

A Study of the Disparity in Wages and Benefits Between Men and Women in Wyoming: Update 2018

Presented to the Joint Labor, Health, and Social Service Committee
of the Wyoming Legislature in Casper, Wyoming, October 4, 2018,
by Tony Glover, Manager, and Patrick Harris, Senior Economist,
Research & Planning, Wyoming Department of Workforce Services



Research & Planning
<http://doe.state.wy.us/LMI>

OUR ORGANIZATION:

R&P is an exclusively statistical entity within DWS.

WHAT WE DO:

R&P collects, analyzes, and publishes timely and accurate labor market information (LMI) meeting established statistical standards.

OUR CUSTOMERS:

LMI makes the labor market more efficient by providing the public and the public's representatives with the basis for informed decision making.



Research & Planning
Wyoming DWS

About this Project

- *A Study of the Disparity in Wages Between Men and Women in Wyoming: Update 2018*
- House Bill 0209 (2017)
- Update to *A Study of the Disparity in Wages Between Men and Women in Wyoming*, published in 2003

About the Data



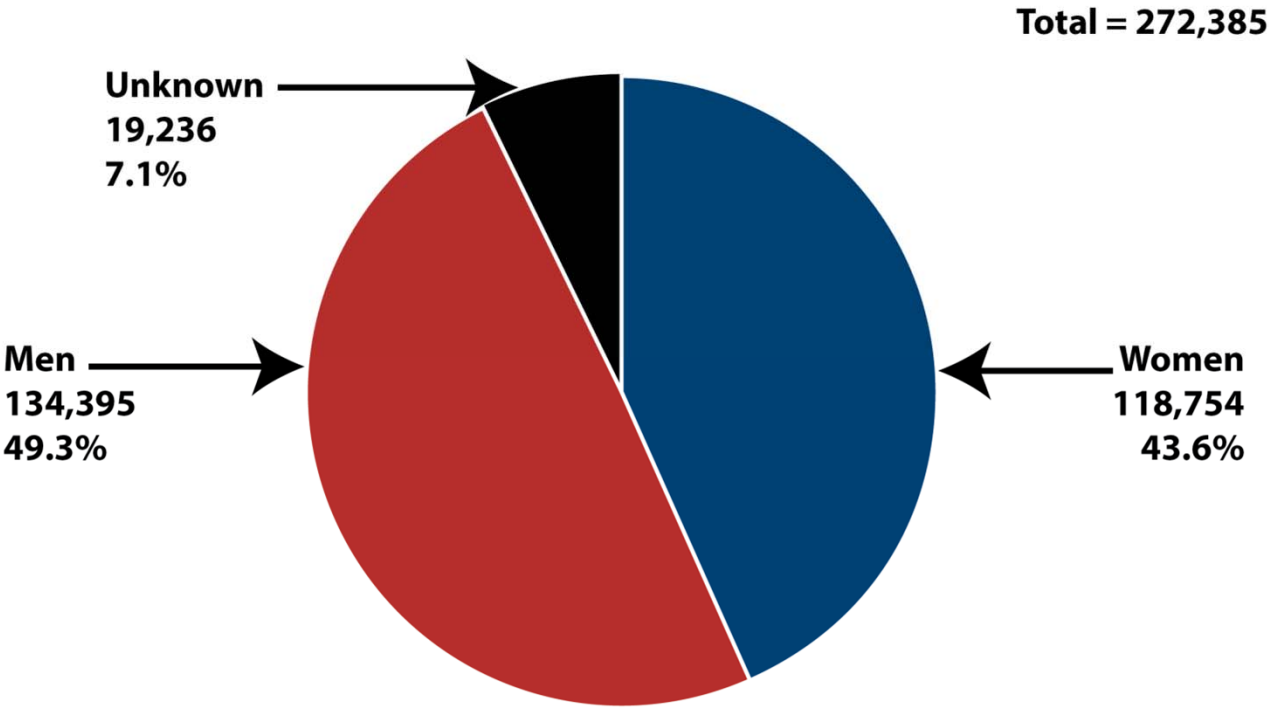
Data Sources

Agency	Data
DWS	<ul style="list-style-type: none"> ● Unemployment Insurance Wage Records ● Job Skills Survey
WY Dept. of Health	<ul style="list-style-type: none"> ● Marriages ● Births ● Deaths ● Divorces
State Licensing Boards	<ul style="list-style-type: none"> ● All Licensed Healthcare Boards (except Paramedics)
U.S. Bureau of Labor Statistics	<ul style="list-style-type: none"> ● Quarterly Census of Employment and Wages
University of Wyoming	<ul style="list-style-type: none"> ● University of Wyoming Enrollment and Graduation
WY Community College Commission	<ul style="list-style-type: none"> ● Community Colleges Enrollment & Graduation
WY Dept. of Education	<ul style="list-style-type: none"> ● Secondary School Enrollment & Graduation ● School District Staffing
WY State Auditor	<ul style="list-style-type: none"> ● State Employees
WYDOT	<ul style="list-style-type: none"> ● Driver's License



Gender

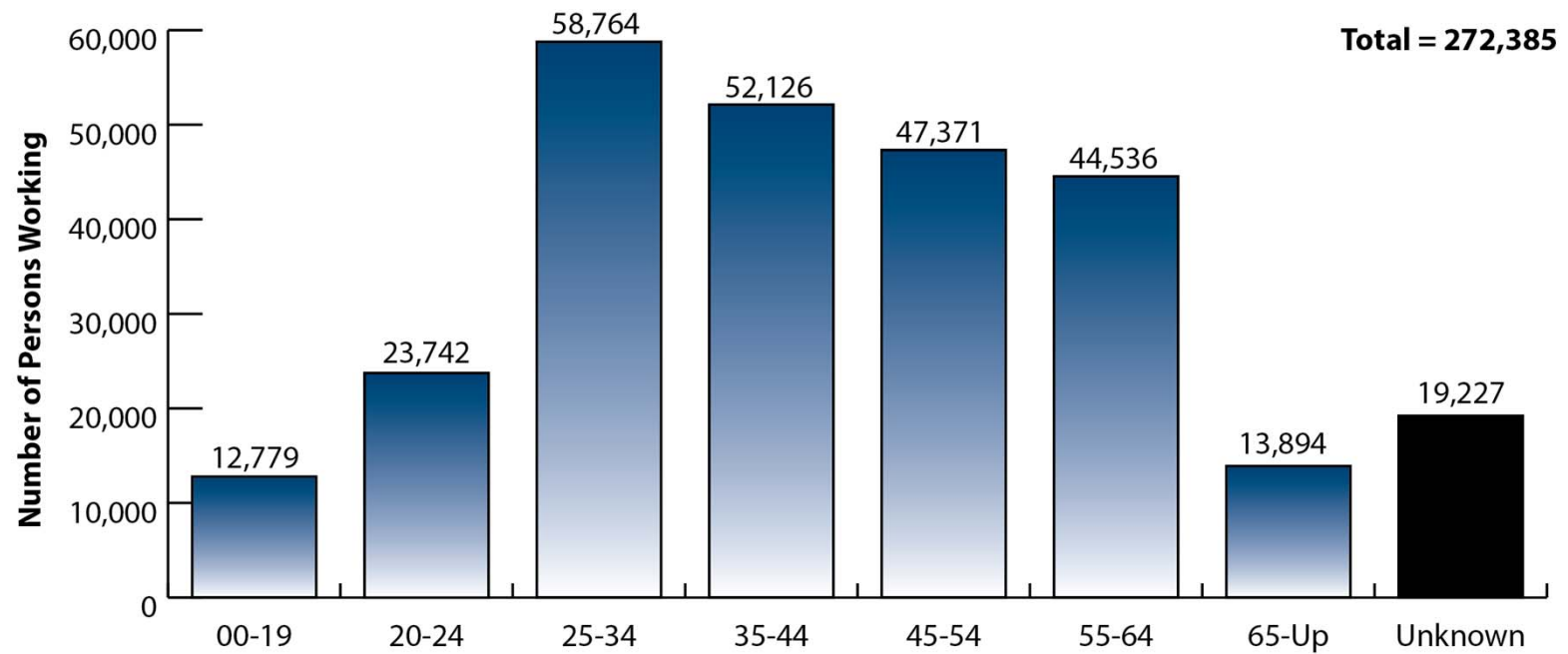
Figure: Total Persons Working in Wyoming by Gender, 2016





Age

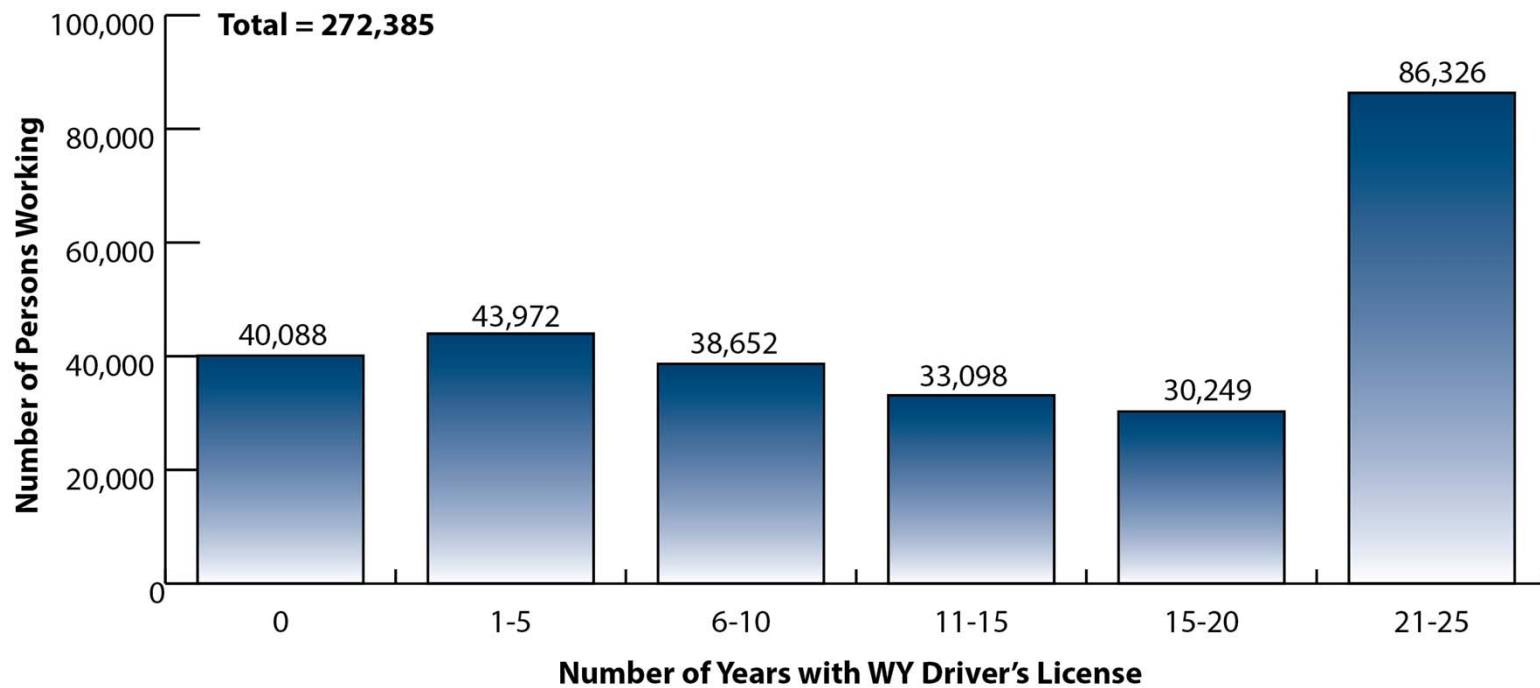
Figure: Total Persons Working in Wyoming by Age, 2016





