Undervalued and Underpaid in America

Women in Low-Wage, Female-Dominated Jobs

A Report from the Institute for Women's Policy Research

INSTITUTE FOR WOMEN'S POLICY RESEARCH

Informing policy. Inspiring change. Improving lives.

About This Report

This report investigates women's experiences in large, low-wage, growing, female-dominated occupations, comparing demographic data and indicators of economic security between 1994 and 2014, and projecting growth rates to 2024. It focuses on 22 occupations fitting these criteria, and analyzes these jobs' size and wages, racial and ethnic composition, share of parents and single parents, workers' educational attainment, poverty rates and reliance on social assistance programs, and documents, where possible, how these indicators have changed between 1994 and 2014. The report also discusses the occupations' projected growth between 2014 and 2024, and discusses public policy choices that could improve workers' circumstances in the coming decades. The report is part of IWPR's Employment and Job Quality initiative, and was funded by Oxfam America and the Ford Foundation. In collaboration with IWPR, Oxfam America produced a complementary report titled *Undervalued and Underpaid in America: The Deck is Stacked against Millions of Working Women* available at www.oxfamamerica.org/undervalued.

About The Institute for Women's Policy Research

The Institute for Women's Policy Research conducts and communicates research to inspire public dialogue, shape policy, and improve the lives and opportunities of women of diverse backgrounds, circumstances, and experiences. The Institute works with policymakers, scholars, and public interest groups to design, execute, and disseminate research and to build a diverse network of individuals and organizations that conduct and use women-oriented policy research. IWPR's work is supported by foundation grants, government grants and contracts, donations from individuals, and contributions from organizations and corporations. IWPR is a 501(c)(3) tax-exempt organization that also works in affiliation with the women's studies and public policy and public administration programs at The George Washington University.

Acknowledgements

The research and analysis for this report was supported with funding from Oxfam America and the Ford Foundation. IWPR would like to express its appreciation for the strong support provided for this work by Laine Romero-Alston, Program Officer at the Ford Foundation, and Jeffrey Buchanan, Senior Domestic Policy Advisor at Oxfam America. The authors are indebted to Andrew L. Yarrow, Ph.D., Senior Fellow at the Aspen Institute; Chandra Childers, Ph.D., IWPR Senior Research Associate; and Jeff Hayes, Ph.D., IWPR Program Director, Job Quality and Income Security, for their work on data analysis and early drafts of this report as well as their review of later drafts. Review and helpful feedback on the report was provided by Mary Babic, Communications Officer at Oxfam America; Shawn Fremstad, Senior Fellow at Center for American Progress; Cynthia Harrison, Ph.D., Professor Emerita of History, Women's Studies, and Public Policy at George Washington University; Teofilo Reyes, Research Director at Restaurant Opportunities Centers United; and an anonymous reviewer.

Heidi Hartmann, Ph.D., President and CEO, and Barbara Gault, Ph.D., Vice President and Executive Director of IWPR provided guidance of the project and reviewed multiple versions of the report. IWPR Study Director Jessica Milli, Ph.D. reviewed the final report. Former IWPR Research Assistant Asha DuMonthier, former Research Interns Catherine Traini and Robert Donoghue, IWPR Mariam K. Chamberlain Fellow Gladys McLean and IWPR Research Interns Mariah Ferguson and Nury Chavez provided additional project and report assistance.

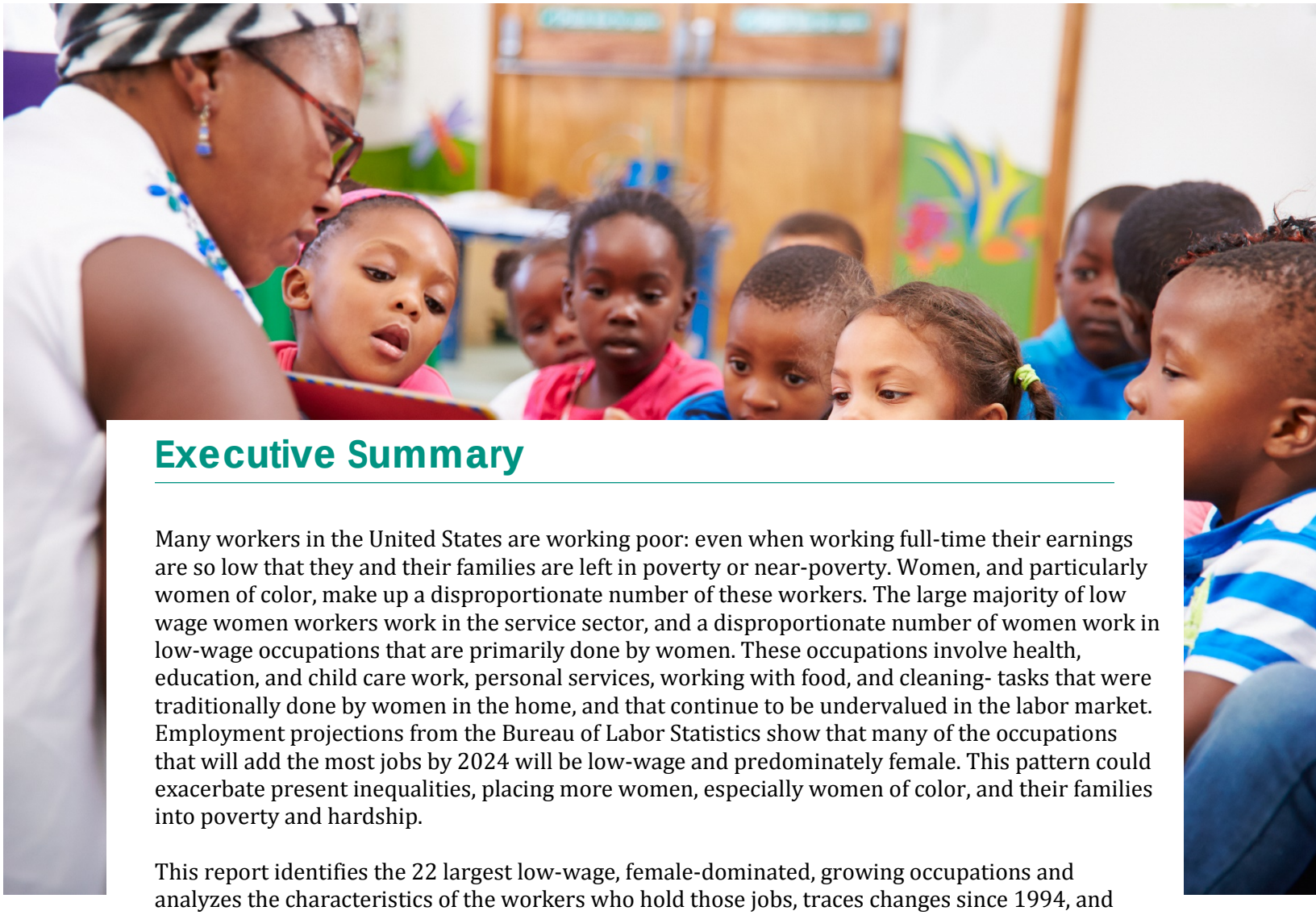
Board of Directors

IWPR #D508

Undervalued and Underpaid in America:

Women in Low-Wage, Female-Dominated Jobs

Elyse Shaw, M.A., Ariane Hegewisch, M.Phil., Emma Williams-Baron, and Barbara Gault, Ph.D.



Executive Summary

Many workers in the United States are working poor: even when working full-time their earnings are so low that they and their families are left in poverty or near-poverty. Women, and particularly women of color, make up a disproportionate number of these workers. The large majority of low wage women workers work in the service sector, and a disproportionate number of women work in low-wage occupations that are primarily done by women. These occupations involve health, education, and child care work, personal services, working with food, and cleaning- tasks that were traditionally done by women in the home, and that continue to be undervalued in the labor market. Employment projections from the Bureau of Labor Statistics show that many of the occupations that will add the most jobs by 2024 will be low-wage and predominately female. This pattern could exacerbate present inequalities, placing more women, especially women of color, and their families into poverty and hardship.

This report identifies the 22 largest low-wage, female-dominated, growing occupations and analyzes the characteristics of the workers who hold those jobs, traces changes since 1994, and describes projected employment growth of the occupations through 2024. The report highlights that low wages typically come with poor job quality, including risks to health and safety, unreliable scheduling, and absence of paid leave. Many women in these occupations are single parents, and must rely on subsidized lunch programs and food stamps (SNAP) to feed their children. While low wages are more likely for women who have no college education, the analysis shows that many women with at least some college education work in low wage jobs, and that women in these occupations are now better educated than they were in 1994.

