



The Young Professional Workforce

Young professionals are the future of the professional workforce. They are more likely to be college graduates, work in fast-growing occupations, and be racially and ethnically diverse. Understanding this group of professionals is key to anticipating the needs of the next professional workforce.

Young professionals have their challenges. While over three million jobs have been added to the young professional workforce in the last 10 years, this growth has been outpaced by the number of college graduates looking to enter the young professional workforce. Millions of college educated young workers are either working jobs that they are more than qualified to perform or unemployed because they cannot make it into the young professional workforce. Additionally, young workers, including young professionals, are less well-off financially than their parents were at their age.

The majority of the data in this fact sheet is based on analysis of Current Population Survey (CPS) data. The CPS is a survey of households jointly sponsored by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics (BLS). The CPS is the primary source for labor force data in the U.S.¹ Young professionals are defined as persons aged 20 through 34 who are working in a professional or technical occupation.

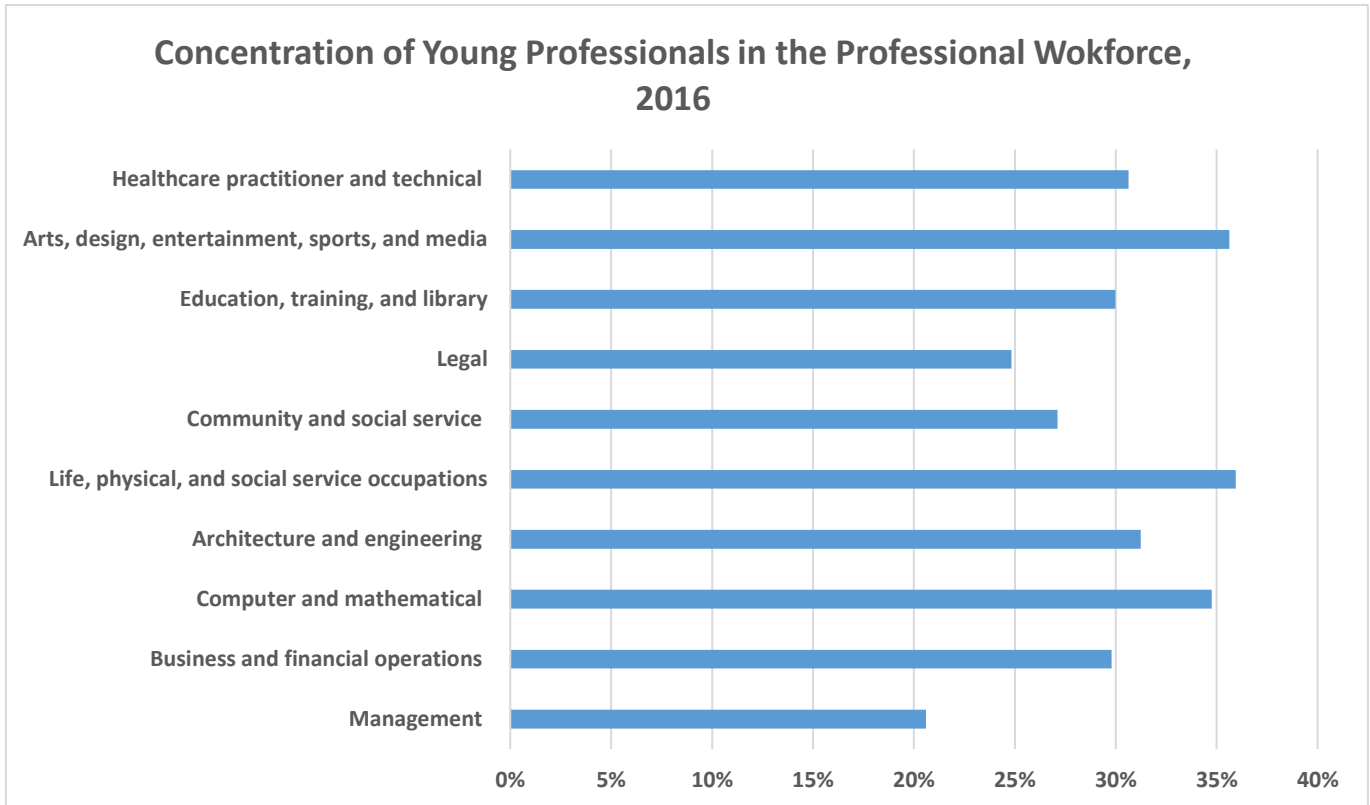
This fact sheet explores the demographics of young professionals, occupation concentration, historical employment, education attainment, unemployment and underemployment, and union membership.