Wyoming Driver's License

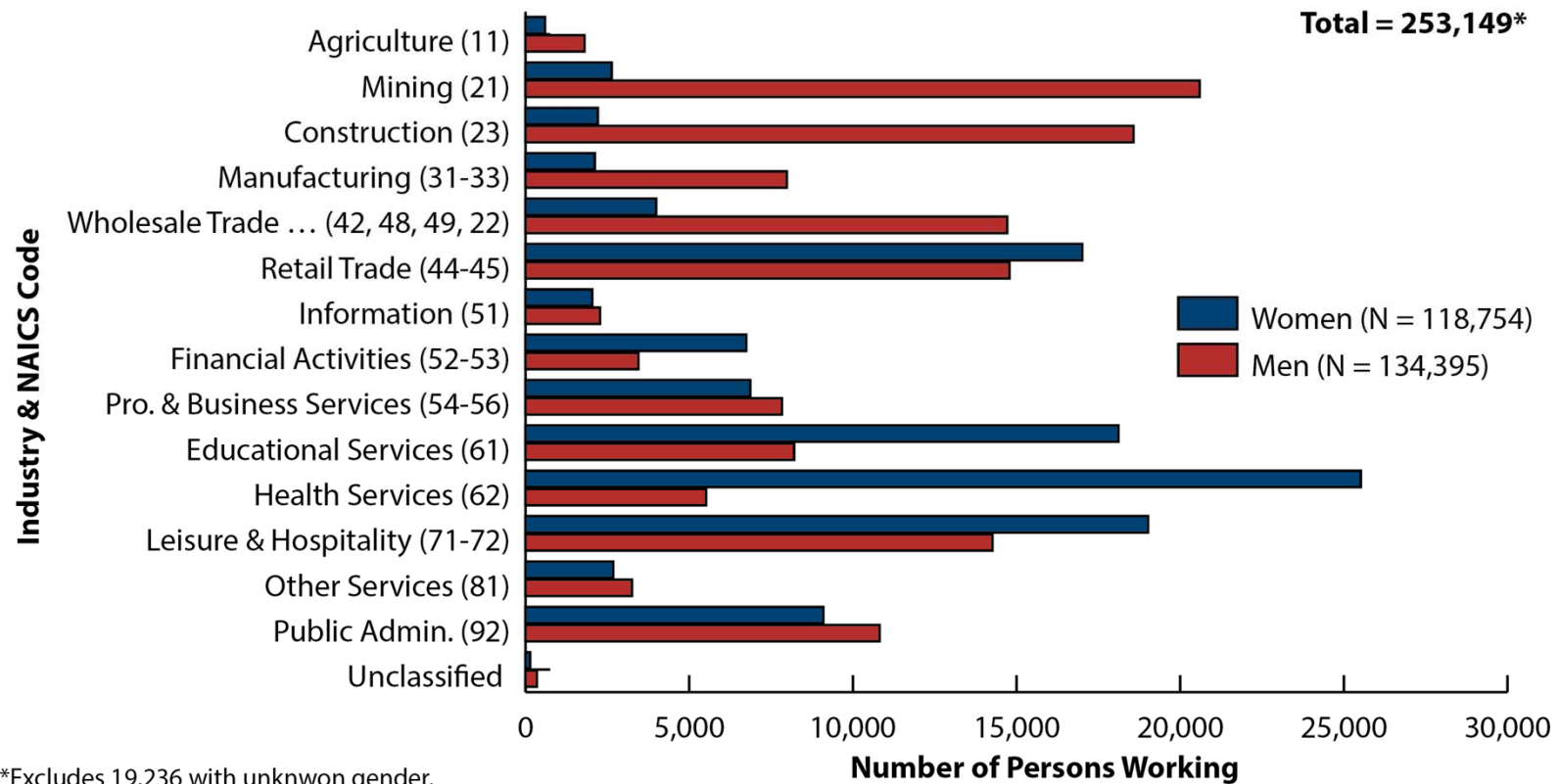
Figure: Number of Years with a WY Driver's License for Persons Working in Wyoming, 2016





Lifetime Primary Industry of Employment

Figure: Number of Persons Working in Wyoming in 2016 by Primary Lifetime Industry of Employment

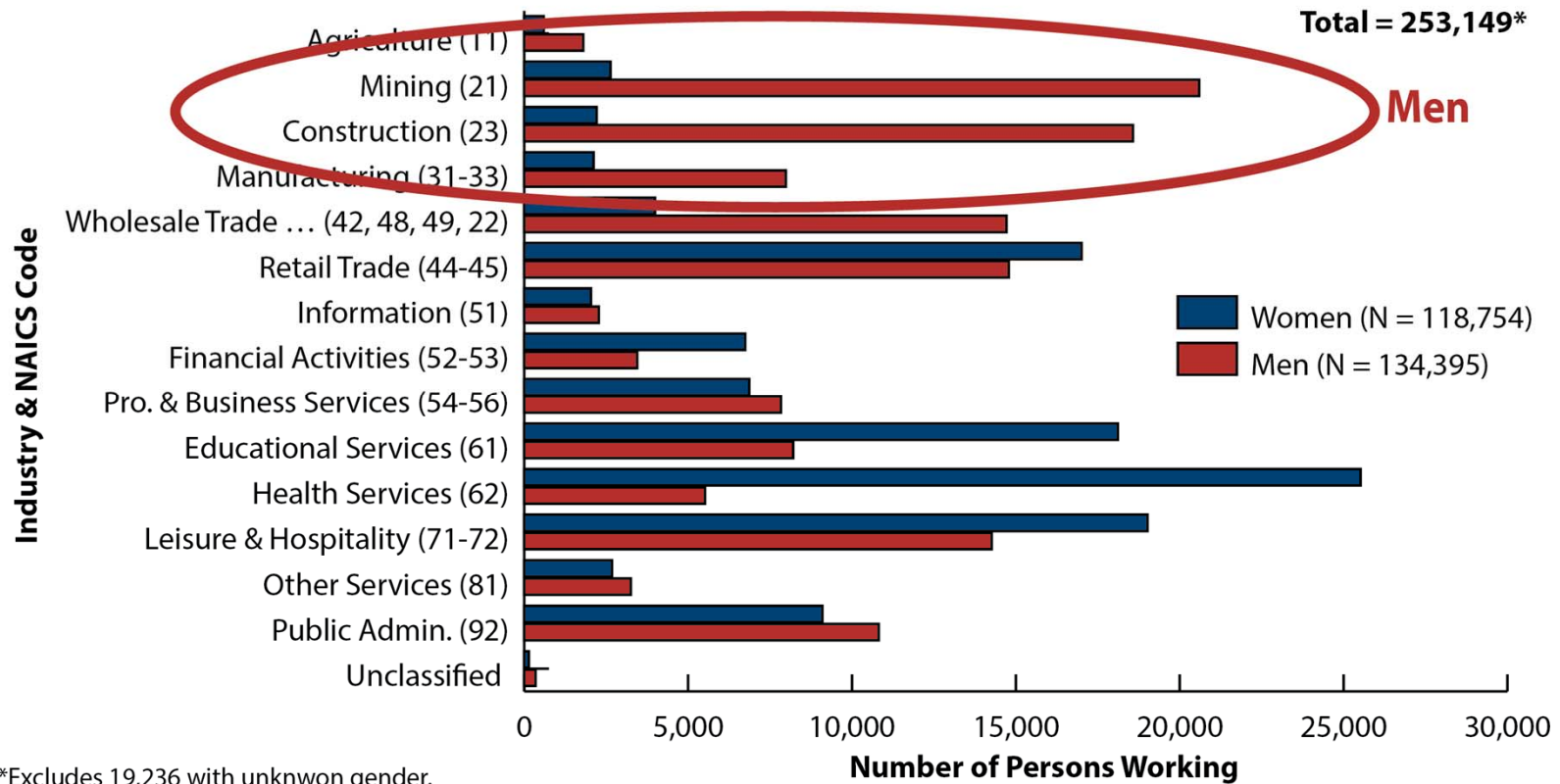


*Excludes 19,236 with unknown gender.



