



April 2017

**RESEARCH BRIEF**

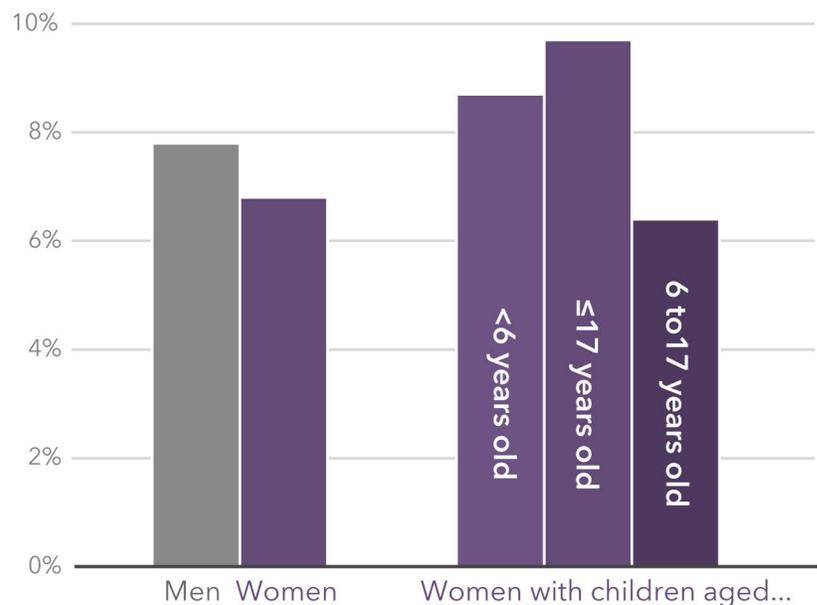
## Working Women of the Commonwealth

HARRISBURG - March was National Women's History Month, and this month's brief is set to focus on the working women of the Commonwealth. The following brief will document women's participation in the labor force and their unemployment versus males, the type of occupation in which women are employed, and the differences in pay based on location and occupation.

### ***Labor Force Participation and Unemployment***

Just over 5.9 million Pennsylvanians participated in the labor force from 2011 to 2015 and of those over 2.8 million (47.9 percent) were women. The number of women in the workforce increased by 52,916 since 2010 which accounted for 67.8 percent of the increase in the overall workforce since that time. Women had a lower labor force participation rate than men in 2015 (73.7 percent vs. 81.3 percent). The proportion of women in the labor force has not significantly changed since 2010 with an increase of only 0.4 percent.

Women generally had lower unemployment than men in Pennsylvania (Figure 1). The unemployment rate for females age 20 to 64 was only 6.8 percent which was lower than the unemployment rate for males in the same age cohort (7.8 percent). Women with young children had higher rates of unemployment than men and women in general. Mothers with older children (6 to 17 years) had a lower rate of unemployment (6.4 percent) than women in general.



**Figure 1.** Unemployment rates for men, women, and mothers in PA, 2011-2015.

Philadelphia County had the highest rate of unemployed women (11.9 percent) and unemployed mothers with children only 6 to 17 years old (12.7 percent). Sullivan County had the highest unemployment for mothers with children 17 years old or younger (21.9 percent), and Pike County had the highest unemployment with mothers of young children, less than 6 years old (21.5 percent). Counties where females had disproportionately higher unemployment than males - determined by dividing the female unemployment rate by the male unemployment rate - included Juniata (27.7 percent higher), Sullivan (25.0 percent higher), Adams (15.2 percent higher), and Perry (13.7 percent higher). Women in Cameron County had less than half (49.1 percent lower) of the level of unemployment as males.

**Employment Type and Occupational Characteristics**

The representation of females in each type of employment varied (Table 1). Women were over-represented in private, non-profit employment (66.8 percent), local government (57.0 percent), and state government (52.9 percent). Women in Pennsylvania were underrepresented in private companies (46.6 percent), federal government (42.2 percent), and made up less than a third (32.1 percent) of those who are self-employed.