Key Findings

- Twenty two occupations have median earnings of less than $15 per hour, employ at least 100,000 women, have a majority (more than 60 percent) female workforce, and are projected to add at least one percent more jobs between 2014 and 2024. These large, growing, low wage, female-dominated occupations employ more than a quarter of all employed women, and 23.5 million workers altogether.

- The 22 occupations include 5 million workers in office and administrative assistance, 4.5 million workers in healthcare and care assistance, 3.8 million cashiers, 3.5 million workers in food preparation and serving, 3.2 million worker in childcare and education, 1.7 million workers in beauty and personal services, and 1.7 million housekeepers and cleaners.

- In all of these occupations, the median earnings for a full year of full-time work leave a family of three near-poverty (below 200 percent of the federal poverty threshold), and in three of these occupations in poverty (below 100 percent of the poverty threshold).

- By 2024, nearly one in six jobs (15.5 percent) will be in these 22 occupations, an increase of more than 25 percent since 1994 when these occupations accounted for one in eight jobs (12.3 percent).

- The median age for women in these 22 occupations is 36 years, and 75 percent are older than 25. A third of women in these jobs are mothers, and about 15 percent –almost twice the rate for women working in better paid occupations—are single mothers.

- Women of all racial and ethnic backgrounds work in these low wage occupations, but women of color are overrepresented and are more than four in ten (44 percent) of women workers in these occupations compared with a third (34 percent) of all women workers. The share of women of color in these occupations ranges from just 11 percent of women working as animal caretakers to 70 percent of women personal appearance workers.

- Of the more than 8 million women working part-time in these occupations (42 percent and well over twice the level of part-time work (17 percent) in better paid occupations), more than four in ten work part-time involuntarily because they cannot find full-time work, or because child care and other family obligations constrain their options.

- Workers in low-wage, female-dominated occupations are better-educated than they were in 1994. Twice as many women have an associate's degree (11.7 percent in 2014 compared with 6.0 percent in 1994), bachelor's degree (11.5 percent compared with 6.3 percent), or master's, PhD, or professional degree (2.4 percent compared with 1.2 percent).

- Workers in low-wage, female-dominated occupations are better educated than workers in other low-wage occupations: more than half (52 percent) of workers in these 22 jobs have at least some college-level education compared with just 39 percent of workers in other low-wage occupations. Yet, median hourly earnings in these occupations ($11.30) are lower than in other low-wage occupations ($12.21).

- Poverty levels for women working in these 22 occupations are high. 19 percent of women working in these occupations live in households with income below 100 percent of the federal poverty threshold, and another 24 percent live in households with incomes between 100 and 200 percent.

- Women working as maids and housekeeping cleaners (62 percent), fast food preparers and servers (58 percent) and personal and home care aides (55 percent) are most likely to live in households with incomes below 200 percent of the federal poverty threshold for their household size and type.

- Six in ten mothers in these jobs depend on subsidized lunch programs for their children, and a quarter rely on food stamps (SNAP), a rate four times higher than mothers in better-paid jobs.

Recommendations for Action

- **Improving conditions for workers in these jobs** by raising the minimum wage and eliminating the tipped minimum wage, proactively enforcing wage and hour laws, guaranteeing paid sick days and paid family leave, ensuring fair scheduling for workers, providing equity for part-time workers, improving work environment and equipment, and supporting collective bargaining rights.

- **Invest in the caregiving infrastructure** by ensuring fair remuneration for workers in care and education, improving access to affordable and quality child care, ensuring universal pre-kindergarten, and investing in eldercare and care of dependent adults.

- **Build ladders to higher-paying occupations** by improving access to education and training for well-paid careers and incentivizing transparent promotion pathways.

- **Strengthen protections for immigrant workers** by increasing the number of visas available to immigrant workers in fast-growing occupations such as heath and home care work, and allowing flexible work visas—where workers are not tied to one employer.

Contents

List of Figures

Introduction

Many American workers are employed in jobs that pay too little to provide for their families and keep them out of poverty. The majority of workers in these jobs are women. In the United States, 57.3 million workers—36.7 percent of the workforce—earn less than $15 per hour, earnings that leave a family with one adult and two children near poverty even after a full year of full-time work. Thirty-one million of these workers are women, and a disproportionate number are Black and Hispanic women.[1] Moreover, many of the occupations that are projected to have the most job growth in the coming years are occupations that, at least currently, are low-wage, predominantly female, and involve care-giving and other service work (U.S. Bureau of Labor Statistics 2016d). Low-wage jobs in the U.S. are growing for a number of reasons, including the decline in collective bargaining and union membership, technological change, the automation of middle-skilled jobs in manufacturing and related sectors, globalization and the offshoring of jobs to lower-wage countries, and the growing demand for elder care related jobs (Autor and Dorn 2013; Autor, Dorn, and Hanson 2013; Mishel, Schmitt, and Shierholz 2013; Rosenfeld, Denice, and Laird 2016; Western and Rosenfeld 2011; Kalleberg 2011; Appelbaum, Bernhardt, and Murnane 2003). While there is some debate about the causes of the growth in low-wage work, there is little debate about women's predominance in low-wage jobs.

Women outnumber men in low-wage jobs, constituting 57 percent of workers paid under $15 per hour,[2] and the majority of low-wage workers in each state (Entmacher et al. 2014). While low-wage work can be found across the economy, across all types of sectors and occupations, it is particularly prevalent in service sector jobs that involve the education and care of children, the elderly and the infirm, work that traditionally was done by women at home, and often continues to be done almost exclusively by women when it is paid.

Women's earnings are increasingly important to family economic security (Anderson 2016), and low earnings in the occupations that mainly employ women contribute to inequality in household incomes and to women's higher rates of poverty than men's. Many of the low-wage caregiving occupations that mainly employ women are central to our economy and are particularly vital in the

[1] IWPR analysis of 2013-2015 CPS ASEC; see Appendix A.
[2] IWPR analysis of 2013-2015 CPS ASEC; women are 46.8 percent of all employees.

coming years as our population ages. The low wages in these occupations reflect an undervaluation of women's work (Duffy, Armenia, and Stacey 2015a). Many workers in these occupations are unable to earn enough to keep themselves and their families out of poverty, and need to turn to public benefits such as the Supplemental Nutrition Assistance Program (SNAP, or food stamps) and Medicaid.[3] This undervaluation is intimately linked to economic insecurity for women and families. If women were simply paid the same as comparable men—men who work the same number of hours, are the same age, have the same educational background, and have the same urban/rural status—poverty among working women would be cut in half (Hartmann, Hayes, and Clark 2014).

Women's concentration in occupations and sectors with relatively low pay is a major factor behind the gender wage gap (Blau and Kahn 2016). Women have lower earnings both because the occupations that mainly employ women tend to have lower earning than occupations that mainly employ men (for any worker in that occupation, whether they are men or women) and because women face sex discrimination (they earn less than men when they work in the same occupation; Hegewisch and Hartmann 2014). This is especially true for women of color, who face additional discrimination because of their racial or ethnic identity (Wilson 2016).

This report sets out to better understand the growing low-wage occupations that mainly employ women. It focuses on the largest occupations with median earnings of less than $15 per hour that mainly employ women and are projected to grow between 2014 and 2024. Altogether 22 occupations match these criteria, with the share of women workers in these occupations ranging from 64 percent to 98 percent. These 22 occupations employ four in ten of all low-wage women workers, and more than a quarter of all employed women.[4] Employment in these occupations grew more than twice as much as employment overall between 1994 and 2014, and is projected to have above-average growth between 2014 and 2024.

Through an in-depth analysis of women's earnings, educational attainment, poverty levels, and use of taxpayer-funded public assistance programs between 1994 and 2014 in these 22 occupations, this report aims to deepen understanding of the barriers to economic security and self-sufficiency presented by low-wage work in female-dominated occupations. The report highlights the fact that many women in low-wage, female-dominated occupations have considerable education, with the majority having at least completed high school and some college level courses. Levels of educational attainment have risen substantially during the last 20 years in these (and other) occupations, while wages have not. While levels of education are higher in female-dominated jobs than in other low-wage occupations, including the largest growing low-wage occupations that mainly employ men, median earnings are lower. This report reviews changes in the size and makeup of low-wage, female-dominated occupations in the past two decades, examines the racial/ethnic distribution of workers in these jobs, and documents predicted growth of these occupations through 2024.

The report highlights the growing concentration of women of color, and particularly immigrant women, in low-wage, female-dominated occupations. It shows that a disproportionate share of mothers—particularly single mothers—work in these occupations, and poor compensation means many remain eligible for food stamps and other public assistance. Finally, the report highlights the consequences for poverty, and the fact that a high proportion of women workers in these occupations have to turn to public benefits such as SNAP and Medicaid to make ends meet.

[3] IWPR analysis of 2013-2015 CPS ASEC; see Appendix A.
[4] IWPR analysis of 2013-2015 CPS ASEC; see Appendix A.