Lifetime Primary Industry of Employment

Figure: Number of Persons Working in Wyoming in 2016 by Primary Lifetime Industry of Employment

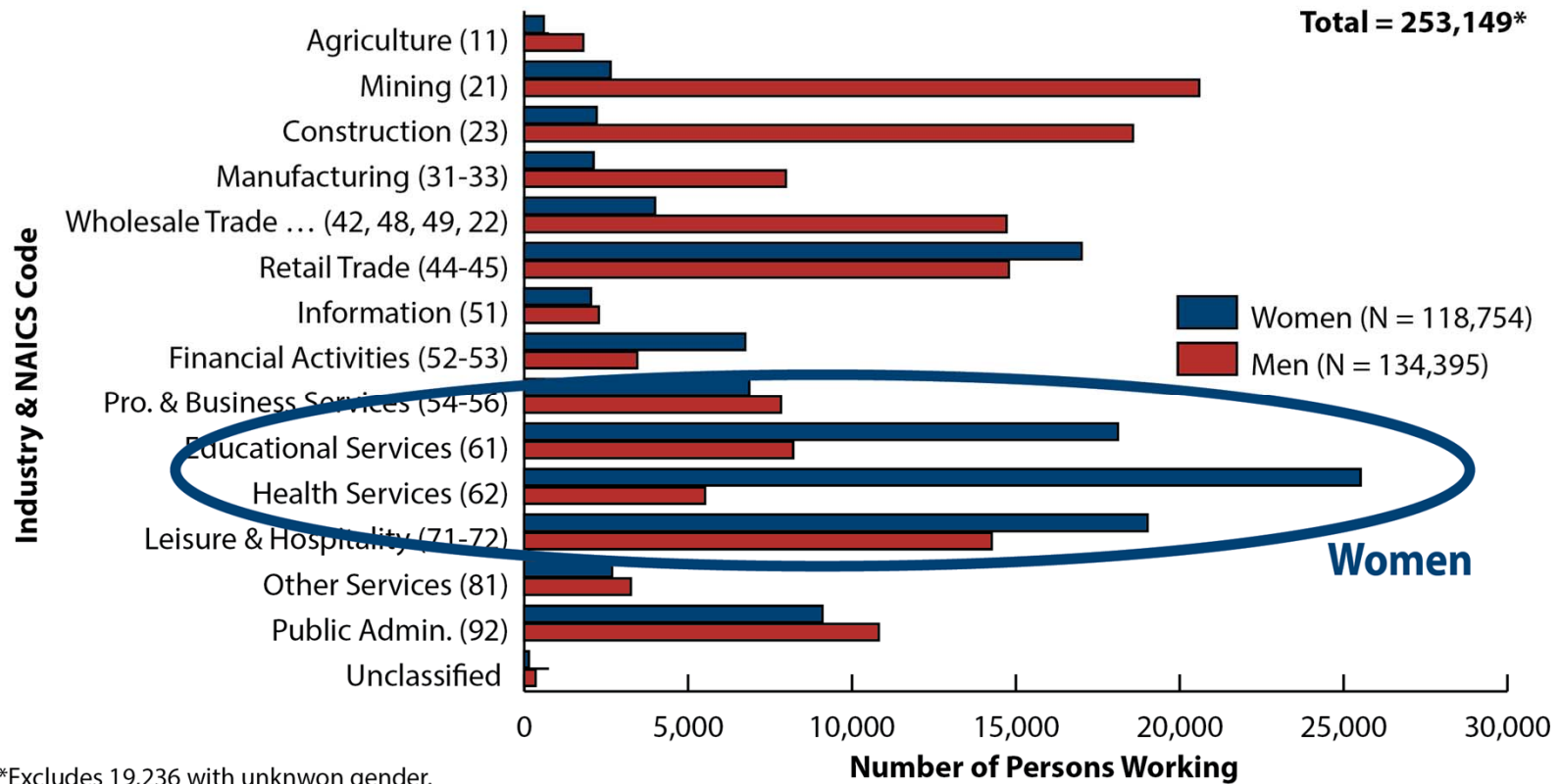


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Lifetime Primary Industry of Employment

Figure: Number of Persons Working in Wyoming in 2016 by Primary Lifetime Industry of Employment



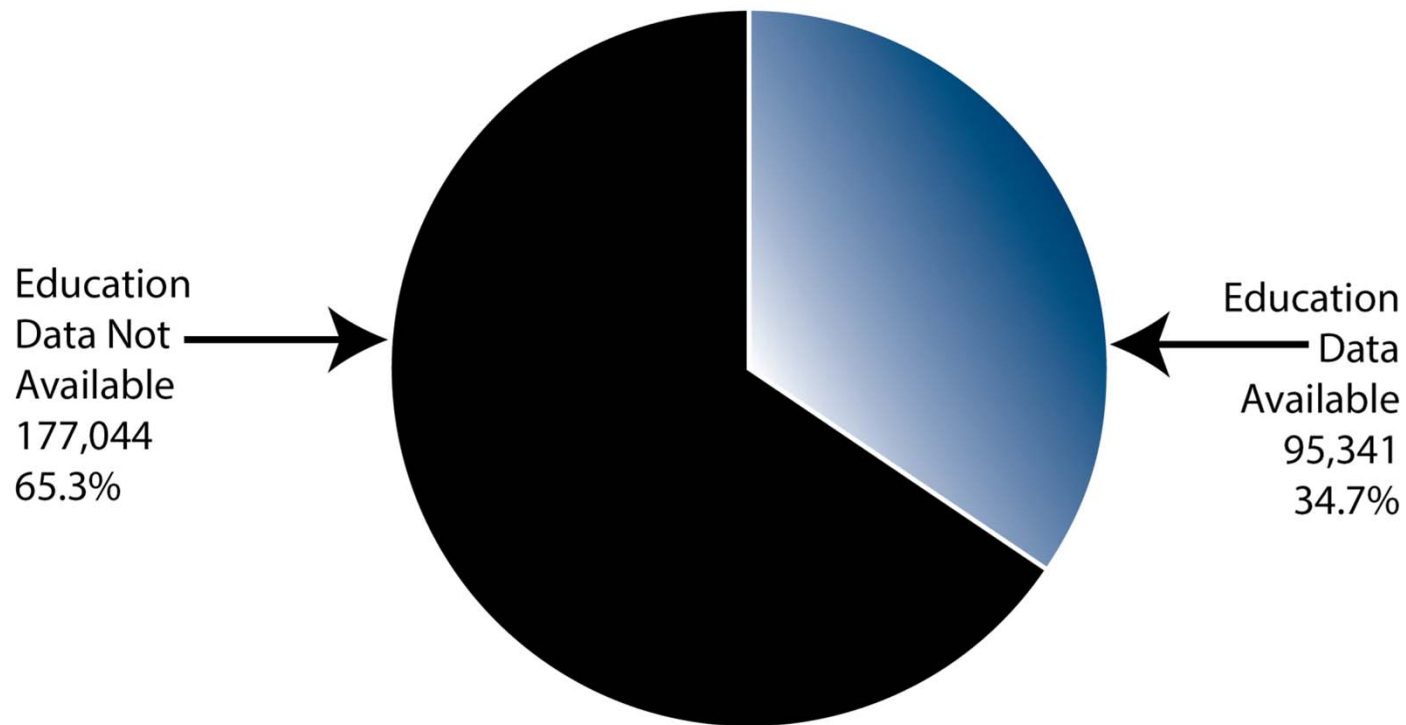
*Excludes 19,236 with unknown gender.