Table 1. Percent of employment type filled by women in PA, 2011-2015.

Type of Employment	Females
Private, Non-Profit	66.8%
Local Government	57.0%
State Government	52.9%
Private, For-Profit	46.4%
Federal Government	42.2%
Self-Employed	32.1%

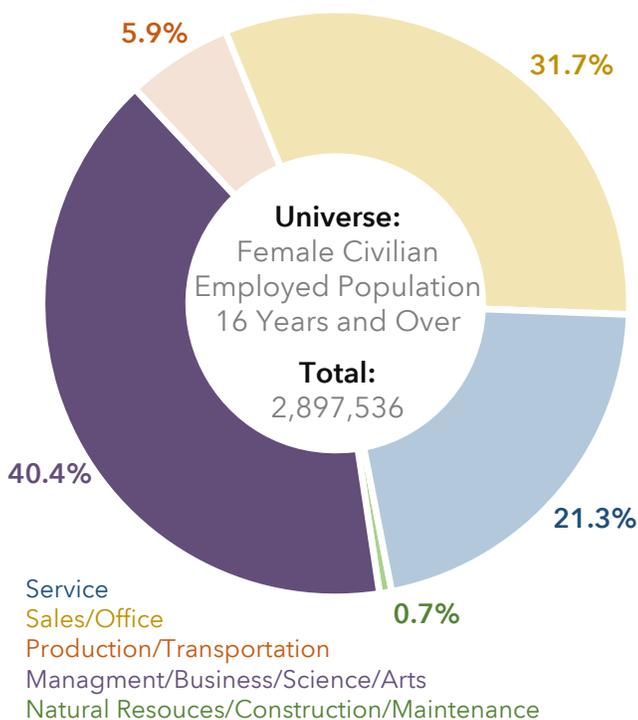


Figure 2. Distribution of female workforce by occupation type in PA, 2011-2015.

The female workforce was largely distributed into management/business/science/arts, sales/office, and service positions (Figure 2). Over 40 percent of working females worked in the management, business, science, and arts sector in health, social, and education-related occupations. Nearly a third (31.7 percent) of the female labor force were concentrated in sales and office positions, largely as office administrators. Over a fifth (21.3 percent) of the female labor force fulfilled service sector positions such as healthcare services and personal care. A low percentage of working women were employed in production and transportation positions (5.9 percent) and natural resources, construction, and maintenance (0.7 percent).

Working women in Pennsylvania had the highest representation in health-related fields (Figure 3). The percentage of female workers was highest for healthcare support (88.0 percent), health technologists and technicians (80.7 percent), and personal care (77.4 percent). Women represented a small proportion of workers in architecture and engineering (14.4 percent), transportation (13.0 percent), maintenance (3.3 percent) and construction and extraction (2.4 percent).