The report concludes by outlining strategies to increase the correspondence between the value of these jobs to our society and the compensation and benefits that they produce, through higher wages and improved job quality, which can ultimately improve the well-being of women workers and their families.

Methodology

This report focuses on low-wage, large, female-dominated occupations, selected to meet four criteria. First, median hourly wages for all workers (not only women) are below $15. Second, at least 100,000 women worked in the occupation as of 2014. Third, the occupation is projected to grow between 2014 and 2024, adding at least 1 percent of its 2014 total employment in new jobs by 2024. Finally, at least 60 percent of workers in the occupation are women. Out of a total of close to 500 occupations, 22 occupations—employing 23.5 million workers, including 19 million women—meet the four criteria (see Table 1).[5] The report draws on data from the Current Population Survey Annual Social and Economic Supplement (CPS ASEC) dataset, produced by the Census Bureau, and the Bureau of Labor Statistics' Employment Projections (BLS EP) 2014 – 2024 dataset.

For purposes of comparison, the report groups all remaining occupations into two further groups: "other low-wage occupations," occupations that also have median hourly earnings below $15 but are not female-dominated and/or employ fewer than 100,000 women; and "all better paid occupations," all occupations that have median hourly earnings of $15 or higher, irrespective of the gender composition of the occupation. For better insights into gender differences in low-wage occupations, the report also identifies large low-wage male-dominated occupations, selected to meet criteria equivalent to the large female-dominated occupations, and provides a brief overview of the characteristics of these occupations and the workers in them.

[5] Three other occupations meet the criteria for low-wage, large, and female-dominated, but are not projected to grow by 1 percent: tellers, file clerks, and sewing machine operators. These occupations have been included in the "All Other Low-Wage Occupations" category along with smaller female-dominated occupations.

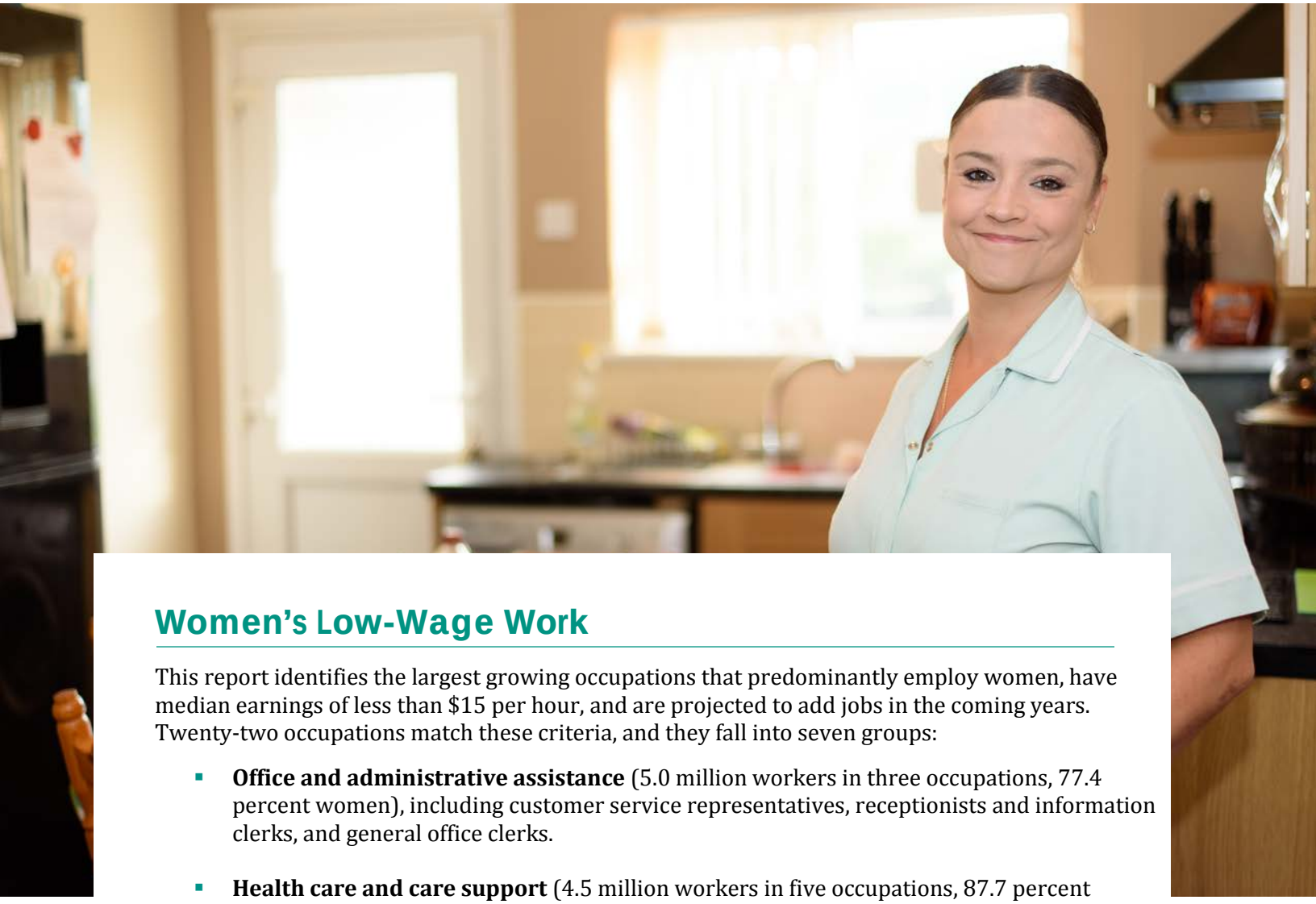
Table 1: The Distribution of Employment Across Low-Wage Female-Dominated, Other Low-Wage, and Better-Paid Occupations, 2014

	Number Employed			Percent Female
	All	Women	Men	
Low-Wage, Female-Dominated Occupations	23,539,845	19,030,524	4,509,321	80.80%
All Other Low-Wage Occupations	31,967,876	10,846,733	21,121,143	33.90%
All Better-Paid Occupations	100,810,433	43,796,676	57,013,757	43.40%
Total employment	156,318,154	73,673,933	82,644,221	47.10%

Note: Workers ages 15 and older.
Source: Institute for Women's Policy Research analysis of Current Population Survey, (2015) Annual Social and Economic Supplement.

Workers' circumstances in low-wage female occupations are described and compared with the other occupational groups on nine sets of indicators: employment and job growth, race and ethnicity, educational attainment, age, parenthood and marital status, poverty, wages, social assistance program use, and part-time work. The report also compares these indicators for 1994 and 2014, where possible, to understand changes over time.

For a more detailed methodology, including a complete list of the 22 focus occupations, their definitions, and examples of job titles within the occupations, see Appendix A.



Women's Low-Wage Work

This report identifies the largest growing occupations that predominantly employ women, have median earnings of less than $15 per hour, and are projected to add jobs in the coming years. Twenty-two occupations match these criteria, and they fall into seven groups:

- **Office and administrative assistance** (5.0 million workers in three occupations, 77.4 percent women), including customer service representatives, receptionists and information clerks, and general office clerks.
- **Health care and care support** (4.5 million workers in five occupations, 87.7 percent women), including nursing, psychiatric, and home health aides; medical assistants; phlebotomists; miscellaneous health care support workers; and personal and home care workers.
- **Cashiers** (3.8 million workers, 71.6 percent women).
- **Food preparation and serving** (3.5 million workers in five occupations, 71.4 percent women), including fast food workers, counter attendants, waiters and waitresses, non-restaurant food servers, and hosts/hostesses.
- **Early childhood care and education** (3.2 million workers in three occupations, 93.5 percent women), including child care workers, preschool and kindergarten teachers, and teacher assistants.
- **Beauty and personal services** (1.7 million workers in four occupations, 82.1 percent women), including hairstylists and cosmetologists, miscellaneous personal appearance workers, recreation and fitness workers, and animal caretakers.
- **Maids and housekeeping cleaners** (1.7 million workers, 88.2 percent women).

Together these 22 occupations employ over 19 million women, more than a quarter (25.8 percent) of all employed women, and four in ten (39.9 percent) of all women workers with earnings under $15 per hour (Appendix Tables B1). The importance of these occupations for women's employment

has grown substantially during the last two decades. In 1994, these 22 occupations employed only 12.6 million women, two in ten (20.7 percent) of all employed women, and only three in ten (29.7) of all women workers with earnings under $15 per hour.[6]

Women in low-wage, female-dominated occupations earn on average $11.18 per hour, which is less than the median wage in other low-wage occupations and less than men earn in these same occupations.[7] Across the 22 low-wage, female-dominated occupations, women's median hourly earnings are only 93.5 percent of the median hourly earnings of men in the occupations (Table 2).