Availability of Education Data

Figure: Availability of Education Data for Persons Working in Wyoming, 2016

Total = 272,385

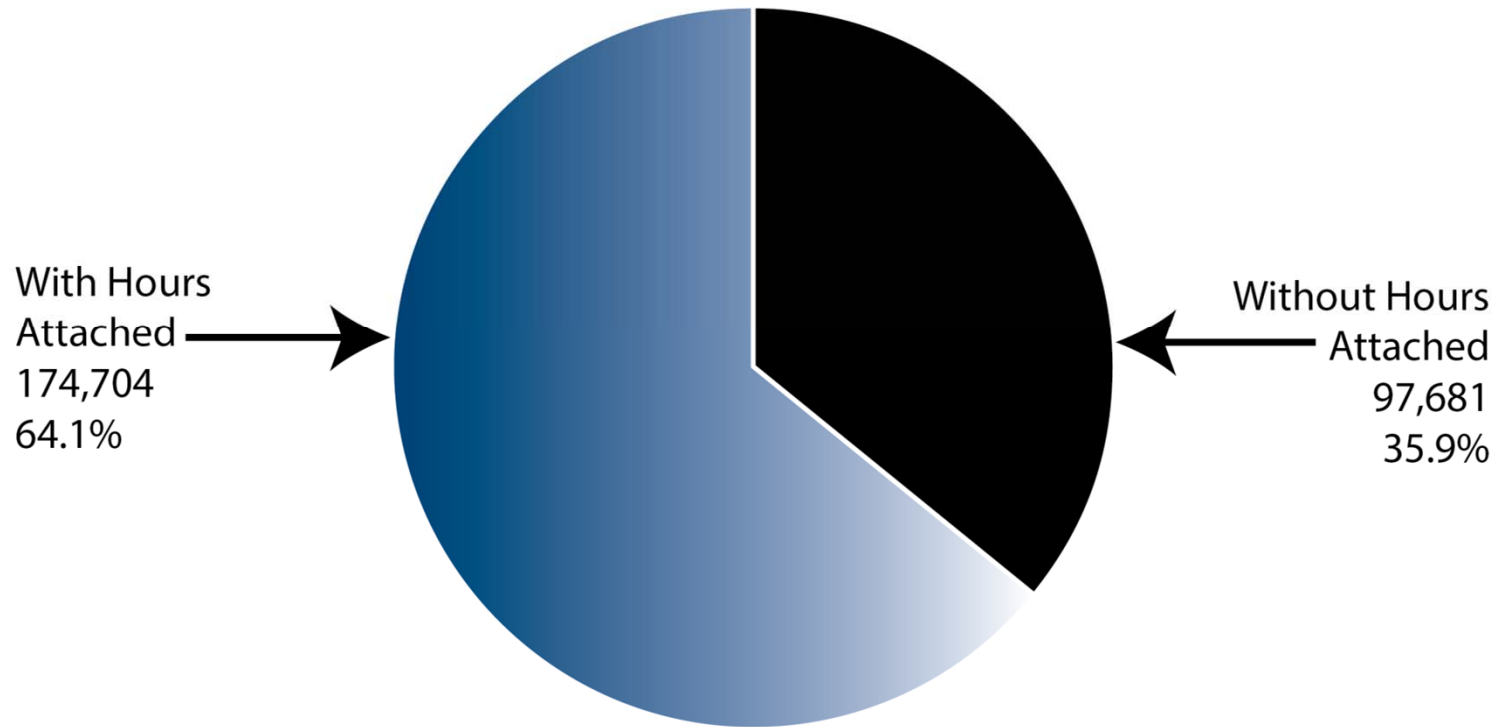




Availability of Hours Worked

Figure: Persons Working in Wyoming in 2016 with Hours Attached to Wage Records

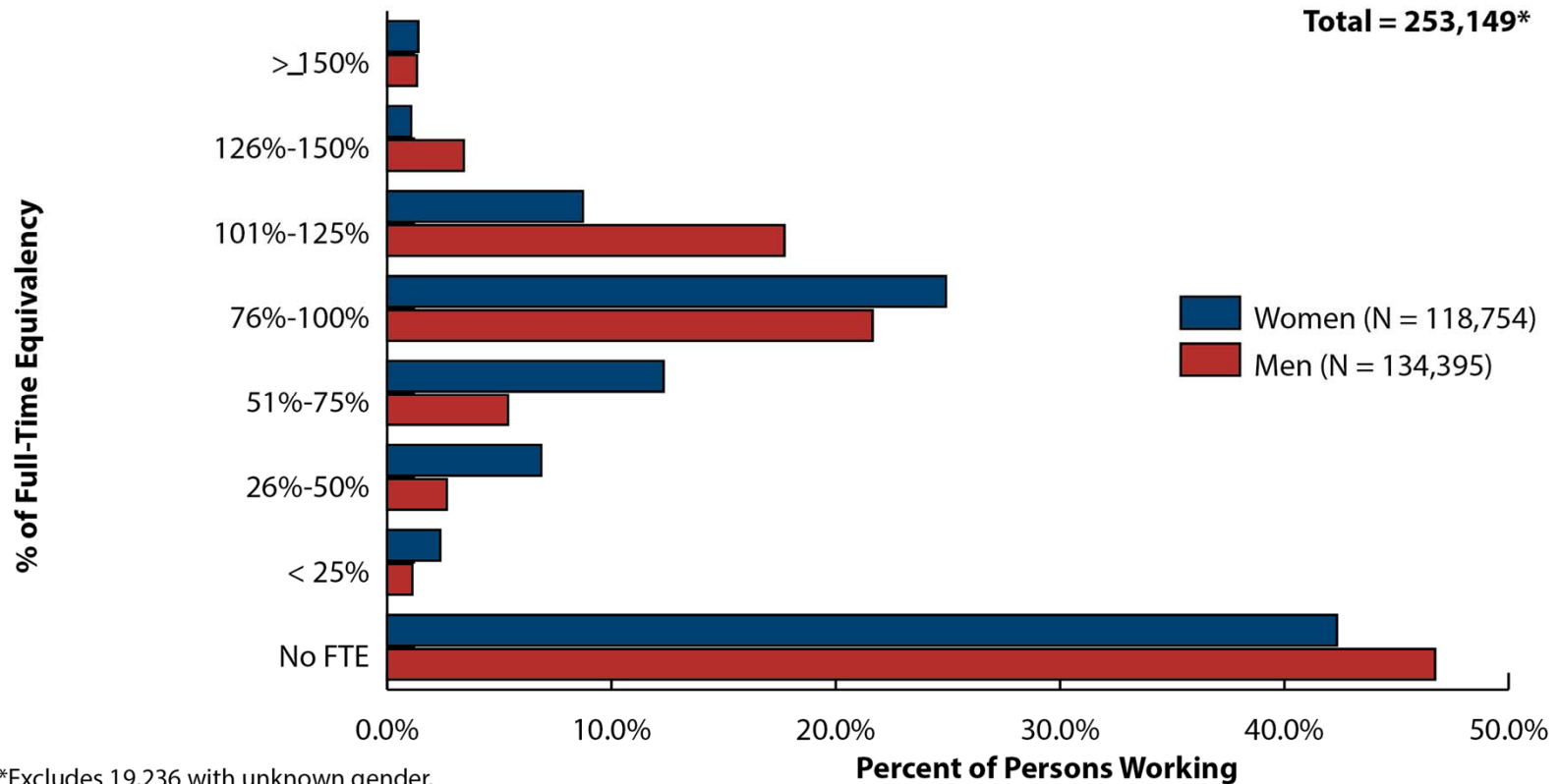
Total = 272,385





Full-Time Equivalency

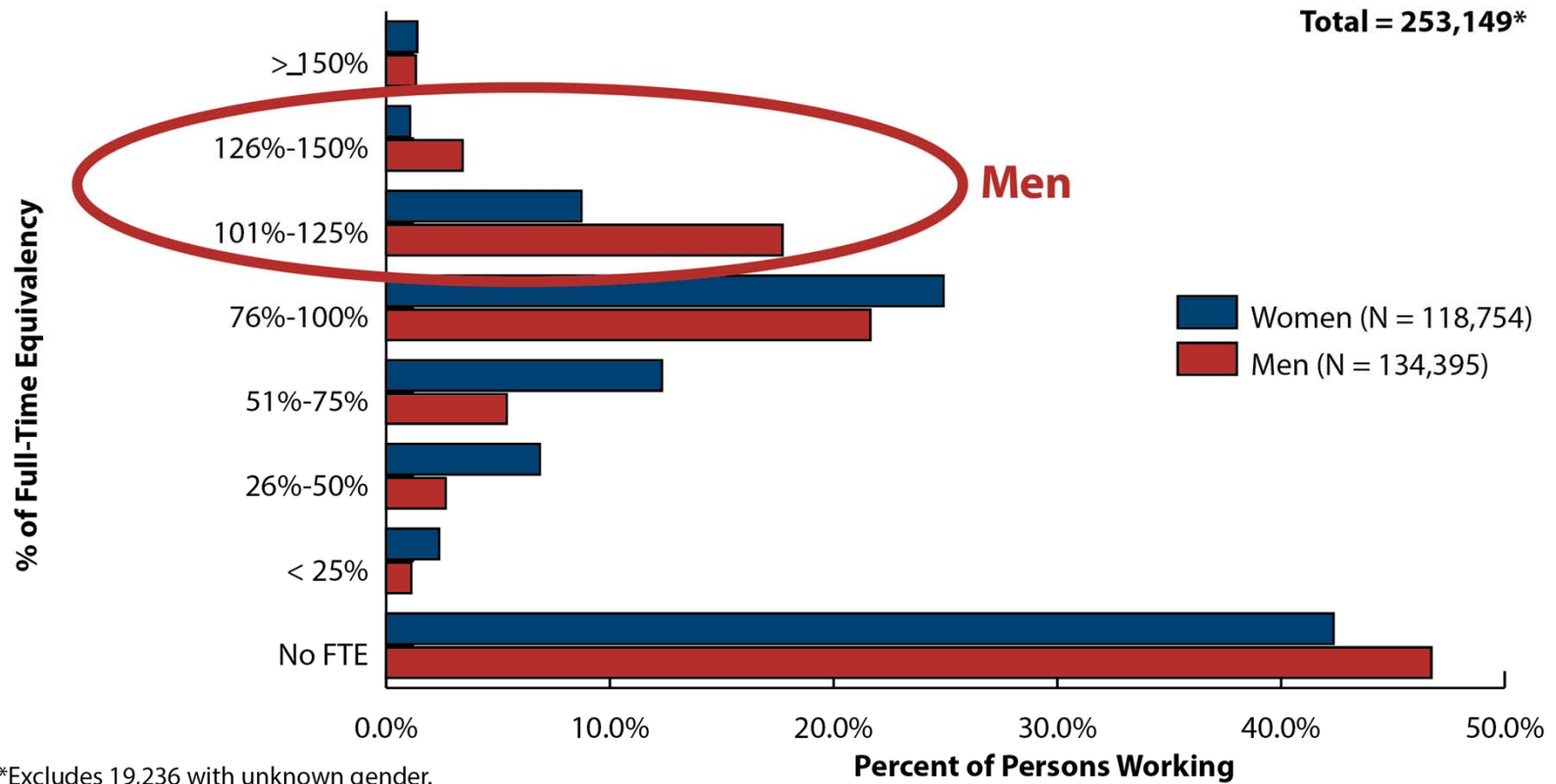
Figure: Persons Working in Wyoming in 2016 by Gender and Lifetime Percent of Full-Time Equivalency (FTE)





Full-Time Equivalency

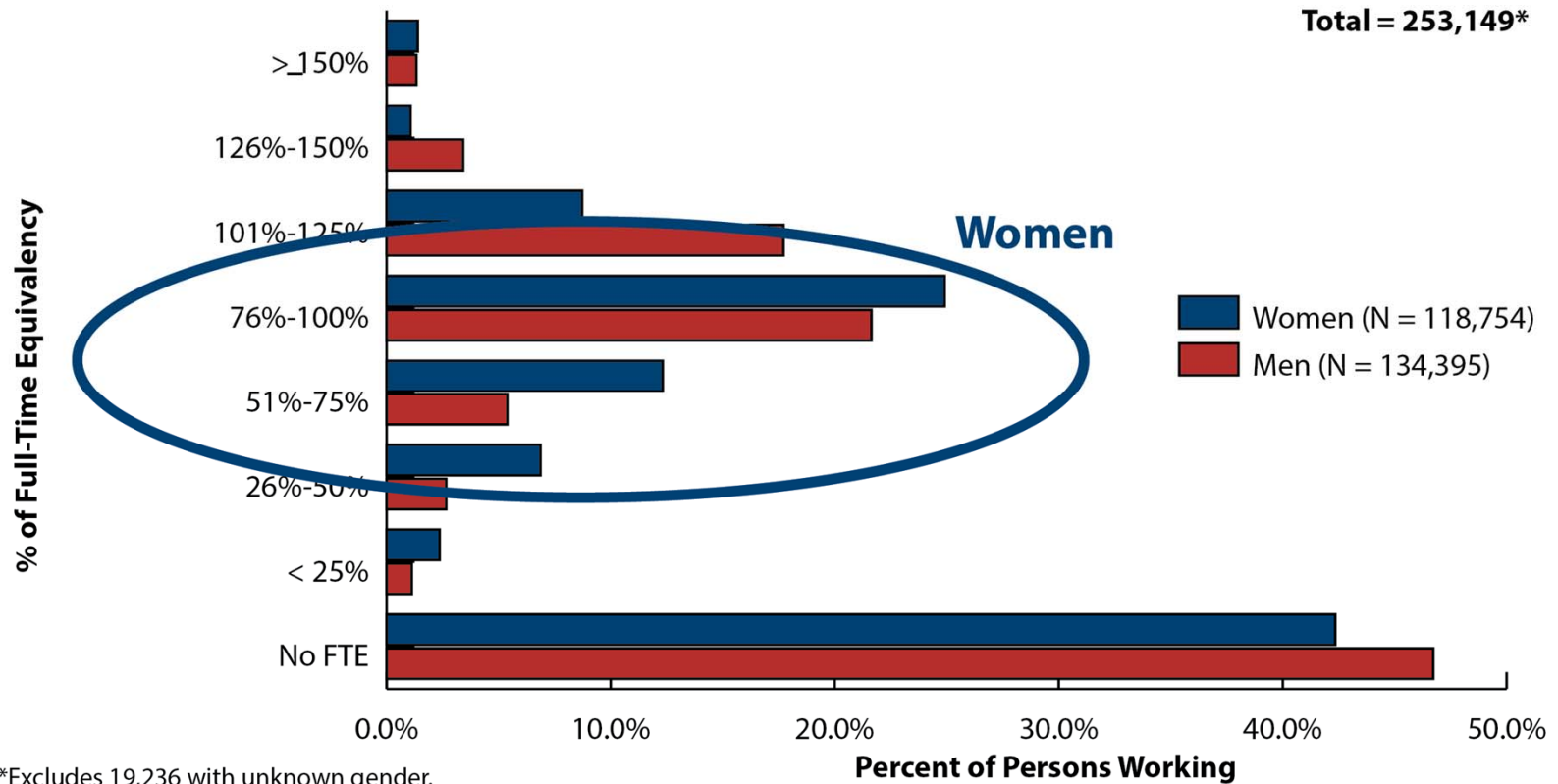
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Full-Time Equivalency