Quantifying the Young Professional Workforce

In 2016, there were 17.2 million young professionals in the workforce.² The professional and technical occupations of these young workers include teachers, nurses, computer programmers, civil engineers, and over 175 other occupations.³ The occupations fit into 10 occupational groups, established by BLS, including:

- management;
- business and financial operations;
- computer and mathematical science;
- architecture and engineering;
- life, physical, and social science;
- community and social service;
- legal;
- education, training, and library;
- arts, entertainment, sports, and media; and
- healthcare practitioner and technical occupations.

- In 2016, 61.6 million people were employed in the 10 occupation groups that made up the professional workforce.⁴ Young professionals were 28 percent of the professional workforce (17.2 million professionals).⁵ The occupation group with the highest concentration of young professionals was life, physical, and social science occupations where 35.9 percent of the professional workforce was between the ages of 20 and 34 (see the chart below). The occupation group with the lowest concentration of young professionals was management occupations where just 20.6 percent of all management occupations were held by professionals between the ages of 20 and 34.



Employment and Earnings

This section examines where young professionals were employed within the young professional workforce and their earnings.

Concentration of Young Professionals

- Of the 17.2 million young professionals in 2016:
 - 21.5 percent worked in management;
 - 13.6 percent worked in business and financial operations;
 - 9.5 percent worked in computer and mathematical science;
 - 5.5 percent worked in architecture and engineering;
 - 3.1 percent worked in life, physical, and social science;

- 4.3 percent worked in community and social service;
- 2.6 percent worked in legal occupations;
- 16.7 percent worked in education, training, and library occupations;
- 6.8 percent worked in arts, design, entertainment, sports, and media; and
- 16.3 percent worked in healthcare practitioner and technical occupations.⁶

Earnings

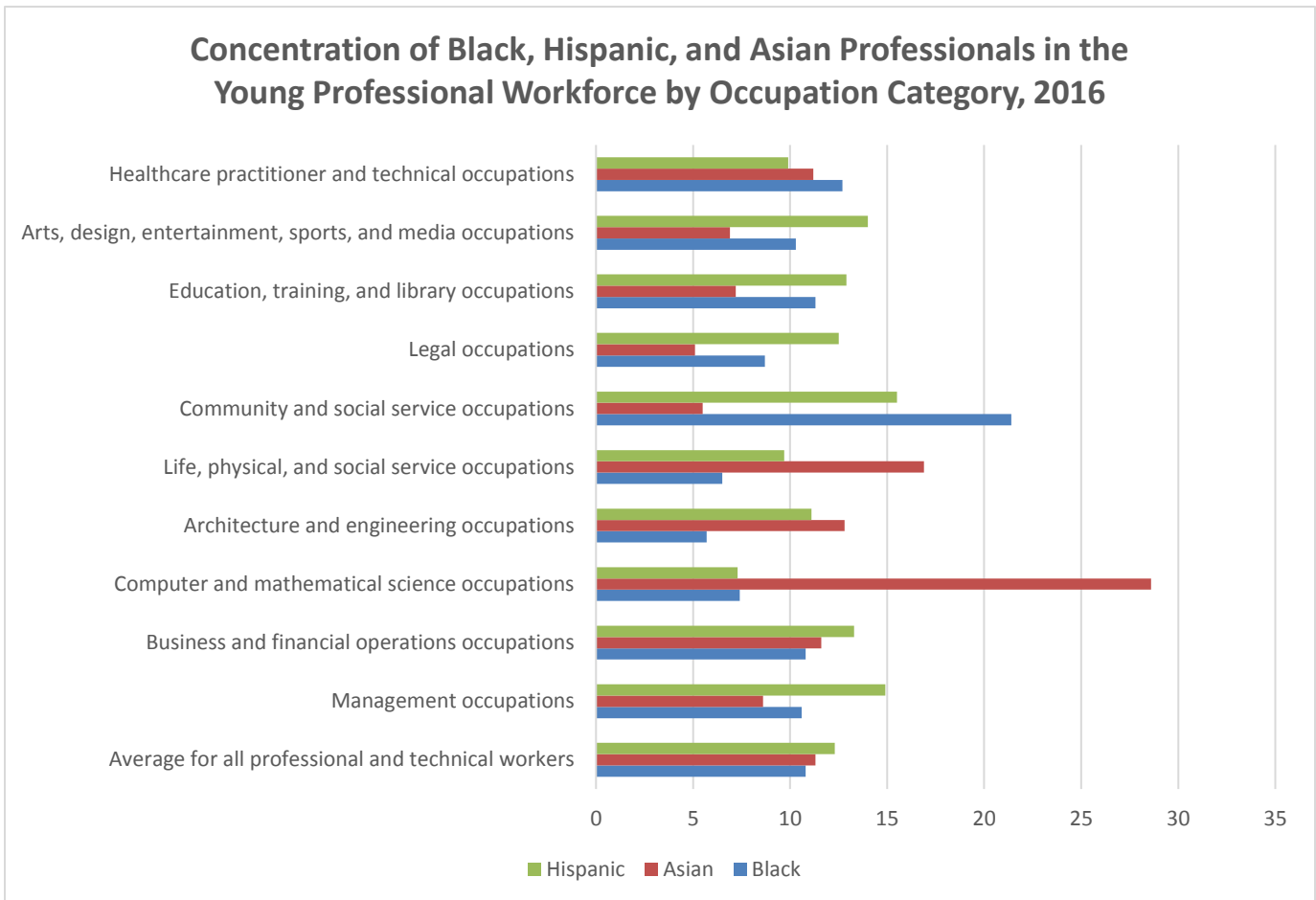
- Young professionals earned an annual average of \$53,192 in 2015. The average yearly earnings for a 25-year-old young professional were \$43,000 in 2015. The average 34-year-old young professional earned \$69,914 in 2015.⁷
- Among all 20 to 34-year-olds, those in legal occupations had the highest yearly earnings, \$72,886, followed by computer and math occupations, averaging \$64,660 in 2015. Professionals in community and social service occupations as well as those in education, training, and library occupations reported the lowest annual earnings among young professionals, which were \$35,981 and \$37,369, respectively in 2015.⁸