Table 2: Women Have Lower Hourly Earnings and Are More Likely Than Men to Earn Less Than $15

	Median Hourly Wage			Gender earnings ratio	Percent earning < $15 per hour		
	Overall	Women	Men		Overall	Women	Men
Low-Wage, Female-Dominated Occupations	$11.30	$11.18	$11.96	93.5%	69.9%	71.3%	63.9%
All Other Low-Wage Occupations	$12.21	$11.36	$12.69	89.5%	65.0%	71.8%	61.5%
All Better-Paid Occupations	$23.18	$21.23	$24.84	85.5%	24.2%	27.1%	22.0%

Note: Worker age 15 and older.
Source: Institute for Women's Policy Research analysis of Current Population Survey, (2015) Annual Social and Economic Supplement.

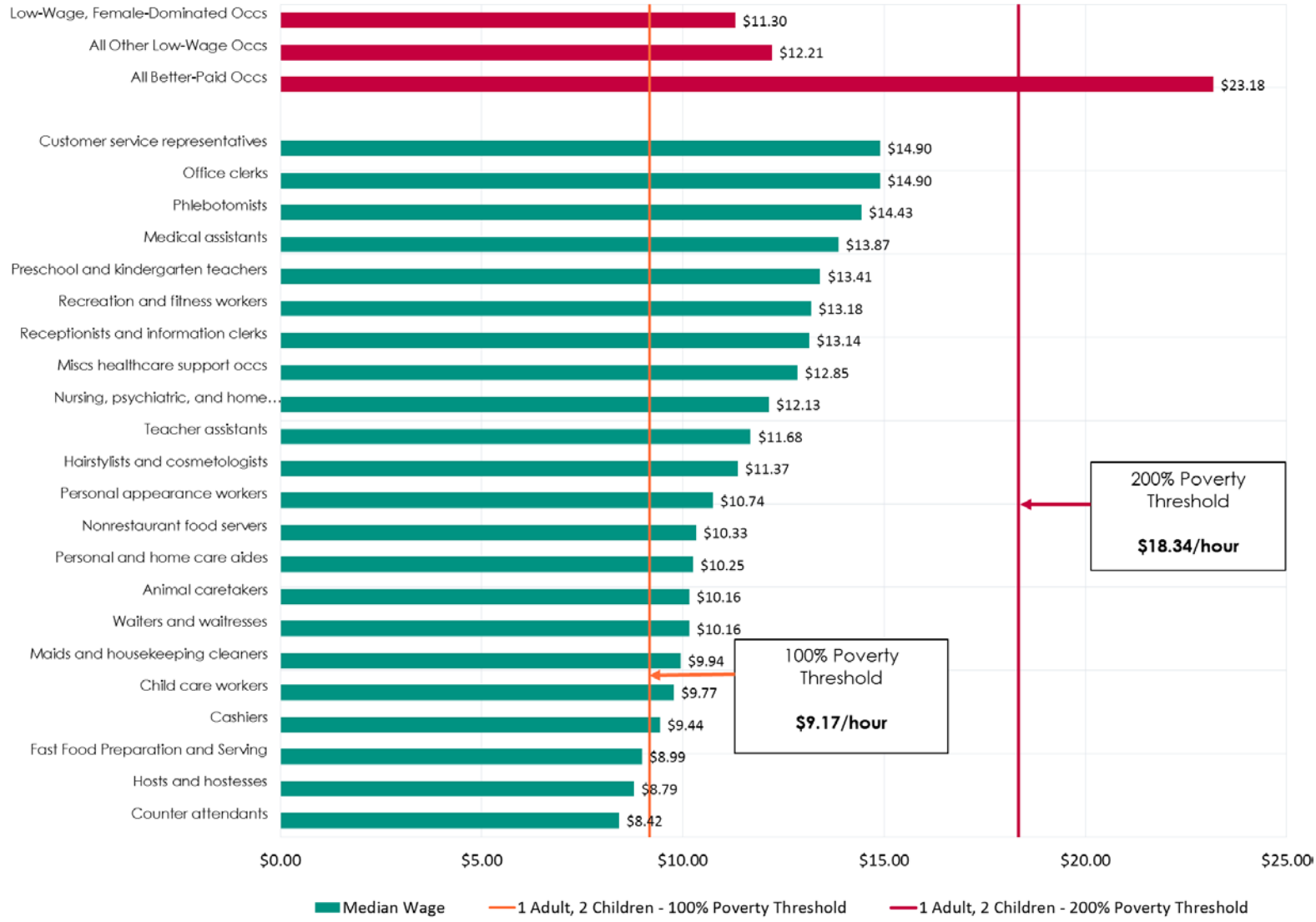
Contrary to common assumptions about the low-wage workforce, most women workers in low-wage, female-dominated occupations are not young people working their first jobs: the median age for women in these occupations is 36, with 57 percent falling between the ages of 25 to 55 and 18 percent over 55 (Appendix Table B2). Low-wage workers are not just independent single adults; many have families to support (see Figure 7). Yet in all of these occupations median hourly wages are too low to support a family.

While the median hourly wages for workers in these occupations vary considerably—ranging from just $8.42 for food counter attendants to $14.90 for customer service representatives and office clerks—in all 22 occupations, median hourly wages are insufficient to allow workers who work full-time, year-round to lift themselves and their families out of near-poverty (Figure 1).[8] In three of these occupations, wages are so low that they would leave a worker with two children in poverty even if they worked full-time for the entire year.

[6] IWPR analysis of 2013-2015 CPS ASEC; see Appendix A.
[7] Median wages denote the midpoint in the earnings distribution, with about half of all workers earning more than and half earning less than the median. While some workers in the low-wage occupations identified in this report may make more than $15 per hour, a substantial majority—six in ten—do not, and women are more likely than men to have earnings that fall below $15 per hour (Table 2).
[8] In this report, a family of three is defined as an adult with two children. Near-poverty is defined as household incomes less than 200 percent but more than 100 percent of the federal poverty threshold ($19,073 in 2014); for a family of three, the 200 percent threshold translates into hourly earnings of $18.34, assuming paid employment for 52 weeks, working 40 hours per week (U.S. Department of Commerce, Bureau of the Census 2015).

Figure 1. Median Wages in Low-Wage, Growing, Female-Dominated Occupations Not Enough to Lift Families Out of Poverty

Median Wages in Low-Wage, Female-Dominated Occupations by Poverty Thresholds, 2014



Note: Poverty wages are calculated using Census Bureau poverty threshold and assume full-time, year-round work (of 2,080 hours per year. In 2014 the 100 percent poverty threshold for a family of three was $19,073 per year; the 200 percent poverty threshold was $38,146, translating into an hourly wage of $9.17 and $18.34 respectively for full-time full-year work.
Source: Institute for Women's Policy Research analysis of Current Population Survey, 2013-2015 Annual Social and Economic Supplement, and U.S. Department of Commerce, Bureau of the Census 2015.

The definition of poverty used here is the federal government's official poverty measure, which was developed in the early 1960s and has only been adjusted for inflation since then. We also follow the common practice of using 200 percent of the official poverty line as a measure of low income or "near poverty." There is broad agreement among experts that the official poverty measure is outdated and falls below the earnings workers need to afford adequate housing, food, and other necessities (see text box next page).

Measuring Economic Security and Poverty

There are different ways of measuring poverty and economic security. The federal government sets poverty thresholds for different family sizes and these thresholds are updated annually for inflation.[9] In 2014, the federal poverty threshold for a single adult under 65 with two children was $19,073, which translates to an hourly wage (for full-time, year-round work) of $9.17.[10] These thresholds are often used to determine eligibility for some benefits.[11] For example, to receive food stamps (SNAP) a household must be at or below 130 percent of the poverty threshold for its household type.

This method of deciding which families qualify for benefits and which are considered "in poverty" has been criticized as an insufficient assessment of what it takes for a family to survive. The standard was designed in the 1960s, when food was about a third of a family's budget, and thresholds were set at three times the costs of the least expensive food budget the government could design. The method for calculating the threshold has been updated for inflation since then, but has not been fundamentally redesigned. Food is now only about one seventh of families' budgets and, therefore, a less accurate predictor of economic need (Greenberg 2009). Further, the cost of living differs widely across the country, but the federal poverty thresholds do not account for geographic variation.

A number of alternative standards have been designed to more accurately capture the actual costs of family budgets, and to take account of regional variations in the real, region-specific costs of necessities like food, housing, transportation, and taxes. These "living wage" models calculate the wages different types of households would need to be self-sufficient without relying on public assistance programs. For example, the MIT Living Wage Calculator[12] estimates that in 2014:

- The lowest living wage for an adult with two children is $23.30, in South Carolina.
- The highest for a family of three is $37.81, in Washington, D.C.