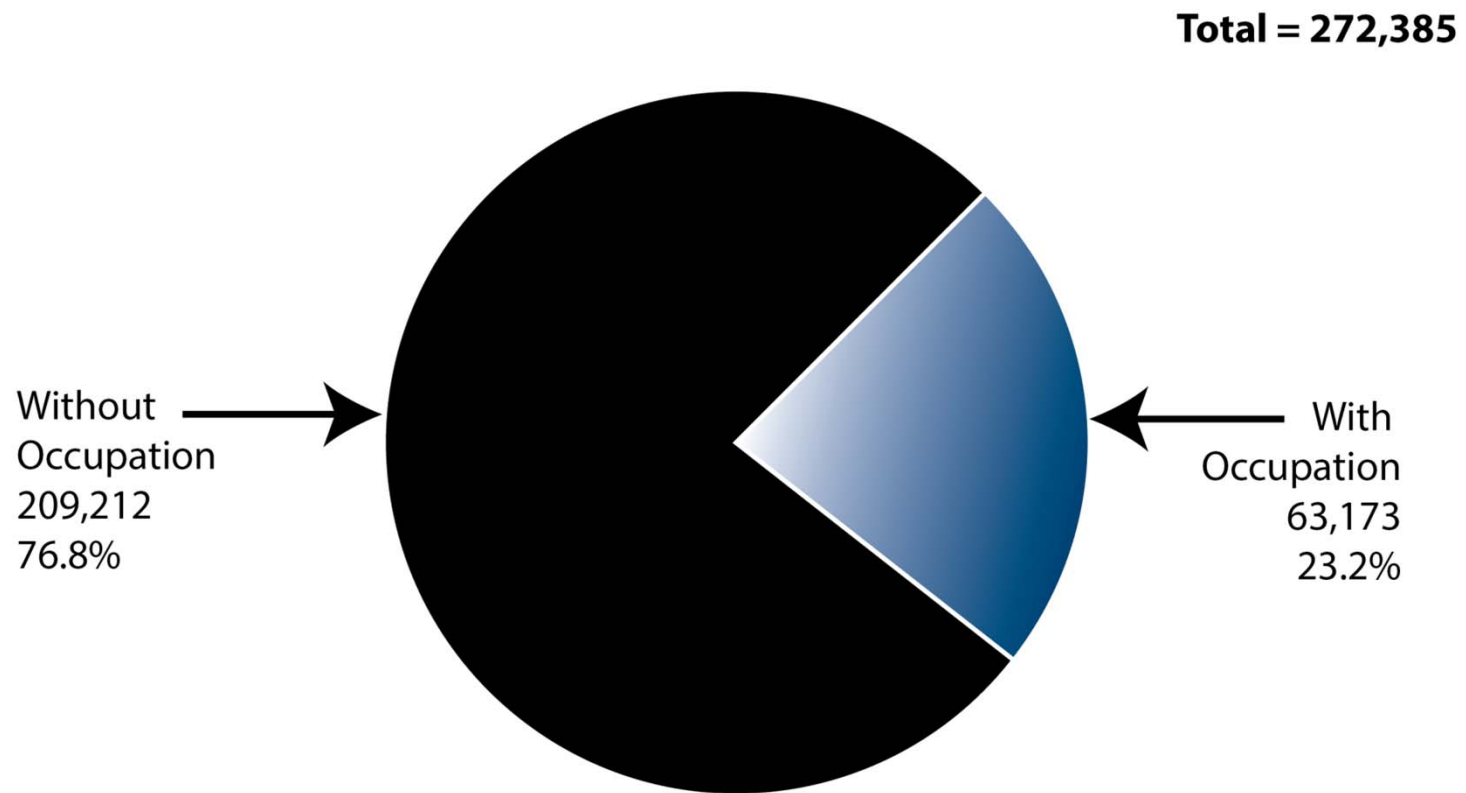
Figure: Persons Working in Wyoming in 2016 by Gender and Lifetime Percent of Full-Time Equivalency (FTE)





Availability of Occupation

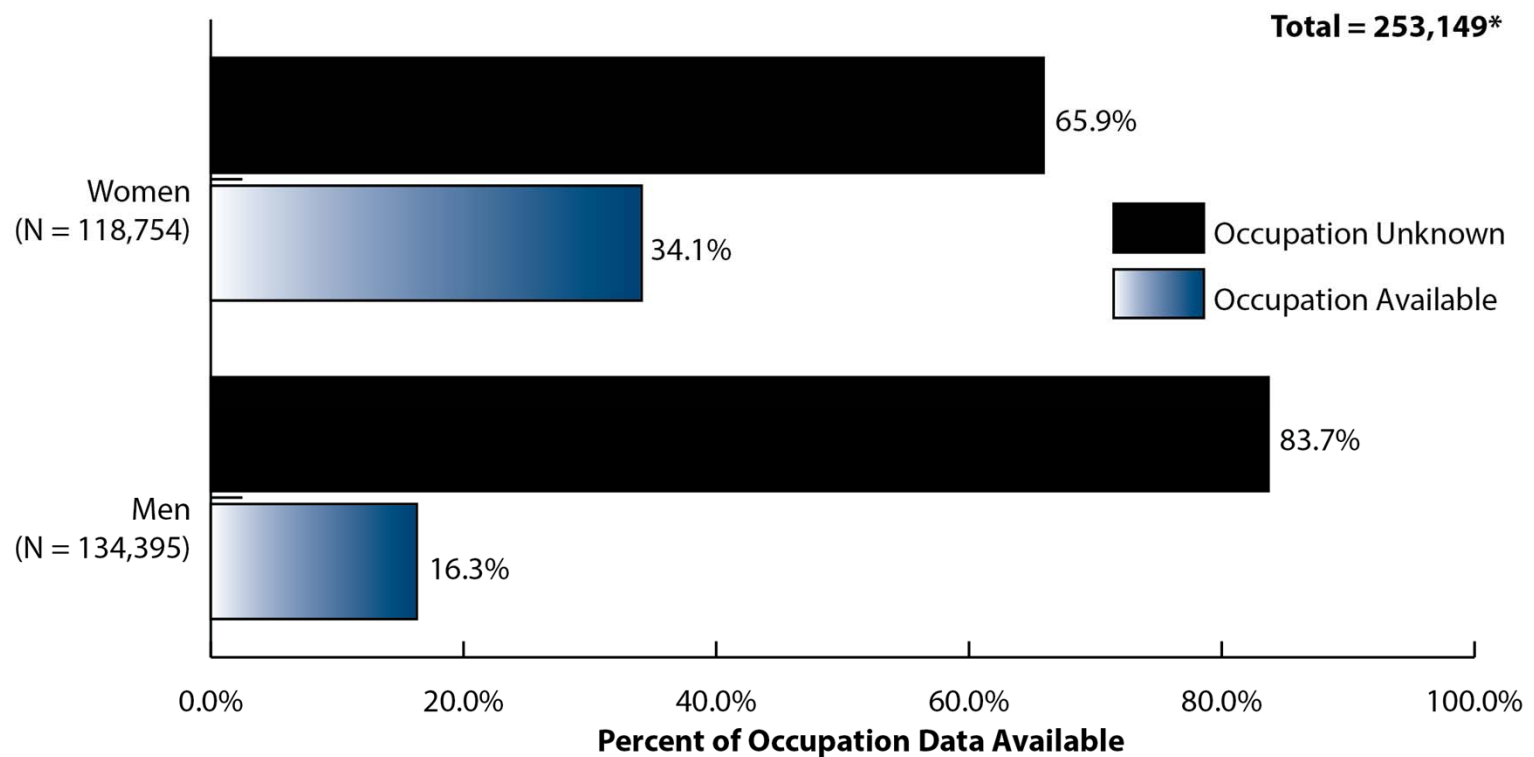
Figure: Availability of Occupation Data for Persons Working in Wyoming, 2016





Availability of Occupation by Gender

Figure: Availability of Occupation Data for Persons Working in Wyoming by Gender, 2016



*Excludes 19,236 with unknown gender.

About
The Data

States with Enhanced Wage Records

States with Hours	States with Occupations
<ul style="list-style-type: none">● Minnesota● Nebraska● Oregon● Rhode Island● Washington● Louisiana (pay rate)	<ul style="list-style-type: none">● Alaska (mandatory)● Louisiana (mandatory)● Nebraska (voluntary)

Key Findings



Wyoming's gender wage gap varies depending on the data source used and the limitations placed upon the data.

