



VITAL WORKFORCE STATISTICS

The Changing World of Work

- Between 1900 and 2007, the percentage of white collar workers in the work force grew from less than 18% to 60.3%.¹
- While manual workers comprised 41% of the work force in 1950, by 2007, their proportion had shrunk to only 22.6% of the work force.²
- The work force is more equally comprised of men and women. In 2007, women accounted for 46.4% of the work force, up from 29% in 1950.³
- Women are the majority of professional and related workers (56.2 %) and the majority of office and administrative support workers (75.2%). They are also the majority of those who work in service occupations (57.2%).⁴
- The service sector is and will continue to be the dominant employment generator in the economy, adding 12.2 million jobs by 2016. More than 45% of all new jobs created in the U.S. between 2006 and 2016 are expected to be in the service and professional and related occupations.⁵
- Between 2006 and 2016, employment in the service sector is expected to increase by almost 17%, while employment in manufacturing is expected to *decrease* by nearly 5%.⁶
- The number of new jobs varies based on education level; with bachelor's degrees projected to increase by 13.2%, 1.6% for master's degrees, 1.6% for doctorate degrees and 1.3% for first professional degrees.⁷

Unions Reflect Changes in the Work Force

- White collar workers accounted for 52.6% of all union members in 2007.⁸
- There are more union members among professionals than any other occupational group.⁹
- In 2007, over 5 million professional and related workers were union members; nearly 5.6 million were represented by unions.¹⁰
- Union representation among professionals and related workers was about 18.2% in 2007, while union representation was just 12.1% among the total work force.¹¹
- Significant numbers of administrative support workers are represented by unions: almost 1.9 million, or 10.2% of all such workers.¹²
- Women comprised 44% of the labor movement in 2007, up from 19% in 1962.¹³
- Women, and especially women of color, are forming and joining unions at a faster rate than men. Many of the unions organizing in industries dominated by women, such as education

and government, have consistently shown much higher win rates than those unions organizing in industries with fewer women members.¹⁴

Rapid Growth in Professional and Related Occupations Will Continue

- Employment in professional and related occupations is projected to grow faster and to add more workers (5.0 million) than any other major occupational group, with service occupations a close second (4.8 million). This amounts to a 16.7% increase in employment for professional and related workers between 2006 and 2016. Total U.S. employment is projected to increase by less than 10.4% over this period.¹⁵
- Of the eight subgroups in the professional and related occupations category, three subgroups—education, training and library occupations; health care practitioners and technicians; and computer and mathematical occupations—will account for 70.6% of the job growth in this category.¹⁶
- Health care practitioners and technical occupations are projected to add more than 1.4 million jobs between 2006 and 2016. Registered nurses will account for more than 40% of these jobs. Registered nurse is the occupation projected to experience the largest job growth between 2006 and 2016, increasing from 2.4 million–3.1 million.¹⁷
- Education, training and library occupations are projected to increase by 14% (versus 10.4% for all occupations), adding 1.3 million jobs. Post-secondary teachers make up another occupation that will see large gains in employment, adding 382,000 jobs between 2006 and 2016.¹⁸
- Eighteen of the 30 fastest-growing occupations are professional and related occupations; another 10 are service occupations groups. Five from the computer specialists subgroup, including the fastest-growing occupation, network systems and data communications analysts, show up in the top 30. Together these computer specialist (or information technology) occupations are expected to add nearly 645,000 jobs between 2006 and 2016. In the 2004–2014 Bureau of Labor Statistics’ projection period, three of the fastest-growing occupations were computer specialist or information technology (IT), occupations.¹⁹
- Almost 30.2 million Americans (20.6% of the work force) were employed in professional and related occupations in 2007. By 2016, more than 34.8 million (20.9% of the work force) are expected to be employed in these occupations.²⁰

Growing Disparities in Educational Requirements for New Jobs

Occupations that typically require a bachelor’s degree or higher for an entry level position will generally grow faster than the average for all occupations. Such occupations are expected to increase by 15.3%, or about 5 million new jobs, by 2016. Still, occupations that only require short- or moderate-term on-the-job training, while not growing as quickly as those requiring more formal education, will continue to account for about half of all jobs by 2016.²¹

Of the 30 fastest-growing occupations between 2006–2016, 22 require a post-secondary award or higher. The doctoral degree category is expected to increase the fastest of all the education and training categories over the 2006–2016 period, growing at a rate of 22%. Most of this change will be due to the fast-growing occupation of post-secondary teachers. Despite such growth, jobs requiring a doctoral degree will still account for just 1.5% of total jobs in 2016.²²

- Five of the 10 fastest-growing occupations require a bachelor's degree or higher.²³
- Registered nurse, the occupation expected to add the largest number of new jobs by 2016, requires an associate's degree. Together, these occupations are expected to add nearly one million new jobs.²⁴
- The number of jobs for biomedical and environmental engineers—both occupations requiring at least a bachelor's degree—are expected to increase by 21.4% and 25.4% respectively, more than twice as fast as overall employment growth. Computer software engineers (both applications and systems software) requiring to have at least a bachelor's degree, are projected to add 325,000 jobs by 2016, growing at a rate more than three times that of jobs overall.²⁵
- Employment for occupational and physical therapists, both of which require a master's degree, is expected to increase by 23.1% and 27.1%, respectively, both more than twice the rate of all jobs. Employment for mental health counselors and mental health and substance abuse social workers, occupations requiring master's degrees, are among the 29 fastest-growing occupations.²⁶