Another living wage calculator, the BEST Index,[13] estimates that in 2014:

- One worker with two preschoolers:
  - In Dade County, GA needs $24.30.
  - In San Francisco, CA needs $47.34.
- One worker with a preschooler and a school age child:
  - In Cameron County, TX needs $20.82.
  - In King County, WA needs $33.96.

---

[9] The federal poverty calculations measure a household's resources including pre-tax income from earnings, unemployment compensation, Social Security benefits, pension income, interest, dividends, and rent for all family members but not non-cash benefits such as food stamps. The recently developed "Supplemental Poverty Measure" does includes the receipt of food stamps and other forms of in-kind public assistance and sets the poverty threshold equal to roughly the 33rd percentile of spending on food, clothing, shelter, and utilities by two-child consumer units with a modest additional amount added for other necessities. For more information about the Supplemental Poverty Measure, see (Short 2015).

[10] The poverty thresholds are calculated for annual income. These thresholds were translated to hourly wages by assuming full-time, year-round work of 2,080 hours (40 hours per week for 52 weeks).

[11] As a practical matter, few programs use 100 percent of the federal poverty level any more as the sole income guideline, in part due to the recognition that it is too low, and also to avoid penalizing employment. For example, while child care subsidies may be tied to the federal poverty level at the state level, it is tied to the percent of median income at the federal level.

[12] The MIT Living Wage Calculator accounts for the cost of food, child care, insurance and health care, housing, transportation, clothing, housekeeping supplies, personal care items, and taxes. This calculator assumes full-time work of 2,080 hours (40 hours per week for 52 weeks). http://livingwage.mit.edu/pages/about

[13] The Wider Opportunities for Women Basic Economic Security Tables Index accounts for the cost of housing and utilities, food, transportation, child care, personal and household items, health care, emergency and retirement savings, and taxes and tax credits.

Employment Growth in Low-Wage Women's Jobs

Between 1994 and 2014, employment in low-wage, growing, female-dominated occupations grew by an estimated 7.4 million jobs, at more than twice the rate of total job growth (45.9 percent versus 18.8 percent, respectively), accounting for almost a third of all new jobs during this period.[14] These occupations are projected to drive a substantial portion of job growth through 2024 (see Figure 2). It has been projected that between 2014 and 2024 nearly three in ten new jobs will be in these 22 occupations (Appendix B3).[15] Employment in these occupations is projected to grow by 9.5 percent, or one and a half times the rate of employment growth projected for the total economy (6.5 percent; Figure 2). In 1994, one in eight jobs (12.3 percent) were in low-wage, female-dominated occupations; by 2024, one in six of jobs (15.5 percent) is projected to be concentrated in these occupations.[16]

The four low-wage female occupations with the highest projected employment growth between 2014 and 2024–at four-times the growth rate of all jobs in the economy—are health care and care support occupations: personal and home care aides; phlebotomists; nursing, psychiatric, and home health aides; and medical assistants (Figure 2). Nursing, psychiatric, and home health aides (2.0 million women workers) and personal and home care aides (1.2 million women workers) are already among the 20 largest occupations for women (Hegewisch and DuMonthier 2016) and will become even more dominant in the labor market; phlebotomists and medical assistants are showing strong growth, albeit from a slightly lower employment base (Appendix Table B3). Employment in health care and other care occupations has grown rapidly in response to the aging of the population and increasing life expectancy (Committee on the Long-Run Macro-Economic Effects of the Aging U.S. Population 2012; Browne and Braun 2008). Total employment in businesses providing care for the elderly and disabled, for example, more than quadrupled between 1994 and 2014 (U.S. Bureau of Labor Statistics 2015; Gould and Cooke 2015). As the Baby Boomer generation moves into their seventies, eighties and beyond, demand for such services will continue to grow (Torpey 2014). While the growing health care sector also provides opportunities for good jobs as doctors, nurses, and related health care professionals, a large share of jobs in elder and in-home care are poorly paid and of low quality (PHI 2016). The five largest low-wage female health and home care jobs jointly are projected to add over 1.2 million jobs (Appendix Table B3). Many workers in the occupation with the next highest growth rate—'non-restaurant food servers' (projected to grow by 13.4 percent, Figure 2)—also work in the elder care field; this occupation includes workers who serve food in places such as assisted living facilities, nursing care facilities, and hospitals.

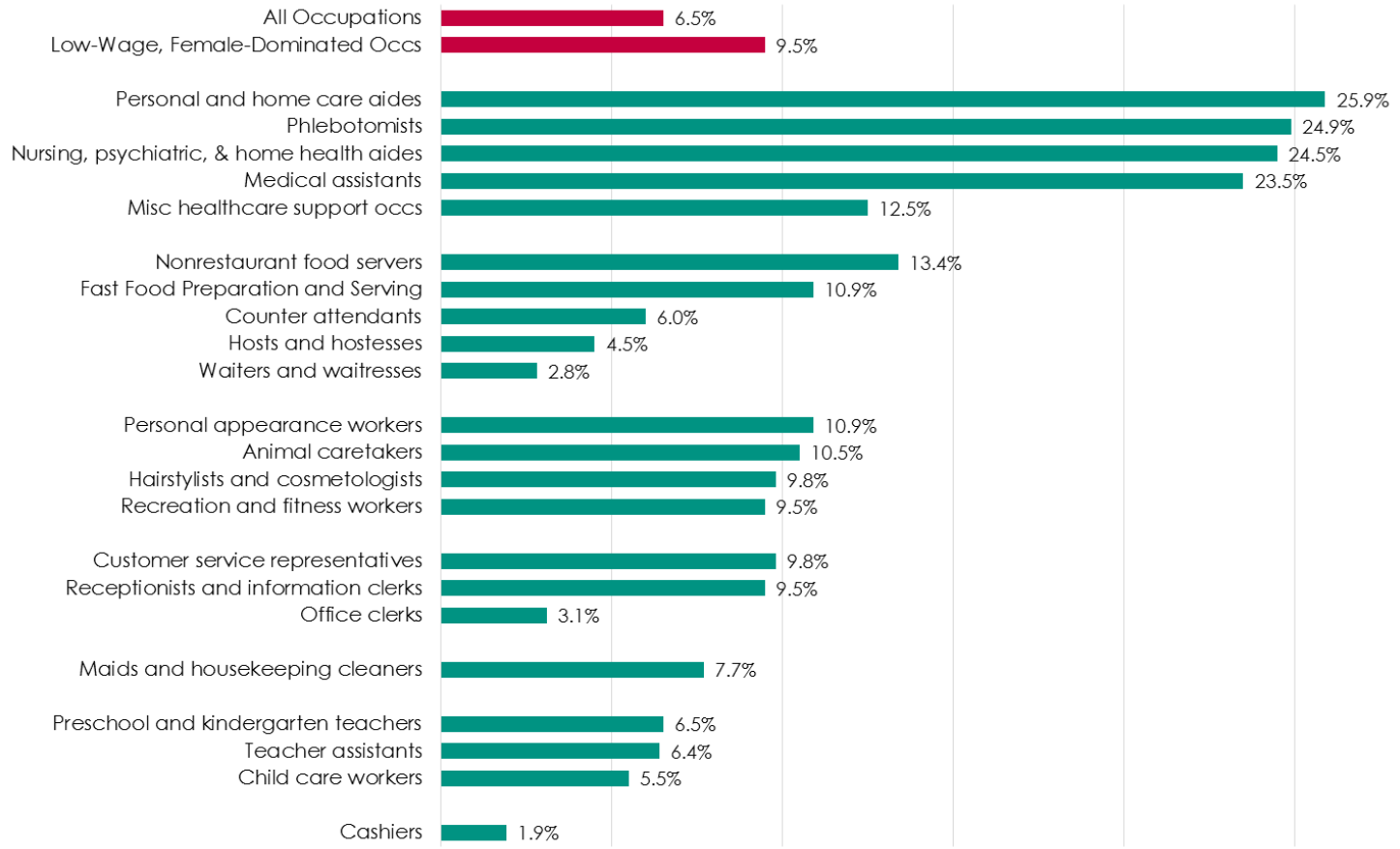
[14] IWPR analysis of CPS ASEC microdata. Employment in the 22 occupations grew by an estimated 45.9 percent, compared with 18.8 percent growth of total employment between 1994 and 2014. In 2000 the Census Bureau introduced a new occupational classification scheme; several of the 22 occupations do not have a direct equivalent in 1994. Data have been adjusted as far as possible to allow comparisons over time, but because occupations, such as phlebotomists, were newly identified, and thus cannot be included in employment estimates for 1994, estimates may overstate actual growth. See also Appendix A.