Examples

\$0.68 on the dollar (Chapter 1)

- Full-time, year-round work in 2016
- Source: American Community Survey 5-year estimates

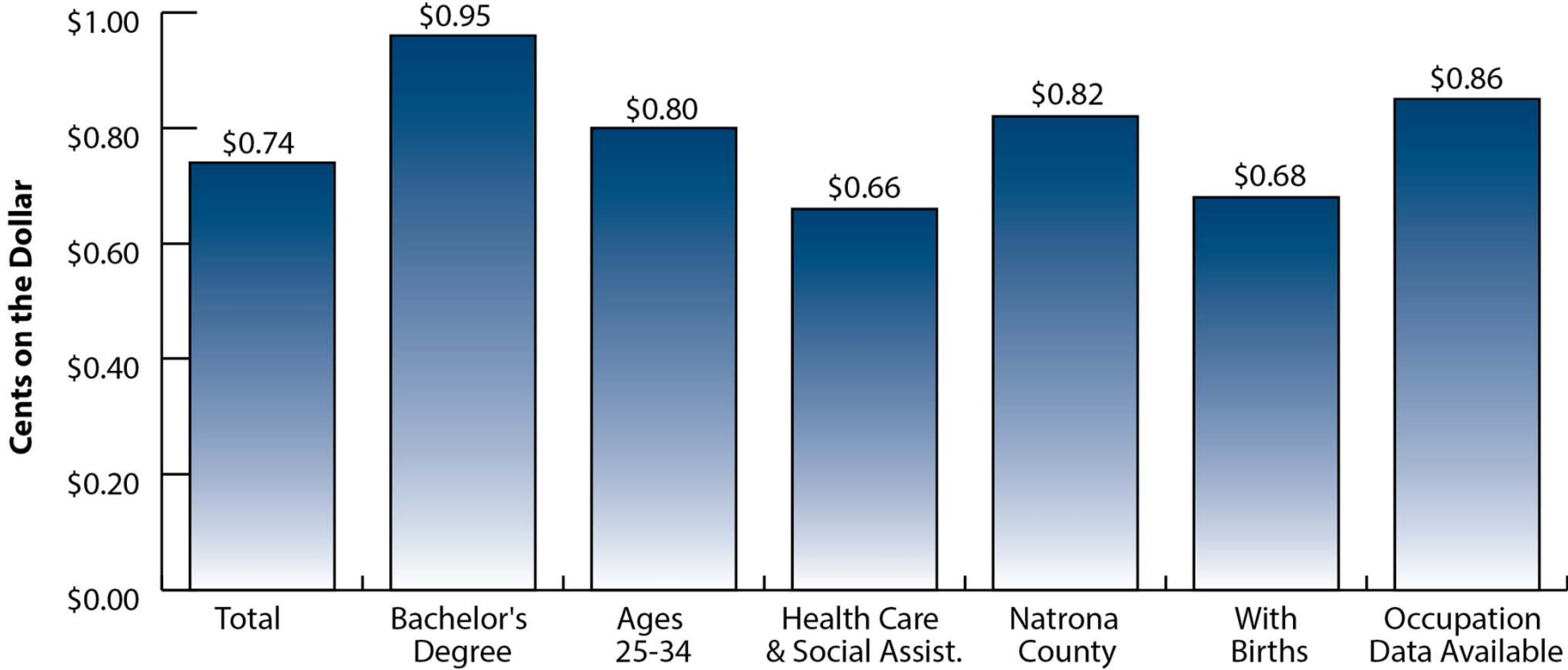
\$0.74 on the dollar (Chapter 2)

- Worked at least two consecutive quarters in 2016
- Source: Wage Records, Research & Planning, WY DWS

\$0.86 on the dollar (Chapter 3)

- Worked at least two consecutive quarters from 2005-2017
- Occupation data available
- Source: Wage Records, Research & Planning, WY DWS

Figure 2.1: Cents Women Earned on a Man’s Dollar by Selected Characteristics, 2016 ... see page 17

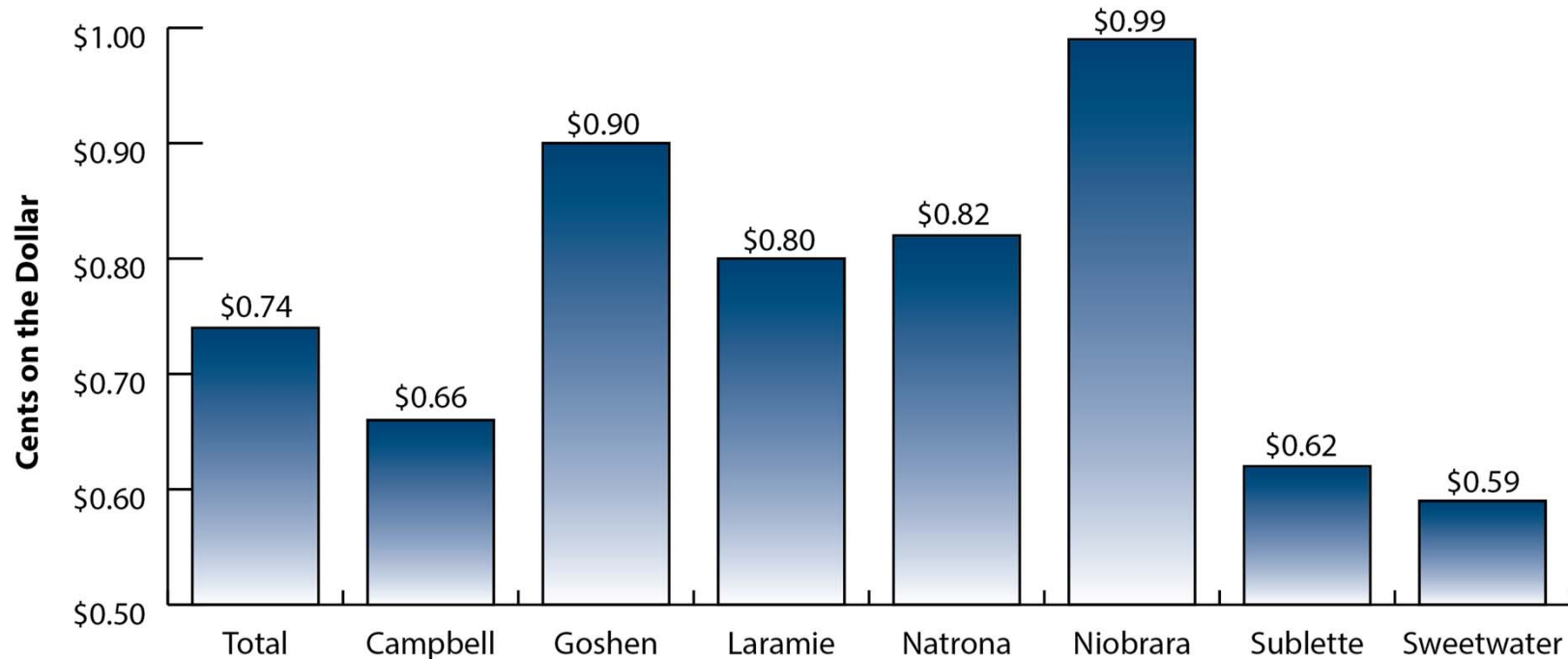


Source: Custom extract from Wage Records and other Research & Planning administrative databases.



(i)(A) Data and Analysis According to County
The gender wage gap varied by county.

Figure: Gender Wage Gap by Selected County of Employment in Wyoming, 2016 ... see page 18



Source: Custom extract from Wage Records and other Research & Planning administrative databases.



(i)(B) Data and Analysis According to Occupation

- Data on occupations are limited
- Occupation data not collected with wage records

Occupation data available to R&P:

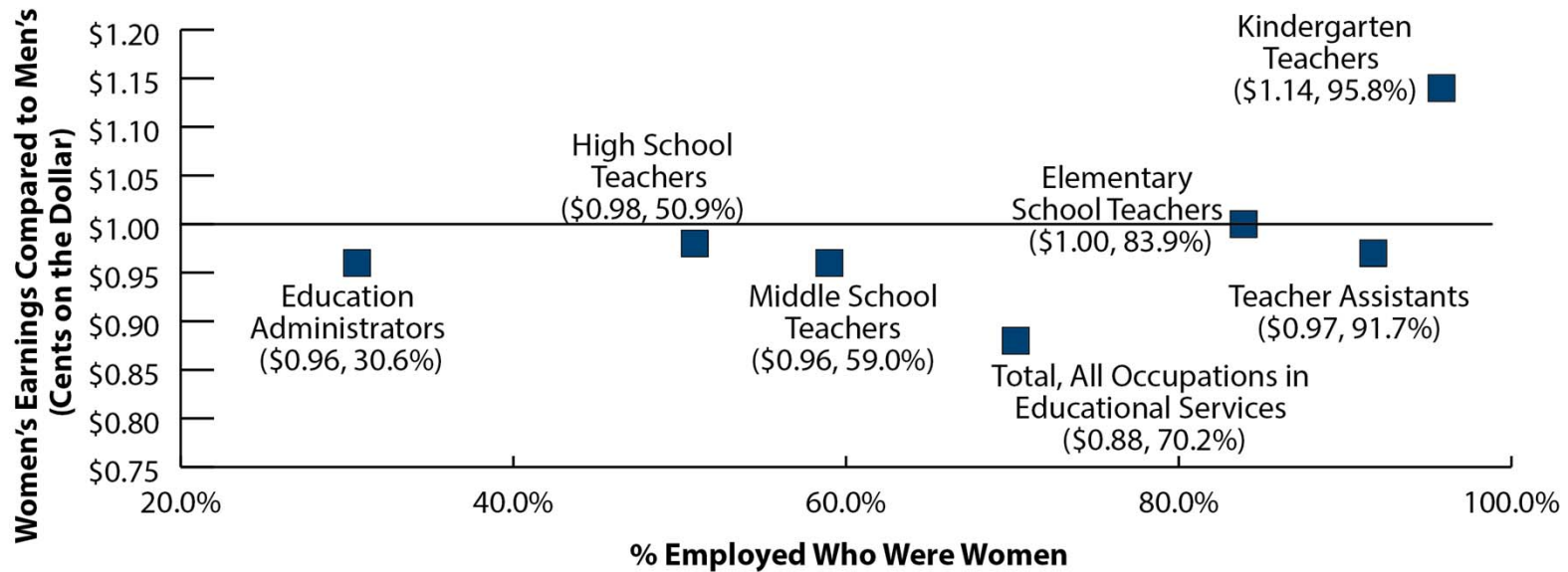
- Department of Education
- Wyoming state licensing boards
- State auditor's file
- New Hires Job Skills Survey

Source: Custom extract from Wage Records and other Research & Planning administrative databases.