Race and Hispanic or Latino Ethnicity

The young professional workforce is more diverse than the larger professional workforce. Racial and Hispanic or Latino (hereafter Hispanic) minorities made up 33.7 percent of the young professional workforce in 2016.⁹ Among all professionals in management, professional, and related occupations, 28 percent belonged to a racial or Hispanic minority in 2016.¹⁰

- Black professionals made up 10.8 percent of all young professionals in 2016.¹¹ Among all workers in management, professional, and related occupations, 9.8 percent were Black in 2016.¹² In 2016, 14.3 percent of the U.S. population was Black.¹³
 - In 2016, 385,974 young Black professionals worked in management occupations—which was the occupation group with the most young Black professionals. Young Black professionals made up 10.6 percent of all young professionals in management occupations. Community and social service occupations had the biggest share of young Black professionals at 21.4 percent.¹⁴
- Young Black professionals also had above average concentration among 20 to 34-year-olds in healthcare practitioner and technical occupations, education and training occupations, and business and financial occupations.
 - Young Black professionals made up 11.3 percent of the young education, training and library occupations with 313,735 working in these occupations. Among all professionals in education, training, and library occupations, Black professionals were 10.5 percent of the workforce.

- In business and financial occupations, young Black professionals were 10.8 percent of the young professionals working in these occupations with 256,155 employed in 2016.¹⁵
- As for healthcare practitioner and technical occupations, 12.7 percent of young professionals—or 363,042 were Black.
- Hispanics made up 12.3 percent of the young professional workforce in 2016.¹⁶ Among all professionals in management, professional, and related occupations Hispanics were 9.4 percent of the workforce and 17.9 percent of the U.S. population in 2016.¹⁷
- Young professional Hispanics had above average concentration in six occupation groups: management (14.9 percent); community and social service (16.8 percent); arts, design, entertainment, sports, and media (14 percent); education, training, and library (12.9 percent); legal (12.5 percent); and business and financial (13.3 percent).