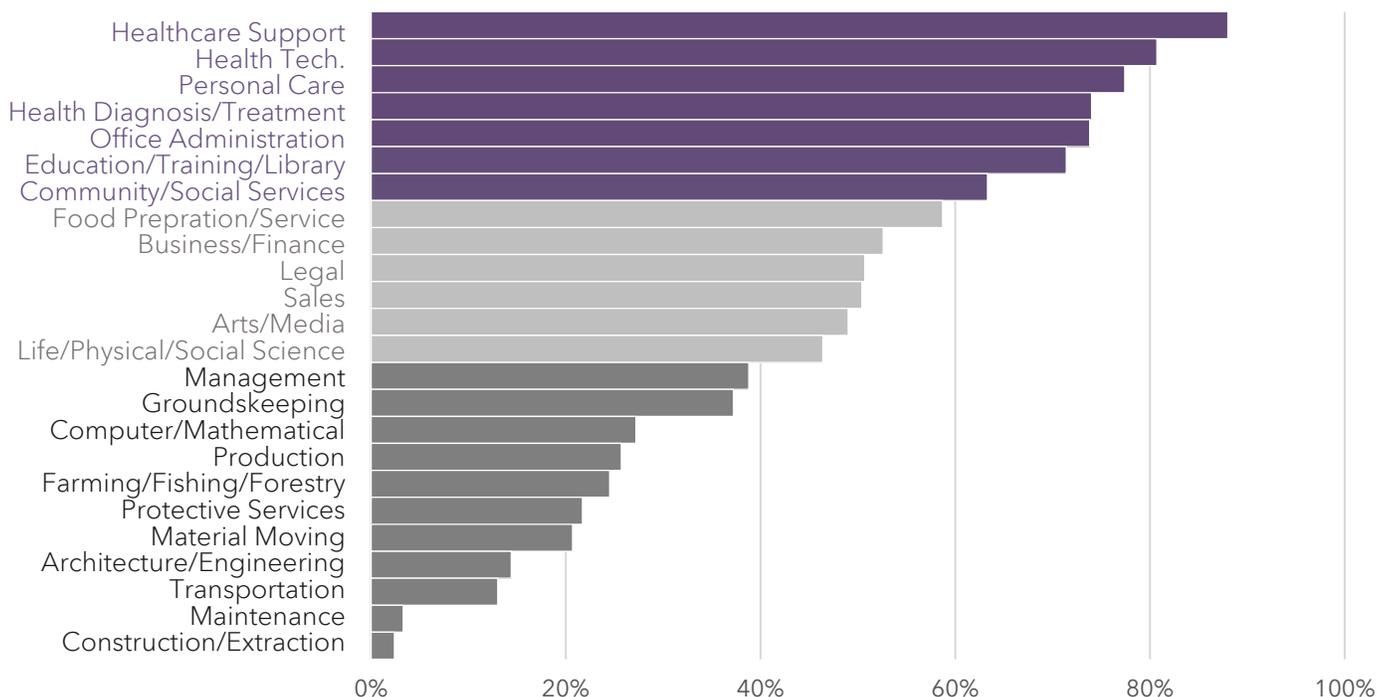


Figure 3. Females as a percent of total employees by occupation type in PA, 2011-2015.

**Women’s Earnings and Comparison to Men’s Earnings**

Female median earnings in Pennsylvania were fairly stagnant from 2010 to 2015. Median earnings for females were \$26,392 in 2010 (\$28,688 in 2015 inflation-adjusted dollars) and \$28,722 in 2015. Female earnings as a percentage of male earnings rose from 2010 (65.5 percent) to 2015 (68.5 percent) though this increase was driven more by a decrease in male median earnings from 2010 to 2015 (a loss of \$1,845 in 2015 inflation-adjusted dollars) rather than any improvement in female earnings.

Philadelphia County had the highest female-to-male earnings ratio at 85.0 percent (see March’s Map of the Month). The next five highest counties included Dauphin (74.5 percent), Montour (73.3 percent), Centre (72.9 percent), Luzerne (72.2 percent), and Delaware (72.1 percent). The five counties with the lowest female earnings as a percentage of male earnings were Greene (52.2 percent), Cameron (53.6 percent),

Jefferson (54.3 percent), Sullivan (54.7 percent), and Indiana (56.4 percent). Females make less than 60 percent of males in 15 counties and less than 70 percent of males in 57 Pennsylvania counties. The median earnings of females were significantly lower than the median earnings of males at the county level.