(i)(B) Data and Analysis According to Occupation
Gender wage gap was narrower in many occupations in the educational services industry.

Figure 2.6: Gender Wage Gap for Selected Occupations in Educational Services in Wyoming, 2016 ... see page 25



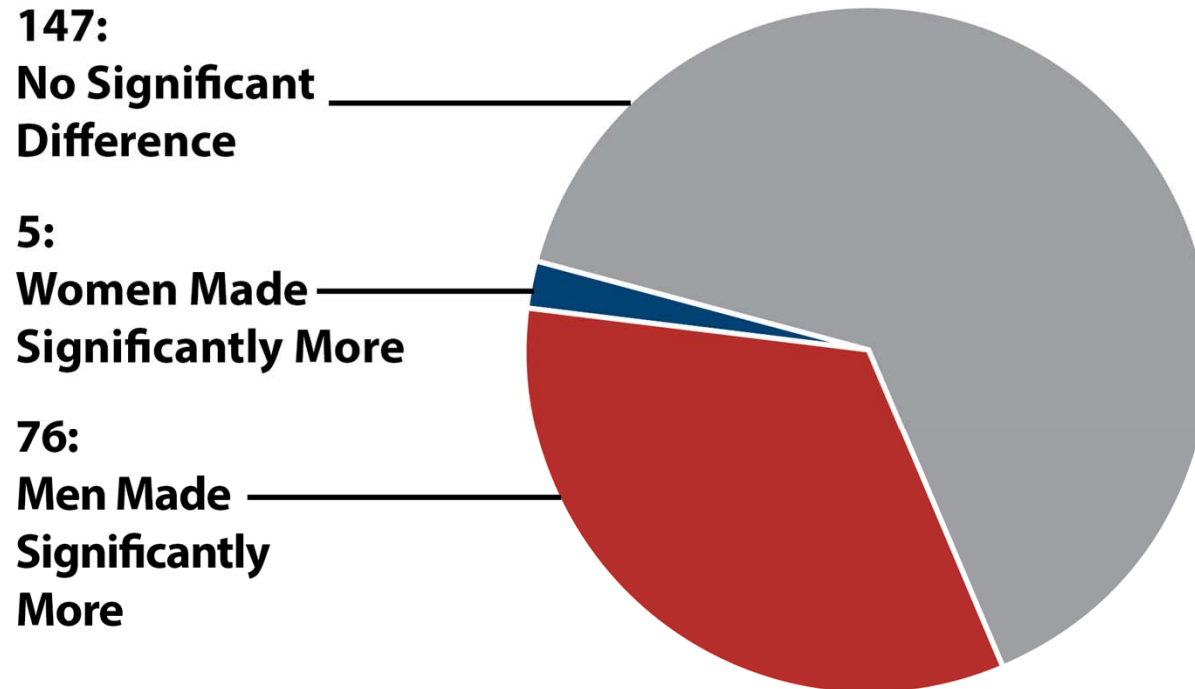
Source: Custom extract from Wage Records and other Research & Planning administrative databases.



(i)(B) Data and Analysis According to Occupation

228 Total Occupations
At least 5 men, 5 women

... see page 36

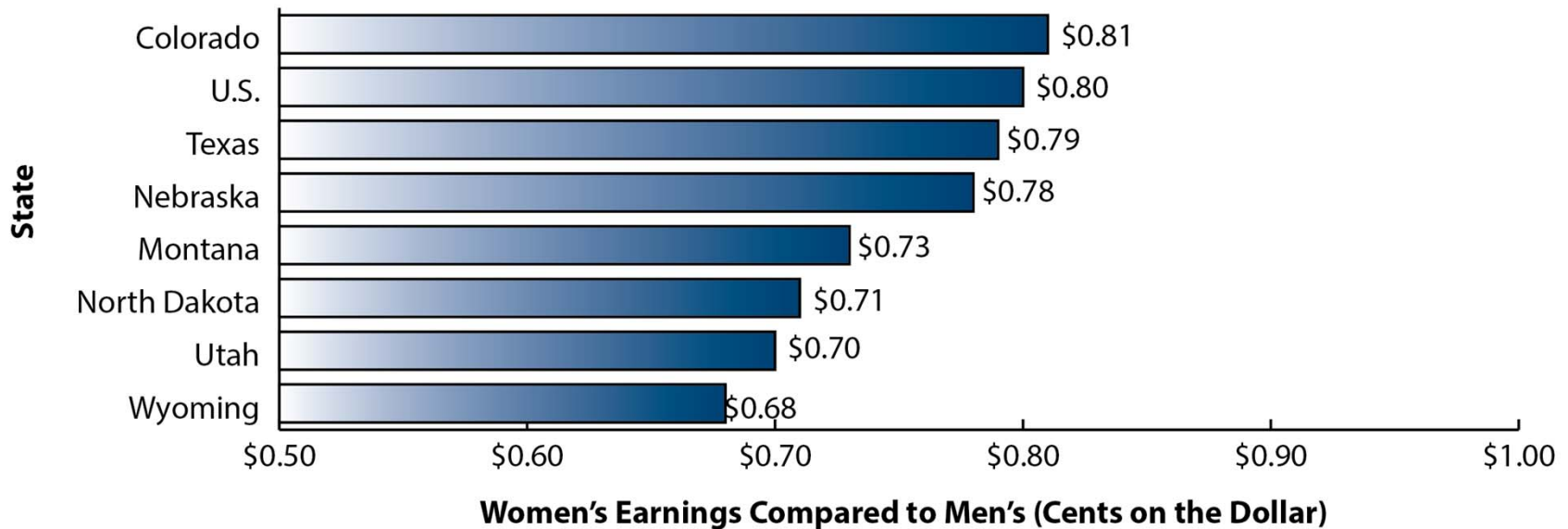


Source: Custom extract from Wage Records and other Research & Planning administrative databases.



(i)(C) Comparative State Data with Other State and Federal Info.
Wyoming had one of the widest gender wage gaps in the country.

Figure: Women’s Earnings Compared to Men’s (Cents on the Dollar) for Wyoming and Other Selected States, 2016 ... see page 41

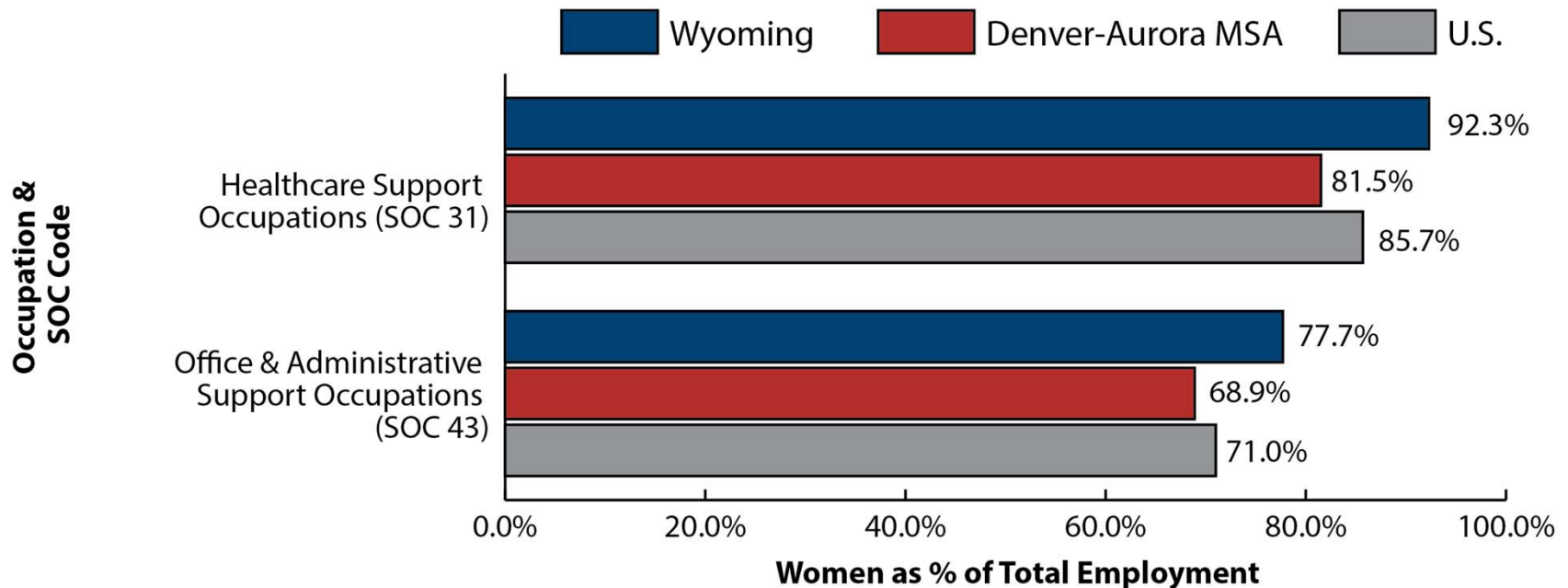


Full-time, year-round workers.
 Source: American Community Survey 5-Year Estimates. .



(i)(C) Comparative State Data with Other State and Federal Info.
Wyoming had a large proportion of women working in lower paying occupations.