- Asian, Hawaiian, and other Pacific Islanders (Asians) made up an estimated 11.2 percent of the young professional workforce in 2016.¹⁸ Among all workers in management,

professional, and related occupations, Asians were 8.9 percent of the workforce in 2016.¹⁹ In 2016, Asians were 6.9 percent of the U.S. population.²⁰

- Among young Asian professionals, there was above average density in five of the 10 professional occupation groups in 2016.
 - The highest concentration of young Asians was in computer and mathematical science occupations where they made up 28.5 percent of young workers in 2016. When compared to all professionals employed in computer and mathematical science occupations, Asians made up 22 percent of professionals in 2016.²¹
 - Young Asian professionals also had above average density among young professionals in:
 - Business and financial occupations (11.5 percent of the young professional workforce);
 - Architecture and engineering occupations (12.8 percent of the young professional workforce); and
 - Life, physical, and social science occupations (16.9 percent of the young professional workforce).²²
 - Asians have made the largest gains in the young professional workforce. In October 1995, Asians made up just 3.4 percent of the young professional workforce. In 2016, Asians were 11.2 percent of young professionals.²³

Gender

The young professional workforce is majority female. Women have maintained majority status in education and healthcare occupations, but men still hold most jobs in engineering and computer occupations.

- In 2016, women were 54 percent of the young professional workforce. Young professional women were disproportionately represented in education occupations. They made up 71.5 percent of all professionals in education, training, and library occupations. The concentration of women was even higher among preschool and kindergarten teachers where they were 96 percent of the young professional workforce and female elementary and middle school teachers were 79 percent of the young professional workforce.²⁴
- Similarly disproportionate numbers are also seen in several health-related occupations. For example, registered nurses, diagnostic technicians, nutritionists, and occupational therapy had heavy concentrations of women in 2016.²⁵
- However, men were heavily concentrated in computer and engineering occupations in 2016. For example, within the young professional workforce, young male professionals made up 74.7 percent of the computer-related workforce and 82.5 percent of the engineering workforce in 2016.²⁶

A Slow-Changing Workforce

From 2006 to 2016, the young professional workforce added nearly 3.35 million jobs, about 350,000 new jobs per year. However, this growth does not keep pace with the number of new college graduates seeking to enter the professional workforce. Between academic years 2002-03 and 2013-14, 26.9 million bachelor's, master's, and doctorate degrees were awarded. Another 9.1 million associate's degrees were awarded over the same period.²⁷

Slow job growth has resulted in few demographic changes among young professionals in the last 10 years. Where there has been job growth among young professionals, it has been concentrated in just a handful of occupations.

- In 2004, women made up 54 percent of the young professional workforce, which remained unchanged in 2016.²⁸
- While the changes were small, the concentration of Black, Asian, and Hispanic professionals did change from 2006 to 2016. The concentration of young Black professionals increased from 8.7 percent in 2006 to 10.6 percent in 2016. Young professional Hispanics increased from 9.5 percent in 2006 to 12.3 percent in 2016. Among young professional Asians, density increased slightly from 9.3 percent in 2006 to 11.2 percent in 2016.²⁹
- From 2006 to 2016, a number of occupations experienced a significant increase in the concentration of young professionals.
 - Among engineers, some occupations saw declines in the employment of young professionals. However, there were big gains among young civil engineers with 70 percent growth, young chemical engineers with 40 percent growth, and young aerospace engineers increased by 30 percent.
 - In education, training, and library occupations, young professionals saw an overall increase of young workers, but declines in a number of occupations. However, elementary and middle school teachers along with postsecondary teachers were some of the occupations that saw gains. From 2006 to 2016, there was a 28 percent increase in the employment of young postsecondary teachers and a 10 percent increase in the employment of young elementary and middle school teachers.
 - The largest gains among young professionals, not surprisingly, were among professionals in healthcare occupations. Registered nurses had the highest number of new young professionals added with 316,348 more young professionals employed in 2016 than 2006, a 52 percent increase.³⁰

Education

While job opportunities for young people may be limited, millions of new and well-educated young professionals are entering the job market every year. A survey of youth and

young adults by the National Center for Education Statistics found that “from 1980 to 2009, the proportion of young adults whose highest level of education was high school completion decreased from 46 to 29 percent. Conversely, the proportion of young adults who had completed some college increased from 25 to 36 percent.”³¹

