

## Gender Wage Gap of Utah Workforce and Post-Secondary Graduates

September 2021

### Overview

This study aims to investigate the gender wage gap experienced by Utahns. Utah has consistently ranked with one of the widest gender wage gaps in the nation.

This study combines wage data obtained from the Utah Department of Workforce Services (DWS) with graduates who received a certificate from a technical college or a degree from an institution in the Utah System of Higher Education (USHE) and includes cohorts from 2012 to 2014.

The gender wage gap experienced by these graduates is broken down by the highest educational attainment, age group, and Classification of Instructional Program (CIP) studied.

It is important to examine the gender wage gap now as the gap has narrowed from the late 1970s to the 1990s. However, progress in closing the gender wage gap has been relatively stagnant since then. Basic economic theory informs us that closing the gender wage gap might encourage women to increase participation in the workforce—helping to maximize women’s economic security and potential.

### About the Utah Participants

Utah participants in this research included 67,013 graduates from USHE degree-granting institutions (35,190 women and 31,823 men) and 10,788 graduates from USHE technical college (5,713 women and 5,075 men).



## Finding 1: Utah’s gender wage gap is larger than the U.S. wage gap

Overall in Utah women made

**69%**

of men’s wages

Utah women with a bachelor’s degree made

**62%**

of men’s wages

- Using the American Community Survey (ACS) data, women made 53.3% of men's median wage in Utah compared to the U.S. earnings ratio of 69% in 2018.
- Figure 1 shows that in 2018, Utah women made 69.2% of Utah men’s median wage compared to the U.S. earnings ratio 80% for those who worked full-time, while Utah men made 104% of national men’s median wage.
- Analyzing the ACS data further illustrates that in 2018, those with a high school degree or equivalent have the most equity in wage (72.5%), while those with a bachelor’s degree (62.1%), some college (63.8%), and an advanced degree (64.5%) experience the largest gender wage gaps in Utah.

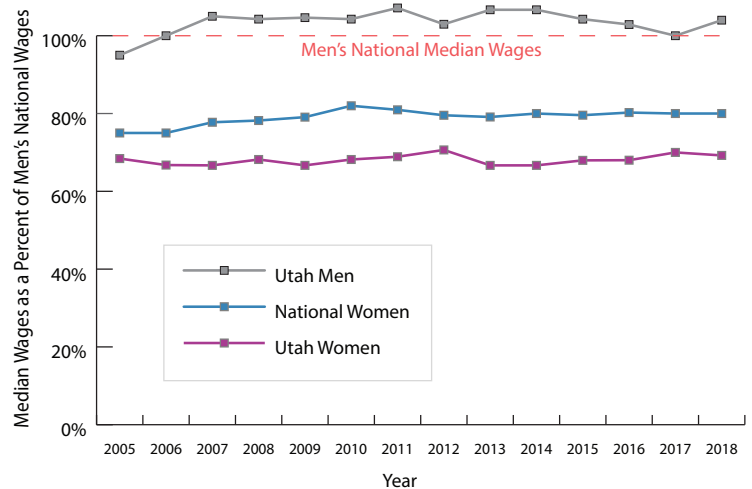


Figure 1: Women’s earnings ratio and Utah men’s earnings as a percentage of national men’s earnings.

*Usual weekly earnings of median full-time wage and salary workers, 1979-2018 (Bureau of Labor Statistics, 2018)*

## Finding 2: Utah women face a large wage gap one year after graduating from an academic institution or technical college

Of graduates from an academic institution who were strongly attached to the workforce, women made

**77%**

of men’s wages after one year

Of graduates from a technical college who were strongly attached to the workforce, women made

**58%**

of men’s wages after one year

## Finding 2 continued

For the entire group of 2014 USHE graduates, including those who worked only part of the year, we found the following about the first year:

- Those graduating from an academic institution made 58.3% of men's salary.
- Those graduating from a technical college made 48.4% of men's salary.