[15] This estimate is based on the BLS Employment Projections (http://data.bls.gov/projections/occupationProj). Because the CPS ASEC and BLS EP employment estimates are based on different methodologies, they cannot be strictly compared (see Appendix A).

[16] IWPR analysis of CPS ASEC microdata and U.S. Bureau of Labor Employment Growth Projections (2016).

Figure 2. Low-Wage, Female-Dominated Occupations Projected to Grow 1.5 Times More Than All Occupations Over Next 10 Years

Projected Employment Growth of Low-Wage, Female-Dominated Occupations, 2014-2024



Source: Institute for Women's Policy Research analysis of U.S. Department of Labor, Bureau of Labor Statistics Employment Projections (2016) and the Current Population Survey 2013-2015 Annual Social and Economic Supplement.

Jobs in beauty and personal care, such as mani- and pedicurists, hairdressers and beauticians, people working in the domestic pet industry, and recreation and fitness workers, are also projected to grow at a higher rate than total employment (Figure 2). Some of these occupations have seen explosive growth since the early 1990s—the number of fitness and recreation workers for example grew almost fivefold in the last two decades, and the number of "nonfarm animal caretakers" more than doubled, as people spent more on personal care and fitness, and on their pets (Appendix Table B3). Because fewer people are employed in beauty and personal care occupations than in health and domestic care, these occupations are projected to add fewer jobs (160,000) between 2014 and 2024 despite having higher employment growth rates. Yet, even the occupations with below-average growth—such as cashiers, waitresses and waiters, and office clerks—are projected to add a substantial number of new jobs because these are large occupations, with a combined total workforce of more than 7 million workers. Close to 500,000 new jobs will be added to food preparation and serving occupations, more than 400,000 to office and administrative occupations, almost 200,000 to early childhood and education occupations, and over 100,000 to the occupation of maids and housekeepers (Appendix Table B3).[17]

[17] The U.S. Bureau of Labor's Employment Projections program (EP) uses a different methodology for estimating employment numbers (drawing on employer surveys as well as expert interviews) than the Current Population Survey,

The Devaluation of Women's Work

For the most part, the work in the 22 low-wage, female-dominated, growing occupations studied in this report involve tasks long considered "women's work" – activities such as cooking, cleaning, serving, and caring for people that moved from the household into the marketplace. Despite the fact that these jobs often demand great stamina and strength of body and mind, they have historically been undervalued and undercompensated (Duffy, Armenia, and Stacey 2015a).

Care work—whether it is performed for children, elders, or adults with disabilities; whether it is located in the home, an institution, or a center; and whether it is paid or unpaid—is typically performed by women (Hochschild 2003; Hochschild 2013; Ehrenreich and Hochschild 2004). This undervaluation of care work was enshrined in the 'companion care exemption' which excluded domestic care workers from wage and hours protections extended to other workers when the Fair Labor Standard Act was first passed in 1938 (Rogers 2015). England and Folbre (1999) have explored the nexus between the low pay for care work and the fact that care work is generally performed by women. Care work has historically been devalued, they argue, because caring labor is associated with women and sexism keeps society from recognizing the value of this work (England and Folbre 1999). Since it is stereotypically 'women's work', associated with unpaid, untrained work performed in private homes, employers pay lower wages (England and Folbre 1999). Further, the emotional rewards that can come from helping others may allow employers to pay less because workers need less external incentive to do the work—or at least, the idea that they might leads employers to set lower wages (England and Folbre 1999). Workers may also have difficulty setting a price for their care work, not only because it has been traditionally done as unpaid work, but because care work can also be seen as 'sacred' work, work that should be performed out of love and compassion and not be tainted by money (England and Folbre 1999).

The occupation of nursing and domestic care aides is a case in point. Workers in this occupation perform onerous but essential care in the form of bathing, feeding, dressing, grooming, and moving sick, elderly, disabled, and mentally impaired individuals in hospitals, residential-care facilities, and homes. Such work is often physically strenuous; nursing assistants, for example, are 3.5 times as likely to be injured on the job as an average U.S. worker (PHI 2016). Yet women nursing care assistants have median hourly earnings of just $11.83, and women domestic care workers of just $10.16 per hour (men in these occupations have higher median earnings but also not high enough to lift their families out of near-poverty; Appendix Table B4). Together the five low-wage growing health and domestic care aid occupations employ nearly 4.5 million workers; close to nine in ten of the workers are women. Likewise, the work of 1.7 million maids and housekeeping cleaners, 88.3 percent female, is typically described as unskilled, yet requires considerable skills of organization, attention to detail, agility, and customer interaction as well as physical strength and endurance. One study quotes a director of housekeeping: "There's so much stress in this job, I believe they should be the highest paid in the entire hotel" (Bernhardt, Dresser, and Hatton 2003, 42).

Similar arguments apply to the low wages of child care workers, teacher assistants, and preschool and pre-K teachers (England, Budig, and Folbre 2002). A recent report found that college-educated early childhood and education teachers and caregivers have much lower earnings than other comparably educated workers in the overall economy (Brandon et al. 2013, 4). The low wages of women in teaching and child care occupations have a long history. In the 19th century, when public education began to spread, communities and states turned to women as teachers because they were as able as men to provide education for the young but were less able than men to negotiate for

which is household-based. The job growth estimates shown here are based on the EP projected numbers of new jobs by 2024 for these 22 occupations. Applying the EP projected percentage growth rates to IWPR's analysis of CPS ASEC microdata yields different numbers of projected new jobs. See Appendix Table B3 for a comparison of both.

decent pay: public bills for education were kept low by exploiting women's lack of alternatives for paid work (Goldstein 2014). Today, the majority of the nation's 722,500 preschool and kindergarten teachers and the more than one million teacher assistants are typically paid by taxpayer dollars, and those in the private sector typically earn even less.

Child care workers' low wages hardly reflect the fact that many studies have found early childhood education to be one of the best investments a society can make—a view backed not only by child advocates and the public but also by the military and much of the business community (Works 2014; U.S. Chamber of Commerce 2010). Low wages for child care workers are part of a larger cycle of low wages and disinvestment in our public child care system. Subsidies for child care are much lower in the United States than in many other high income countries (OECD 2011). Since 60 percent of the cost of child care in the United States is borne by parents—and quality full-time infant and toddler care can be as or more expensive than public higher education (Child Care Aware 2014)—many parents cannot afford child care, and these parents certainly cannot afford to pay for quality child care with quality wages for child care workers (Gould and Cooke 2015; Gould and Essrow 2015).

One aspect of the undervaluation of typically female work is the role of soft or less easily measured skills, especially those related to the social interactions that typically are an important aspect of female-dominated jobs. Arlie Hochschild labeled this facet of this type of work "emotional labor," observing that workers in certain professions have to constantly suppress and induce certain emotions as part of their job responsibilities (Hochschild 1979; 2012). Examples of this include staying calm when dealing with clients who are rude, stressed or upset; showing and managing empathy; and putting on a 'happy face' when interacting with customers and clients. Cashiers, for example, may be the only store workers customers interact with, and are often subjected to negative comments from displeased shoppers (Lawless 2014). While the ability to manage emotions is seen as something intrinsically feminine, it arguably is a learned behavior (Goleman 1996). Women may even face sanctions at work for not doing enough emotional labor (Pierce 1999). Yet emotional labor almost always goes uncompensated; rarely do employers post it in the actual job description, or include it in salary calculations or performance evaluations (Folbre 2012; Guy and Newman 2004). Apart from typically going uncompensated, emotional labor can induce burnout, job dissatisfaction, high levels of stress and general distress in those required to perform it (Guy and Newman 2004; Pugliesi 1999; Duffy, Armenia, and Stacey 2015b).

For women working in occupations where tips make up a large part of earnings, the pressure to act friendly, if not sexualized, is particularly strong; and the threat of losing tips makes it even harder to challenge harassment on the job, whether such harassment is sexual, racial, or age-related. Sexual harassment is particularly common in restaurants, where employers may see it in their interest not to censure customers who behave inappropriately towards their staff despite legal prohibitions on employers knowingly permitting third-party/customer harassment. One survey of waitresses and waiters found sexual harassment to be higher in states with the lowest tipped sub-minimum wage (Restaurant Opportunities Centers United 2014b). Employers of waitresses, hairdressers, and nail care workers have to pay only the federal tipped minimum wage of $2.13 per hour on the assumption that tips will be sufficient to raise the worker's earnings to the full minimum wage. While employers are required to make up a worker's wage to the federal minimum if tips are insufficient, this is often hard to enforce for an individual (Shierholz and Block 2016). There is evidence that some employers frequently ignore this requirement (Liu 2013), and tipped workers experience poverty at nearly double the rate of other workers (Allegretto and Cooper 2014). One study found that in states without a tipped minimum wage, where all workers are entitled to receive the regular minimum wage, women workers experience a lower poverty rate and

smaller gender wage gap (Robbins, Vogtman, and Entmacher 2015; National Women's Law Center and Restaurant Opportunities Centers United 2016).