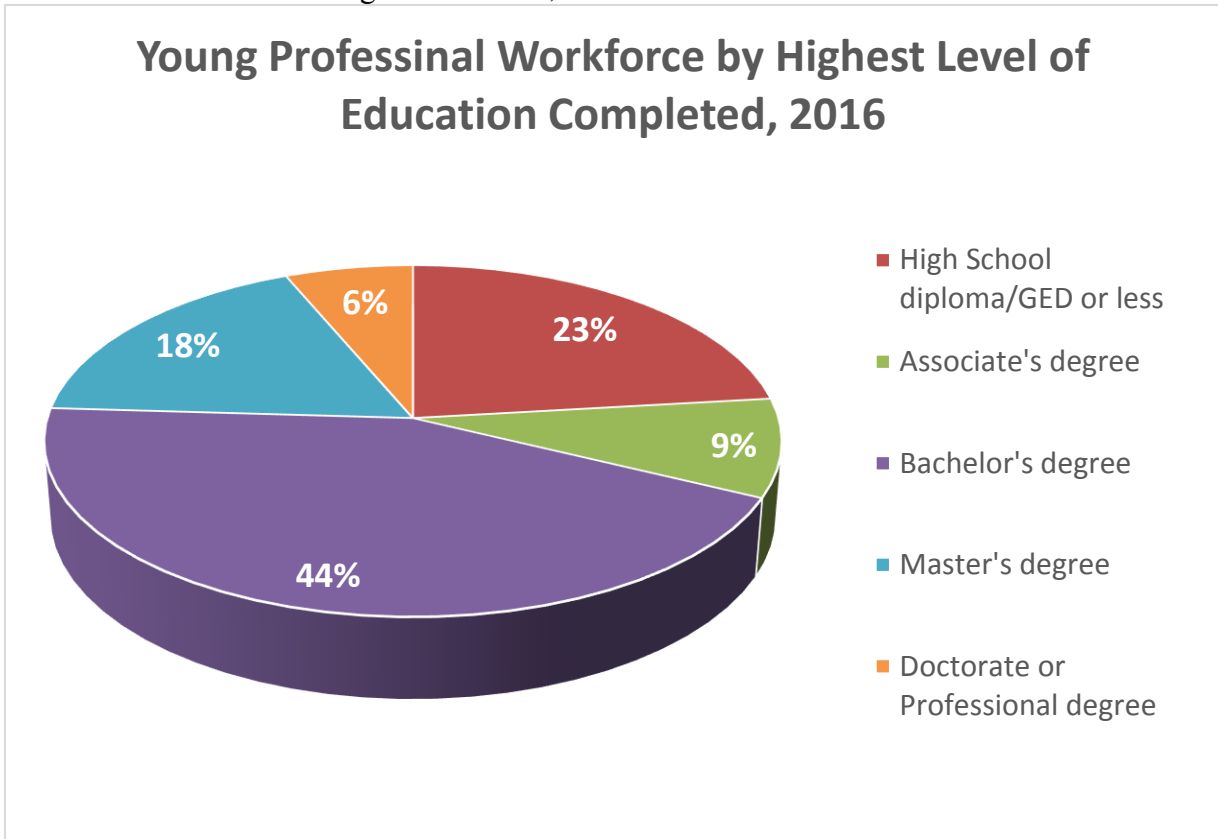
- In the 2013-14 academic year, over 4.8 million associate’s, bachelor’s, master’s, and doctorate degrees were awarded to all students, not just those 34 and younger.³²
 - Nearly 1.87 million bachelor’s degrees were conferred in 2013-14. The field with the most bachelor’s degrees conferred was business (358,079 degrees) followed by health professions (198,770), social sciences and history (173,096), and psychology (117,298). Biological and biomedical science graduated over 100,000 students and engineering and engineering technologies graduated almost 100,000 students.³³
- The greatest number of master’s degrees in the 2013-14 academic year were awarded in business (189,328), followed by education (154,636).³⁴
- Health professions and related programs received the highest number of doctorate degrees with 67,448 degrees awarded in 2013-14.³⁵

Education, Opportunity, and the Young Professional Workforce

An issue critical to young people is whether the money invested in their higher education will reap rewards with a job that will enable them to pay off student loans and join the middle class. While professional and technical jobs have provided opportunity for millions of young workers, many more millions with bachelor’s, master’s, and doctorate degrees struggle to find a good-paying jobs.