Rise of the Baby-Boom Workforce

From 2000 to 2005, the labor force participation rate of people age 55 years and older rose steadily. The rate for women increased by 5.3 percent and men followed closely at 4.1 percent.²⁷ This trend runs counter to the overall labor force participation rate, which decreased by over a percentage point from 2000 to 2005. Several factors could account for this differing trend:

- Population change is the most obvious explanation. The baby-boom generation—those born between 1946 and 1964—has steadily influenced age cohorts over time. The first of the baby boomers reached age 55 in 2001, and differences in the workforce might relate to greater participation by these people.²⁸
- Changes to Social Security could influence the labor rate. As part of the 1983 reform legislation, the normal retirement age increases gradually for those born after 1937. Soon, it will be 67 for those born in 1960 or later. Such changes encourage a greater number of older people to keep working.²⁹
- More seniors lose access to benefits if they retire early. Currently, only 13 percent of employers offer retiree health benefits to individuals who retire prior to age 65.³⁰ While seniors are eligible for Medicare at 65, they may prefer private plans and want to work longer.

Women: More Degrees, More Roles, and Still Unequal Pay

Women have been earning more bachelor's degrees than men since 1982, and more master's degrees than men since 1981. In 2008, women earned more first professional and doctoral degrees than men for the first time.³¹

Women are expected to earn 58.6% of all bachelor's degrees and 59.5% of all post secondary degrees conferred in 2009, including 61.4% of all master's degrees, 51.5% of all first professional degrees, and 51.5% of all doctoral degrees.³²

Yet, despite women's superior educational attainment, the wage gap between the sexes remains a problem in every occupational category. In 2007, women working in professional and related

occupations earned 27% less than their male counterparts; women in office and administrative support occupations earned 8% less than their male counterparts, despite constituting nearly 75% of these workers. Women in sales occupations earned 38% less than similarly employed men, while women in service occupations earned 22% less than men in service occupations.³³

Women also earn less at every level of education. For full-time workers aged 18 and older in 2005:³⁴

- The median annual earnings of a female high school graduate was more than 34% less than that of her male counterpart; the median annual earnings of a woman with a bachelor's degree was almost 31% (or \$15,911) less than that of a similarly qualified man; the median annual earnings for a woman with a professional degree were \$65,941, while median annual earnings for similarly qualified men were more than \$100,000. A woman with a doctorate earned more than 29% (or \$22,824) less than a similarly qualified man.

¹ U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the U.S., Colonial Times to 1970*, 1975; U.S. Department of Labor, Bureau of Labor Statistics, *Current Population Survey*, 2008, www.bls.gov/cps/cpsaat11.pdf

² *Ibid.*

³ U.S. Department of Labor, Bureau of Labor Statistics, *Perspectives on Working Women*, Bulletin 2080; U.S. Department of Labor, Bureau of Labor Statistics, *Current Population Survey*, 2008.

⁴ U.S. Department of Labor, Bureau of Labor Statistics, *Current Population Survey*, 2008.

⁵ *Ibid.* Arlene Dohm and Lynn Shniper, "Occupational Employment Projections to 2016", U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*, November 2007.

⁶ *Ibid.*

⁷ U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, 2005. Table 246.

⁸ U.S. Department of Labor, Bureau of Labor Statistics, "Union Members Summary", 2008.

⁹ *Ibid.*

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² *Ibid.*

¹³ *Ibid.*

¹⁴ Bronfenbrenner, Kate and Robert Hickey, "Changing to Organize: A National Assessment of Union Organizing Strategies", in *Organize or Die: Labor's Prospects in Neoliberal America*, edited by Ruth Milkmen and Kim Voss, Ithaca, NY, Cornell University Press, 2004; Bronfenbrenner, Kate, "Organizing Women: The Nature and Process of Union Organizing Efforts Among U.S. Women Workers Since Around the Mid-1990s", *Work and Occupations*, Volume 32, No. 4, November 2005.

¹⁵ Arlene Dohm and Lynn Shniper, "Occupational Employment Projections to 2016", U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*, November 2007.

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ *Ibid.*

²¹ *Ibid.*

²² *Ibid.*

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ *Ibid.*

²⁶ *Ibid.*

²⁷ Mosisa, Abraham and Hippie, Steven. "Trends in labor force participation in the United States." U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*, Volume 129, No. 10, October 2006.

²⁸ *Ibid.*

²⁹ *Ibid.*

³⁰ *Ibid.*

³¹ U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics: 2007*.

³² *Ibid.*

³³ *Current Population Survey*, op. cit.

³⁴ U.S. Department of Commerce, Bureau of the Census, "Educational Attainment in the United States: 2006 Detailed Tables", Table 9.

For further information on professional workers, check out DPE's Web site: www.dpeaflcio.org.

The Department for Professional Employees, AFL-CIO (DPE) comprises 24 AFL-CIO unions representing over four million people working in professional, technical and administrative support 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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