In summary, common to these low-wage occupations is that they employ primarily women, and that the job duties are typically seen as women's work, not just because they are now mainly done by women, but because this work was done mainly by women at home before it became paid work. There is some discussion on how and why occupations become 'feminized' and undervalued—whether because the work is associated with women's unpaid domestic work, or whether the low wages are more directly due to discrimination against women in better-paid male occupations, thus 'crowding' too many women into too few occupations and creating an excess supply of workers which allows employers to keep wages low (see England 2011; Bergmann 2011 for a recent debate on these issues). Regardless of the reasons, women are the large majority of workers in these large, low-wage, and growing occupations, with significant consequences for their economic well-being and for economic equity in the U.S. more broadly.

Lack of Benefits

Low-wage work often comes with lower benefits, poor working conditions, and few opportunities to advance to supervisory or managerial positions that pay decent wages.

Low-wage workers, across occupations, are much less likely to have access to basic benefits such as vacation, paid sick days, or paid family leave. For example, according to their employers, six in ten (61 percent) of all private sector workers have access to at least some paid sick days, and three in four (76 percent) get some paid vacation. Among workers with earnings in the lowest quarter of the earnings distribution, as few as half as many have access to paid sick days (31 percent) or paid vacation (48 percent), and for the very lowest paid—those in the bottom ten percent of the earnings distribution—access to these benefits is even lower (22 and 40 percent respectively; U.S. Bureau of Labor Statistics 2016a). For working mothers (and fathers) the lack of paid leave also makes it very difficult to take time off to look after a sick child. It is also rare for low-wage workers to be covered by temporary disability insurance; short term disability insurance is available to 40 percent of all workers, but to only 17 percent of those in the lowest quartile, and just 13 percent of those in the bottom ten percent of the earnings distribution. Even fewer of low-wage workers have access to long term disability insurance (7 and 3 percent respectively; U.S. Bureau of Labor Statistics 2016b).

Access to such benefits varies across sectors but is particularly low in leisure and hospitality, the sector that includes hotels, restaurants and fast food establishments, and low-wage female occupations such as waitresses, fast food workers and counter attendants (R. O'Connor, Hayes, and Gault 2014; U.S. Bureau of Labor Statistics 2016a; U.S. Bureau of Labor Statistics 2016b). Not surprisingly, low earnings combined with lack of paid leave mean that workers in these occupations often cannot afford to take time off from work when they are sick. A survey by the Center for Research and Public Policy (2015) found that over half of food preparation and serving workers always or frequently went to work while ill, despite health risks to customers and fellow workers. The lack of paid sick leave makes it harder for individual workers to recover from illnesses, and also puts them at greater risk of getting sick when at work.

Poor Working Conditions

The lack of paid leave and temporary disability insurance is doubly difficult because work in these low-wage female occupations can carry considerable health risks (Kurowski, Boyer, and Punnett 2015). A growing body of research, for example, documents the adverse health effects women experience in beauty-related professions because of their exposure to certain potentially noxious chemicals. Cosmetologists and hairdressers have an increased risk of asthma and other respiratory

symptoms, in addition to a higher prevalence of contact allergy and hand dermatitis compared with the general population (Gallicchio et al. 2011; Nir 2015b). In a survey of nail care workers in California, a high proportion of workers reported experiencing health problems after they began working in the industry, particularly problems associated with solvent exposure (Quach et al. 2008). The chemicals used in the cosmetology industry are also linked to the increasing numbers of nail care workers diagnosed with cancer (Nir 2015b). Women working as hairdressers and cosmetologists are significantly more likely than women in other occupations to have problem pregnancies, including low birth weight babies, miscarriages, preterm delivery, and perinatal death (Halliday-Bell, Gissler, and Jaakkola 2009; Herdt-Losavio et al. 2008; Nir 2015b).

A survey of over 600 women domestic workers in California finds that nearly 40 percent reported a work-related injury in the preceding 12 months, yet 68 percent of female domestic care workers did not have access to health insurance (Theodore, Gutelius, and Burnham 2013). In another study, 40 percent of cleaners report musculoskeletal problems (Panikkar et al. 2014). Waitresses, counter attendants, and cashiers often have to be on their feet for long periods of time, carrying heavy loads, and/or making "repeated and forceful motions"; prolonged standing and repetitive movements can lead to back injuries, pain, numbness, burning, and tingling throughout workers' bodies (California Department of Health Services and California Department of Industrial Relations 2006, 2). For cashiers working in convenience stores, there is another perfidious aspect of their work. Since 75 percent of all robberies that take place in convenience stores include the use of a firearm, cashiers face a greater risk of violence and murder than workers in most other occupations (Belleville et al. 2012). Apart from the actual danger, this can also increase stress. According to one study, "OSHA … found [that] twenty-two percent of [store] workers who have contact with the public think that they are likely to be threatened, and ten percent of staff who have face to face contact with customers [i.e., cashiers] think that they may be assaulted at some point in their career" (Lawless 2014, 10).

Low-wage workers also must contend with wage theft, which has become a widespread practice in the United States. Wage theft comes in many forms, from workers forced to work during unpaid breaks to employers illegally deducting pay for damages to or loss of tools and materials, paying less than the tipped minimum wage, stealing tips from tipped workers, or pressuring injured workers not to file for workers' compensation (Bernhardt et al. 2009). While reliable data on the prevalence of wage theft are difficult to find due to insufficient regulatory oversight, one report found that in 2012 nearly $1 billion was recovered for victims of wage theft in the United States (Meixell and Eisenbrey 2014). Another study found that two-thirds of workers in low-wage industries in a given week experienced at least one pay-related violation (Bernhardt et al. 2009).

Limited Access to Full-Time or Quality Part-Time Work

While the majority of women and men in these 22 occupations work full-time, more than four in 10 women and men (42.2 percent and 40.7 percent, respectively) work part-time, a much higher proportion than in other jobs (Figure 3). Part-time work is significantly more common in low-wage than in better-paid occupations, and it is highest for both men and women in the low-wage, female-dominated occupations (Figure 3).

Figure 3: Part-time Work is Particularly High for Women and Men in the Low-Wage, Female-Dominated Occupations

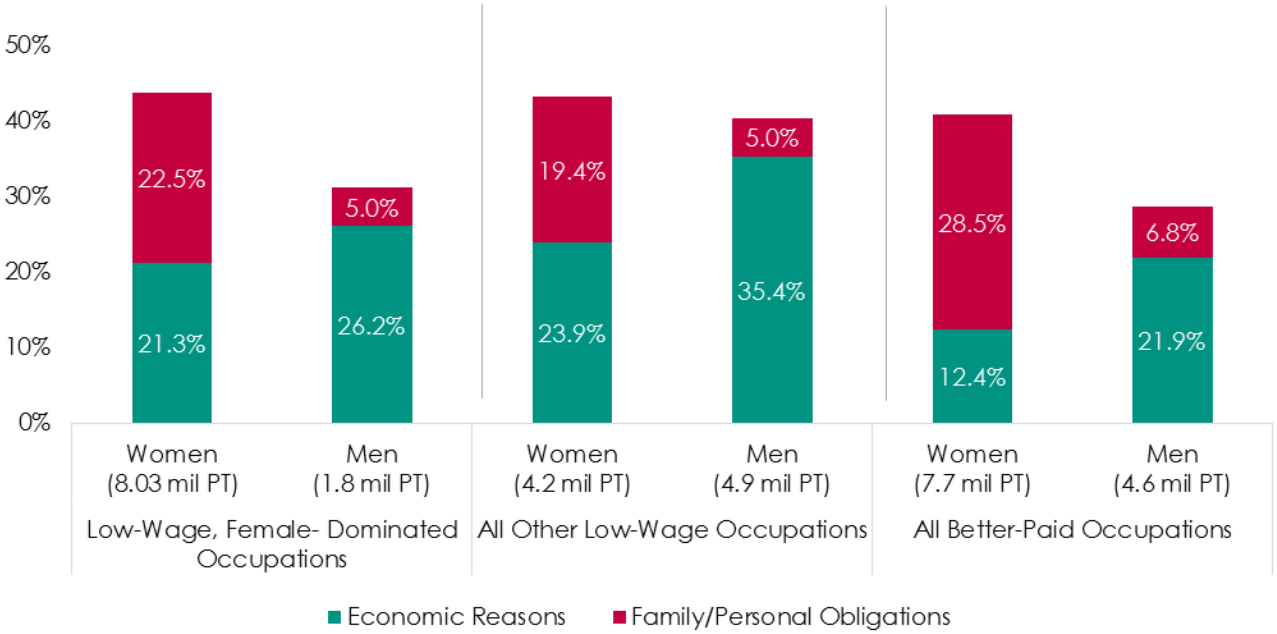
Rates of Part-time Employment in Low-Wage, Female-Dominated, Other Low-Wage, and Better Paid Occupations, 2013-2015

Note: Part-time work is defined as working less than 35 hours per week.
Source: Institute for Women's Policy Research analysis of Current Population Survey, 2013-2015 Annual Social and Economic Supplement.