- Of the 17.2 million young people in the professional workforce, 11.7 million had a bachelor’s degree or higher in 2016. That amounts to two-thirds of the young professional workforce having earned at least a bachelor’s degree.³⁶
 - CPS tracks the highest level of education completed, which shows that nine percent of young professionals in the workforce had completed an associate’s degree, 44 percent had earned a bachelor’s degree, 17.7 percent had completed a master’s degree, and 6.1 percent had received a professional or doctorate degree in 2013. The remaining 23.1 percent had no degree or earned a high school diploma or GED.³⁷
- Young female professionals have higher education attainment than their male counterparts. In the young professional workforce, 6,347,457 women had earned a bachelor’s degree or higher, while 5,323,168 men had earned a bachelor’s degree or higher in 2016. Women out earned men in degrees at every level of higher education.³⁸

- In 2016, 82.6 percent of young professionals in life, physical, and social science occupations had at least a bachelor’s degree. Education, training, and library occupations also had very high levels of education attainment with 75.3 percent of young workers having earned at least a bachelor’s degree. Education occupations also had the highest number of master’s degrees with 781,642.³⁹



- Management occupations showed the greatest variation in education attainment among the 3.7 million young professionals employed in those occupations. Nearly 700,000, or 38 percent of young professionals in management occupations had only completed a high school diploma/GED or less. Another 316,000 had an associate’s degree. Only 53.5 percent of young professionals in management occupations held a bachelor’s degree or higher in 2016. The disparity is largely due to the diversity of management occupations, which include CEO’s, but also food service managers.⁴⁰
- Healthcare practitioner and technical occupations had the greatest number of young professionals with professional and doctorate degrees (over 450,000) and the greatest number of associate’s degrees (over 550,000) in 2016.⁴¹

Unemployment and Underemployment

Although young professionals have lower unemployment rates when compared to all workers, hundreds of thousands of educated young people are unable to enter the professional workforce and instead work in low-wage jobs.

- Of the estimated 17.2 million young professionals who reported working in one of the 10 occupational groups comprising the professional and technical workforce 2.6 percent reported being unemployed in 2016. The unemployment rate for young workers in all non-professional occupations was seven percent in 2016.⁴²
 - Among young professionals, arts, design, entertainment, sports, and media occupations reported the highest unemployment rate, 5.3 percent in 2016.⁴³
- In 2016, the unemployment rate for young professionals ages 20 to 34 with a bachelor’s degree or higher was 2.1 percent. For Black professionals with a bachelor’s degree, the unemployment rate was 3.1 percent and 2.1 percent for White professionals with a bachelor’s degree.⁴⁴
- Underemployment is a persistent problem for young, educated professionals. Underemployment data generally track hours-based underemployment, which is a part-time worker who wants full-time work. The data does not generally account for “skills/education-based underemployment (e.g., the young college graduate working as a barista).”⁴⁵ Analysis of occupations based on whether they require a college degree shows that “among college graduates under the age of 25 who were working in 2014, 46 percent were not working in a job that required a college degree.” This is up from 31.1 percent in 2007.⁴⁶
 - There were over two million workers between the ages of 20 and 34 with a bachelor’s degree or higher working in food preparation and serving, building and grounds cleaning, personal care and service, and office and administrative support occupations in 2016. The vast majority of the occupations in these sectors, if not all of them, do not require a bachelor’s degree or higher.⁴⁷
 - According to a study by Accenture Strategy, 51 percent of 2014/2015 college graduates reported being employed in jobs that did not require their college degree. This is a 10 percent increase from 2013. Additionally, 39 percent of 2014/2015 college graduates reported making less than \$25,000 a year.⁴⁸
 - Those who graduated from college in 2015 had on average \$35,051 in student loan debt, the highest rate of education debt to date.⁴⁹
 - According to Federal Reserve data, in 2013, the median college-educated 25 to 34 year-old only made slightly more than a high school educated baby boomer (those born between 1946 and 1964) in 1989. The median household income of 25 to 34 year-olds is \$40,581—which is 20 percent less than the household income of baby boomers at the same point in life. The median net worth of 25 to 34 year-olds is 56 percent less than it was for baby boomers—\$10,090.⁵⁰

Union Membership

Union membership among young professionals grew steadily from 1994 to 2016, even outpacing growth in the young professional workforce. Women made up the majority of young professional union members in 2016. Young professionals increased both by the number of union members and union density between 1994 and 2016.