Figure: Women as a % of Total Employment by Region and Selected Occupation, 2016
 ... see page 47



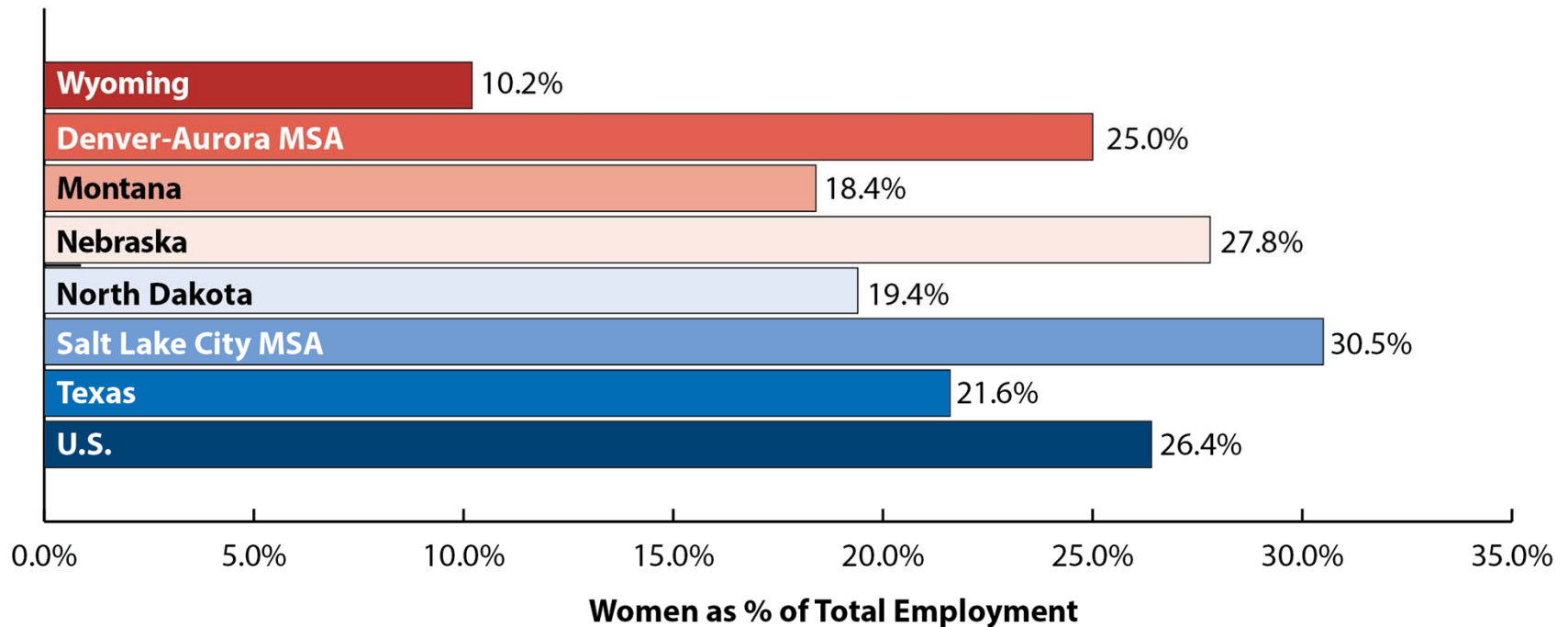
Full-time, year-round workers.
 Source: American Community Survey 5-Year Estimates. .



(i)(C) Comparative State Data with Other State and Federal Info.
Wyoming had a small proportion of women working in some higher paying occupations.

Figure: Women as a Percent of Total Employment in Production Occupations by Region, 2016

... see page 47



Full-time, year-round workers.

Source: American Community Survey 5-Year Estimates. .


**Key
Finding**

(ii) The Causes of Any Wage and Benefit Disparities
Hours worked and industry of employment had the greatest influence on Wyoming's gender wage gap.

Table: Percent Working in Wyoming in 2016 by Gender

... see page 12

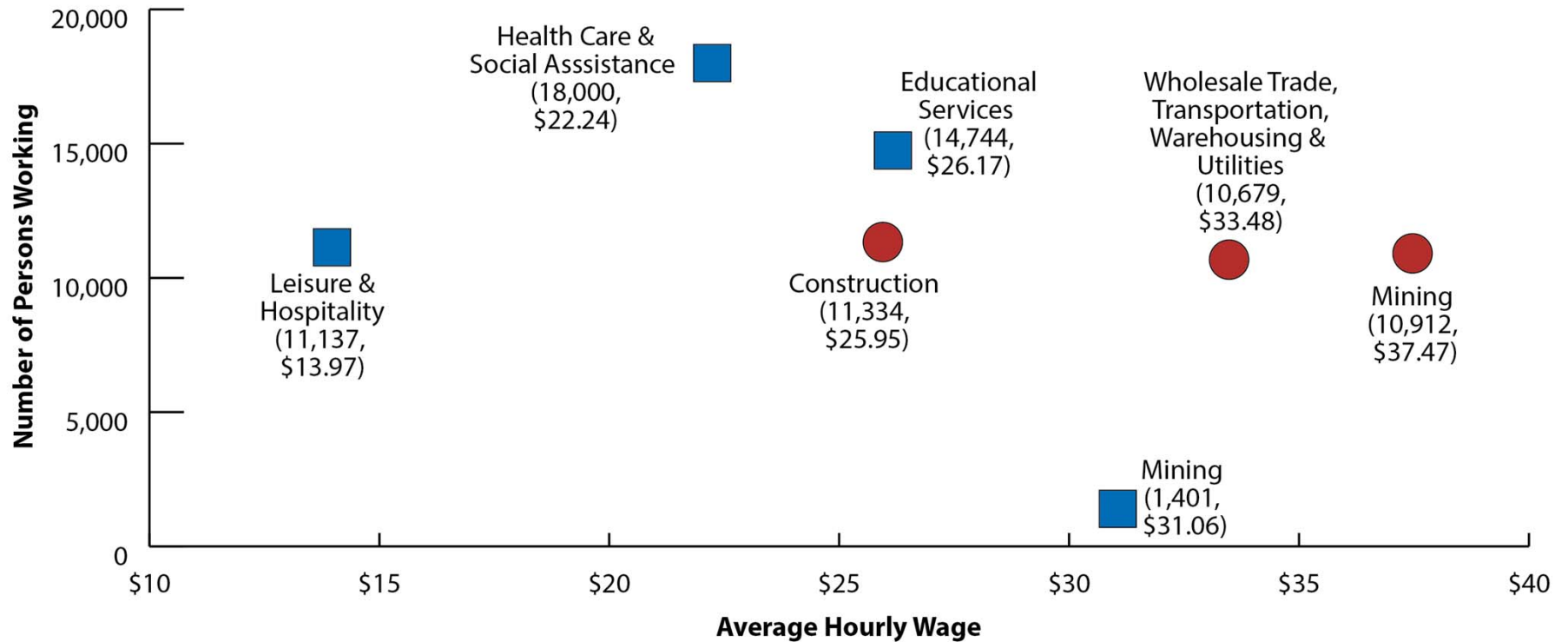
	Men = 195,740	Women = 182,751
Worked in Past 12 Months	87.1%	78.5%
Hours Worked = 35+	86.0%	69.2%
Hours Worked = <35	14.0%	30.8%
Did Not Work in Past 12 Months	12.9%	21.5%
Worked Full-Time, Year-Round	61.5%	43.8%
Average Hours Worked per Week	44.0	36.0

Source: U.S. Census Bureau, 2016 American Community Survey 5-Year Estimates.



(ii) The Causes of Any Wage and Benefit Disparities
Hours worked and industry of employment had the greatest influence on Wyoming's gender wage gap.

Total Number of Persons Working in Wyoming by Gender, Industry, and Average Hourly Wage, 2016 ... see page 20



Chapter 1: Introduction

Primary data source: American Community Survey 5-Year Estimates

Chapter
1

Highlights from the Chapter

- Wyoming women made \$0.60 to \$0.68 for each \$1 paid to men, 2005-2016.
- National average: \$0.80 per \$1
- Wyoming ranked 51st in the nation, ahead of only Louisiana (\$0.66 per \$1)
- Anti-discrimination laws
- Possible solutions

Chapter 2: Factors that Influence the Gender Wage Gap

Primary data source: Wyoming administrative databases

Chapter
2

Highlights from the Chapter

The gender wage gap:

- varied by county and industry
- widened with age
- was narrower among individuals with a postsecondary degree
- widened with the number of births

Chapter 3: Occupations and Hourly Wages

Primary data source: Wyoming administrative databases

Chapter
3

Highlights from the Chapter

Women made more than men in 5 occupations:

- Office & administrative support workers
- Lifeguards, ski patrol, & other recreational protective service workers
- Combined food preparation & serving workers

Men made more than women in 76 occupations:

- General & operations managers
- Accountants & auditors
- Physician assistants

No difference in 147 occupations:

- Human resource managers
- Educational, vocational, & school counselors
- Cashiers

Chapter 4: Regional Occupational Comparison

Primary data source: American Community Survey 5-Year Estimates

Chapter
4

Highlights from the Chapter

- Staffing patterns in Wyoming were often different from other regions and the national average.
- The gender wage gap varied by occupation and region.
- The proportion of women working varied by occupation and region.

Chapter 5: Predicting Gender Using Logistic Regression

Primary data source: Wyoming administrative databases

Chapter
5

Highlights from the Chapter

- 3 models
- Workers' interaction with the labor force
- Wage was purposely excluded
- Accurately predicted gender 69.6% to 79.6% of the time
- 2008: Accurately predicted gender 72.2% of the time

Chapter 6: Breaking Down the Gender Wage Gap

Primary data source: Wyoming administrative databases

- Decomposition analysis

Chapter
6

Highlights from the Chapter

- Women made \$0.72 for every dollar made by men
 - Leaving a \$0.28 wage gap
- Able to explain \$0.15 of the wage gap
 - Two main variables:
 - Hours worked: \$0.09
 - Industry: \$0.12
- \$0.13 could not be accounted for

Chapter 7: Analysis of Benefits in Wyoming

Primary data sources:

- Wyoming New Hires Job Skills Survey
- American Community Survey 5-year estimates

Chapter
7

Highlights from the Chapter

- New Hires
 - Health insurance, retirement plan, paid time off
 - Greater proportion of men offered benefits than women
- ACS 5-Year Estimates
 - Ages 16-65
 - Slightly greater proportion of women (84.9%) covered by some insurance than men (82.1%)
 - Medicaid: greater proportion of women (9.4%) than men (6.6%)

Chapter 8: Benefits of Reducing Wage Disparities

Primary data source: Wyoming administrative databases

- IMPLAN modeling software

Chapter
8

Highlights from the Chapter

- Scenario:
 - Hourly wage of women was increased to the hourly wage of men
 - Total number of hours worked unchanged
- Results
 - Increased labor income of \$153 million
 - Additional 604 jobs
 - \$22.2 million in additional labor income
 - Over \$80 million in output to the Wyoming economy
- Note: Scenario is not entirely realistic
 - Profits could decrease with increased labor costs

Possible Solutions and Actions Other States Have Taken

Please see page 7 of your publication.

Questions?

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