Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections.

The occupation of [dental hygienists](#) is projected to have 17,500 openings each year, on average, from 2016 to 2026, more than any of the other highest paying occupations that typically require an associate's degree for entry.

Postsecondary nondegree award

Repair occupations are among the highest paying postsecondary nondegree award occupations shown in table 5. [Aircraft mechanics and service technicians](#) is the only occupation in the table that typically doesn't have requirements for work experience or on-the-job training in addition to completing an academic program.

Table 5. Highest paying occupations that typically require a postsecondary nondegree award for entry, 2017



Occupation	Median annual wage, 2017 [1]	Work experience in a related occupation	On-the-job training	Occupational openings, projected 2016–26 annual average
Electrical and electronics repairers, powerhouse, substation, and relay	\$78,410	Less than 5 years	Moderate term	2,100
First-line supervisors of fire fighting and prevention workers	76,170	Less than 5 years	Moderate term	4,400
Ship engineers	73,110	Less than 5 years	None	1,300
Captains, mates, and pilots of water vessels	70,920	Less than 5 years	None	4,400
Insurance appraisers, auto damage	62,100	None	Moderate term	1,500
Aircraft mechanics and service technicians	61,020	None	None	10,900
Electrical and electronics installers and repairers, transportation equipment	60,840	None	Long term	1,300

[1] Data exclude wages of self-employed workers.

Source: U.S. Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections.

And the 10,900 openings projected each year, on average, from 2016 to 2026 for aircraft mechanics and service technicians is another way this occupation stands apart from the other highest paying occupations that typically require a postsecondary nondegree award for entry.

High school diploma or equivalent

Wages for the top-paying high school-level occupations were more than double the median for all occupations. Each of the occupations listed in table 6 typically requires either work experience in a related occupation or on-the-job training—or both experience and training.

Table 6. Highest paying occupations that typically require a high school diploma or equivalent for entry, 2017



Occupation	Median annual wage, 2017 [1]	Work experience in a related occupation	On-the-job training	Occupational openings, projected 2016–26 annual average
Nuclear power reactor operators	\$93,370	None	Long term	500
Transportation, storage, and distribution managers	92,460	5 years or more	None	9,700
First-line supervisors of police and detectives	87,910	Less than 5 years	Moderate term	7,100
Power distributors and dispatchers	82,510	None	Long term	1,000
Detectives and criminal investigators	79,970	Less than 5 years	Moderate term	7,500
Elevator installers and repairers	79,480	None	Apprenticeship	3,000
Commercial pilots	78,740	None	Moderate term	4,000

[1] Data exclude wages of self-employed workers.

Source: U.S. Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections.

The occupation of [transportation, storage, and distribution managers](#) is projected to have 9,700 openings annually, on average, from 2016 to 2026, the most of the highest paying occupations that typically require a high school diploma or equivalent for entry.

No formal educational credential

As table 7 shows, [mine shuttle car operators](#) had the highest median annual wage of the occupations that typically don't require a formal educational credential for entry. On-the-job training is typically required for competency in all of the occupations shown.

Table 7. Highest paying occupations that typically don't require a formal educational credential for entry, 2017



Occupation	Median annual wage, 2017 [1]	Work experience in a related occupation	On-the-job training	Occupational openings, projected 2016–26 annual average
Mine shuttle car operators	\$56,890	None	Short term	100
Continuous mining machine operators	54,620	None	Moderate term	1,400
Rotary drill operators, oil and gas	53,980	None	Moderate term	2,600
Loading machine operators, underground mining	52,420	None	Short term	300
Tapers	51,620	None	Moderate term	2,100
Athletes and sports competitors	51,370	None	Long term	1,700
Service unit operators, oil, gas, and mining	48,290	None	Moderate term	6,400

[1] Data exclude wages of self-employed workers.

Source: U.S. Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections.

The occupation of [service unit operators in oil, gas, and mining](#) is projected to have 6,400 openings each year, on average, from 2016 to 2026, the most of the highest paying occupations that typically don't require a formal educational credential for entry.

For more information

A complete list of occupational wages, as well as typical entry-level education requirements and projected openings, is available from the BLS [Employment Projections](#) program. Additional wage data are available from the [Occupational Employment Statistics](#) program.

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