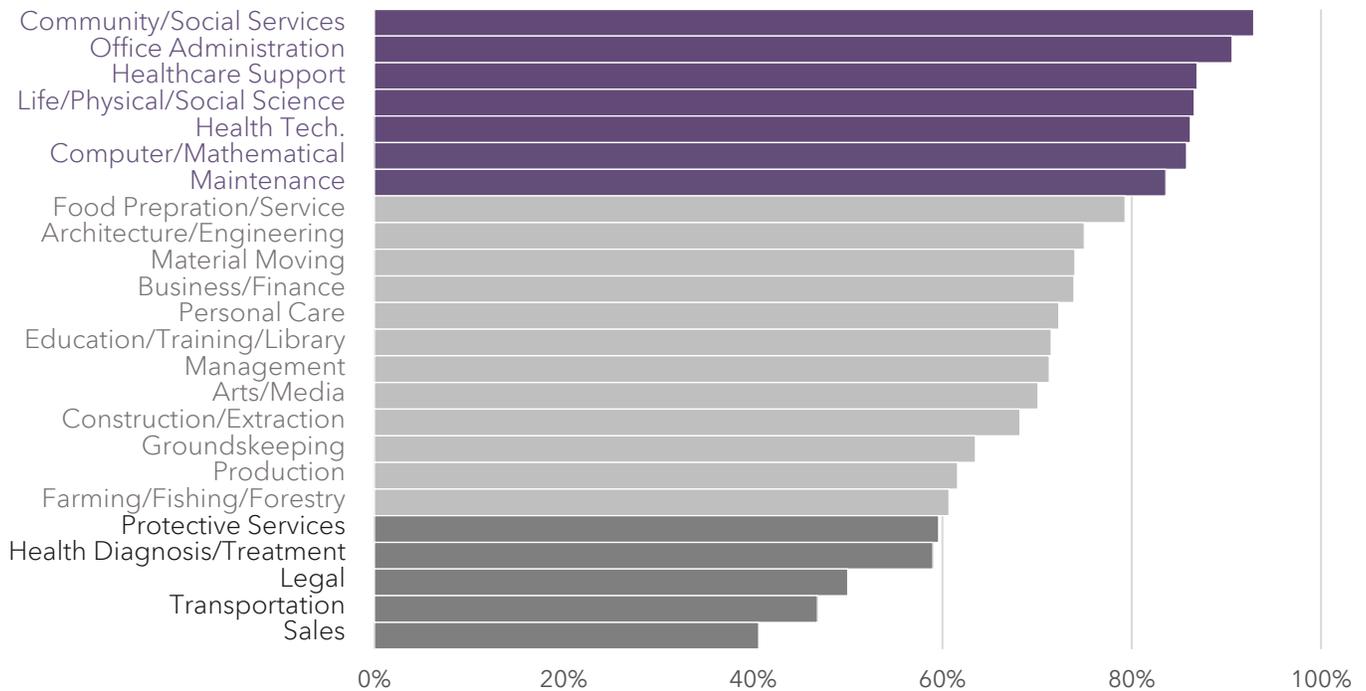


Figure 4. Female median earnings as a percent of male median earnings by occupation type in PA, 2011-2015.

Female earnings as a percent of male earnings varied greatly by type of work (Figure 4). Female earnings were closest to males in community and social services (92.9 percent), office administration (90.6 percent), healthcare support (86.9 percent), life, physical, and social sciences (86.6 percent), and healthcare technicians and technologists (86.2 percent). The earnings of females were lowest in occupations in sales (40.6 percent), transportation (46.8 percent), legal (50.0 percent), health diagnosis and treatment (59.0 percent), and protective services (59.6 percent) when compared to men.

Source: U.S. Census Bureau, 2006 to 2010 and 2011 to 2015 American Community Survey 5-Year Estimates.

The Pennsylvania State Data Center is the commonwealth’s official source for population and economic statistics. It is based at Penn State Harrisburg’s Institute of State and Regional Affairs. The Pennsylvania State Data Center is part of the U.S. Census Bureau’s National State Data Center Program.

Editors: For additional data, contact the Pennsylvania State Data Center at **717.948.6336** or online at [pasdc.hbg.psu.edu](http://pasdc.hbg.psu.edu).