According to CPS data, approximately 1.38 million young professionals were union members in 2016. All 10 professional occupation groupings employed young union members. However, young union members were heavily concentrated in education, training, and library occupations; community and social service occupations; and healthcare practitioner and technical occupations.⁵¹

- 27 percent of young professionals in education, training, and library occupations were union members in 2016.
- Of the young professionals in life, physical, and social science occupations, five percent were union members.
- Healthcare practitioner and technical occupations had the third highest density rate of union members, 11.3 percent in 2016.⁵²

Gender Differences

- Of the 1.43 million young professionals who were union members in 2016, 67.4 percent were women. This majority is largely due to their disproportionate concentration in education, training, and library occupations where over 127,278 women were union members in 2016. There were just 48,010 young male union members in education, training, and library occupations in 2016.⁵³
 - Men made up a larger portion of union members in computer and mathematical science, architecture and engineering, and arts and media occupations.

Trends, 1994 to 2016

Union density among young professionals increased slightly from 8.2 percent in 1994 to 9.2 percent in 2016.

- The number of young professional union members rose from 1,050,848 in 1994 to 1,431,477, a 36.2 percent increase. The young professional workforce grew 22.2 percent from 1994 to 2016.

- Many professional occupation groups saw an increase in the number of union members from 2006 to 2016.^a Young professionals in business and financial occupations grew from 55,964 union members in 2006 to 71,195 in 2016; arts and entertainment occupations averaged 35,156 in 2006 and 40,800 in 2016; and healthcare practitioner and technical occupations grew from 197,807 in 2006 to 309,607 in 2016.⁵⁴ Union membership among young professionals in management occupations, computer and mathematical science occupations, community and social service occupations, and legal occupations also grew from 2006 to 2016.

Conclusion

While young professionals are a diverse and educated group, many educated young people cannot break their way into the professional workforce. Investment in research, education, infrastructure, and similar sectors is needed to grow the professional workforce. Another challenge young workers, including young professionals, face is many are less well-off than their parents were at their age—in terms of income, debt, and economic mobility. One effective way to make gains in this area is through union membership. In the general, union members have higher wages, better benefits, and working conditions than non-union members. Increases in union membership in the young professional workforce demonstrates that many young professionals realize the advantages of having a union.

For more information on professional workers, check the DPE website: www.dpeaflcio.org.

^a The occupation categories from the 1994 CPS data are different than 2016, making comparison of specific occupation groups from 1994 to 2016 impossible. However, occupation groups are the same for 2006 and 2016, so the analysis will focus on this 10-year change.

The Department for Professional Employees, AFL-CIO (DPE) comprises 23 AFL-CIO unions representing over four million people working in professional and technical occupations. DPE-affiliated unions represent: teachers, college professors, and school administrators; library workers; nurses, doctors, and other health care professionals; engineers, scientists, and IT workers; journalists and writers, broadcast technicians and communications specialists; performing and visual artists; professional athletes; professional firefighters; psychologists, social workers, and many others. DPE was chartered by the AFL-CIO in 1977 in recognition of the rapidly growing professional and technical occupations.

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¹ See U.S. Department of Commerce, United States Census Bureau, Current Population Survey, A Joint Effort Between the Bureau of Labor Statistics and the Census Bureau. On the web at www.census.gov/cps/.

² U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, 2016.

³ U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, Average of January through June, 2016.

⁴ *Ibid.*

⁵ *Ibid.*

⁶ U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, 2016.

⁷ U.S. Census Bureau, DataFerrett, American Community Survey, Public Use Microdata, 2015.

⁸ *Ibid.*

⁹ U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, 2016.

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¹² U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, 2016.

¹³ U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, 2016.

¹⁴ U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, 2016.

¹⁵ *Ibid.*

¹⁶ *Ibid.*

¹⁷ U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, 2016.

¹⁸ U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, 2016.

¹⁹ *Ibid.*

²⁰ U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, 2016

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- ³³ U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, Table 322.10. Bachelor's degrees conferred by postsecondary institutions, by field of study: Selected years, 1970-71 through 2011-12.
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- ³⁶ U.S. Census Bureau, DataFerrett, Current Population Survey, Monthly Microdata, 2016.
- ³⁷ *Ibid.*
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