For the group of 2014 graduates that consistently worked the four quarters of the year and made at least an average of minimum wage, we found the following about the first year (Figure 2):

- One year after graduation, women made 77.4% of men's salary.
- One year after women graduated from a technical college, they earned 58.2% of what men received in their salaries.

These findings are relatively consistent across cohorts from 2012 through 2014.

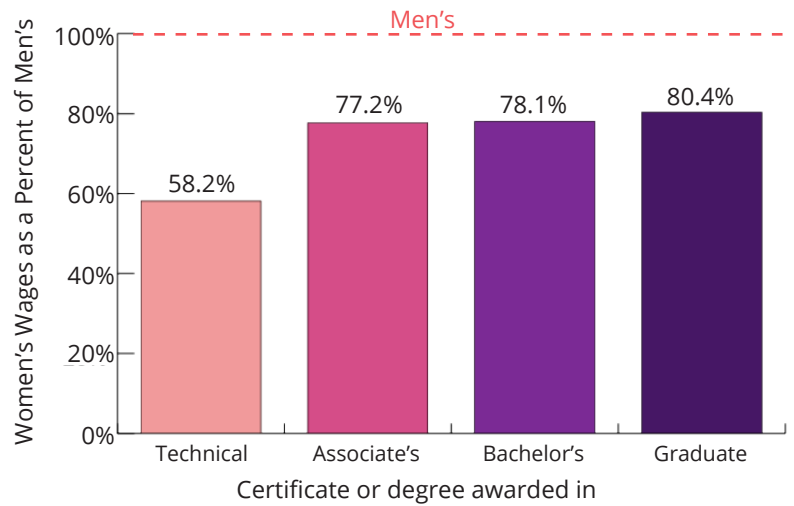


Figure 2: Utah women's earnings as a percentage of men's wage by certificate or degree awarded one year after graduation, strongly attached to the workforce only.

## Finding 3: After college graduation, the wage gap changes over time

After 5 years, women who graduated from an academic institution had their earnings ratio decrease to

**72%**

After 5 years, women who graduated from a technical college had their earnings ratio slightly increase to

**61%**

- The gender wage gap grows significantly worse from the first year of graduation to the fifth year for all academic cohort years. For those who consistently worked throughout the year, each level of educational attainment showed a statistically significant difference in how wage changes over time between men and women.
- In terms of dollars, women made \$36,300 annually in Utah compared to the \$40,000 national average. This difference in wages is especially striking as women in Utah tend to earn lower wages than the national average, while men in Utah tend to make more. Men in Utah with less education often earn more than women with higher levels of educational attainment.

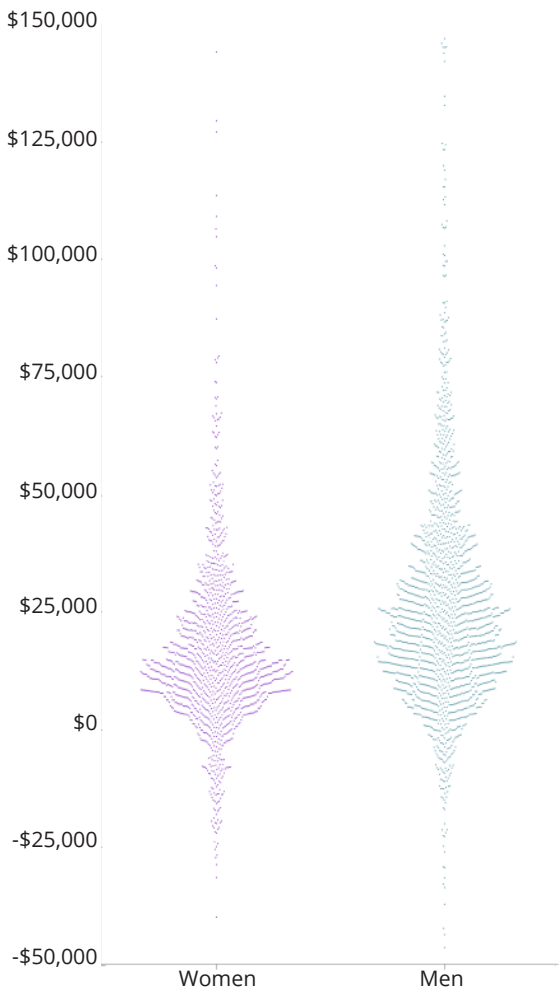


Figure 3: Bachelor's degree - Wage Differences between one-year post-graduation and five-year post-graduation

**Figure 3** on the left shows the differences in men's and women's wage growth with educational attainment. Each dot in the swarm plot represents the change in wages for an individual from one year to five years post-graduation. The swarm plot shows the distribution of post-graduation wage growth values for the considered individuals. Men's wage growth for all educational attainment levels shows a longer top tail on the vertical axis than women's wage growth. This top tail illustrates that more men experience large wage growth than women regardless of educational attainment.

## Finding 4: Utah's wage gap cannot be explained by human capital measures alone

Over  
**70%**  
of the gender  
wage gap **CANNOT** be  
explained by education,  
experience, or age.

Under  
**30%**  
of the gender  
wage gap **CAN** be  
explained by education,  
experience, or age.

- For all cohorts studied, over 70% of the wage gap cannot be explained by age, skills, knowledge, and experience.
- The mean wage difference was examined using the Blinder-Oaxaca decomposition, which splits the wage gap into explained difference and unexplained difference.
- The wage gaps were separated into what can be described using explanatory variables and the unexplained portions. Figures 4-5 show the explained and unexplained portions of the wage gap for the 2014 cohort one- and five-years post-graduation.

### Limitations

- DWS wage data do not include occupations or job roles for individuals.
- DWS wage data are quarterly aggregates and do not include hourly or monthly pay or number of hours worked.
- Only USHE graduates are included in this study. Some post-secondary institutions in Utah were not included.
- DWS wage data do not include income from self-employment, federal employment, or non-profit agencies.

### Conclusion

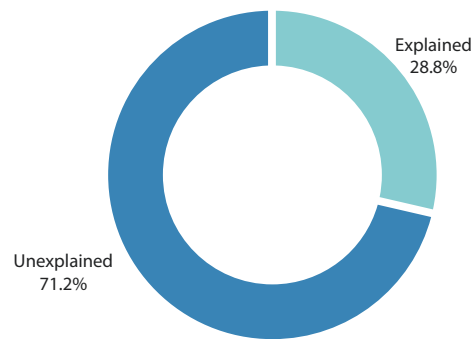
Overall, this study illustrates that women in Utah consistently make less than men regardless of age, experience, educational attainment, or field of study.

In Utah, the gender wage gap is bigger than the national average wage gap.

Wage data suggests a widening gender wage gap as more time is spent in the workforce.

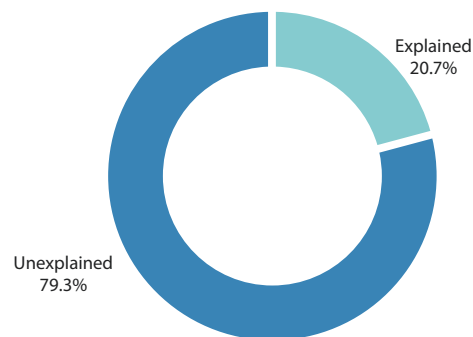
The gap cannot be explained entirely by prior work experience, age, or highest educational attainment.

### Data Partners



2014 cohort

Figure 4: Explained and unexplained portions of the **wage gap one year post-graduation** (2014 cohorts, working consistently throughout the year)



2014 cohort

Figure 5: Explained and unexplained portions of the **wage gap five years post-graduation** (2014 cohorts, working consistently throughout the year)



### Project Team

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Read the full research report at

<https://udrc.utah.gov>

For more information about the research project, contact the Utah Data Research Center at [udrc@utah.gov](mailto:udrc@utah.gov)