Of the 8 million women who work part-time in low-wage, female-dominated occupations, more than one in five (21.3 percent, 1.7 million) work part-time because they cannot find full-time work. Men are slightly more likely to say they work part-time because they cannot find full-time work than women (26.2 percent; Figure 4); but because so many more women than men work in these occupations, women outnumber men among such involuntary part-time workers (1.7 million women and 0.48 million men). Women are also much more likely than men—both relatively and absolutely—to say that they work part-time because they have child care or other family obligations (Figure 4). Working part-time for care-related reasons is not officially classified as involuntary/an economic reason; yet, given the high costs of child care and other care, and the unequal division of unpaid care work between women and men, it reflects an economic constraint on women's access to full-time work just as much as the lack of availability of full-time work in these jobs. Men in these occupations, on the other hand, are almost twice as likely as women to work part-time because they are pursuing training and education (43.7 percent of men, and 24.7 percent of women; Appendix Table B5).

Figure 4. More Than Four in Ten Women in Low-Wage, Female-Dominated Occupations Work Part-Time Because of Family/Personal Obligations or Because They Cannot Find Full-Time Work

Part-Time Workers' Reasons for Part-Time Work by Gender, 2014

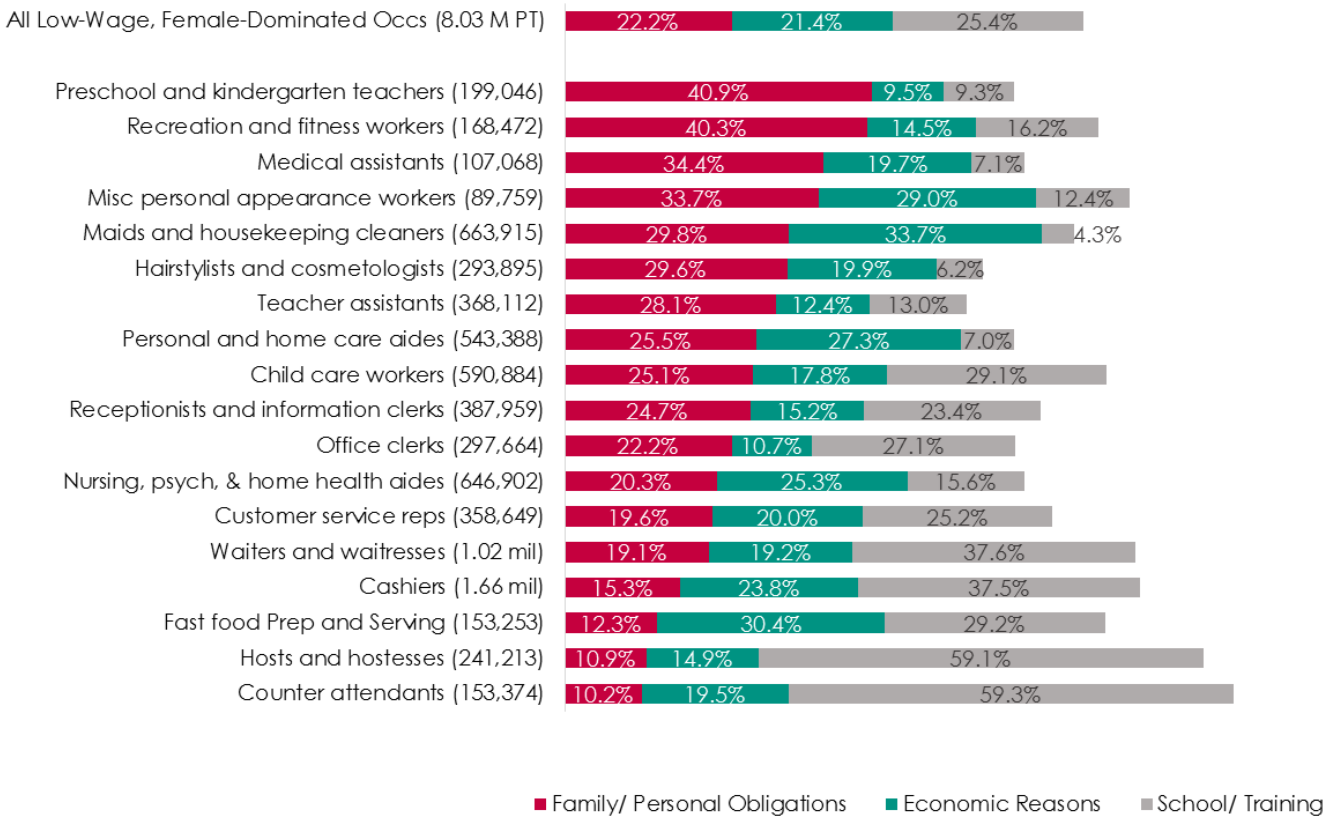


Notes: Part-time (PT) is defined as a total of less than 35 hours of work in the last week for all jobs. The indicator "Family/Personal Obligations" includes "child care problems" and "other family/personal obligations." "Economic Reasons" includes "slack work or business conditions," "seasonal work," "job started/ended during week," and "could only find part-time work."
Source: Institute for Women's Policy Research analysis of Current Population Survey, 2013-2015 Annual Social and Economic Supplement.

The extent of part-time work varies dramatically between low-wage, female-dominated occupations—from fewer than a quarter of women working part-time as medical assistants (21.5 percent) and customer service representatives (23.8 percent) to more than three quarters of women counter attendants (78.3 percent) and hostesses in restaurants, lounges and coffee shops (82.3 percent; Appendix Table B5). Part-time employment is also particularly high in the two largest occupations, cashiers (61.2 percent, 1.7 million part-time women workers) and waitresses and waiters (63.7 percent, 1.0 million women part-time workers). Cashiers, maids and housekeepers, and waitresses are the most likely to be working part-time because they cannot find a full-time job or are prevented from doing so by care responsibilities (Figure 5). Part-time work because of child care or other family obligations is particularly common for preschool and kindergarten teachers and fitness instructors; in these occupations the proportion of women workers who say that they cannot find a full-time job are comparatively low.

Figure 5: Women's Reasons for Part-Time Work Vary Substantially Among Low-Wage, Female-Dominated Occupations

The proportion of women part-time workers who say they work part-time because of family/personal obligations, economic reasons, or school/training for 22 low-wage, female-dominated occupations, 2014



Note: Part-time is defined as a total of less than 35 hours of work in the last week for all jobs. Numbers in brackets show total number of women part-time workers in each occupation. The indicator "Family/Personal Obligations" includes "child care problems" and "other family/personal obligations." "Economic Reasons" includes "slack work or business conditions," "seasonal work," "job started/ended during week," and "could only find part-time work." Data on female phlebotomists, miscellaneous health care support workers, non-restaurant food servers, and animal caretakers are not available due to insufficient sample sizes
Source: Institute for Women's Policy Research analysis of Current Population Survey 2013-2015 Annual Social and Economic Supplement.

Scheduling and Working Hours

Whatever the reasons for working part-time, be it child care or other care responsibilities, training and education, or own health, knowing when you are scheduled to work is key to ensuring workers are able to balance the multiple facets of their lives. Predictability of the number of hours worked is also crucial for allowing workers to manage their finances. Yet such basic predictability of the timing and number of hours worked is increasingly out of reach in occupations related to waitressing and other food service, retail, and cleaning services; indeed, workers with irregular schedules may not know from one week to the next whether they are working full-time or part-time (Lambert, Fugiel, and Henly 2014; Golden 2015). These practices also include "just-in-time" scheduling, in which workers are informed of their schedules as little as two hours before shifts (Luce, Hammad, and Sipe 2015). Schedule irregularity can make it difficult to find child care and fulfill family care obligations. In one recent survey of mothers working in restaurants, 39 percent of

respondents reported that their shifts changed weekly; almost a third of these mothers reported having incurred fines from their child care providers because their working hours had changed on short notice (Liu 2013). New scheduling technology has made it both potentially easier and harder for workers in low-wage service occupations to have predictable schedules (S. O'Connor 2016). Scheduling technology in principle makes it easier to align shifts based on demand and workers' availability, and to allow workers input on their preferred schedule. Yet at the same time, in the context of staffing strategies focused on matching paid hours of work as closely as possible to fluctuating demand, such technologies can lead to more split shifts, shorter periods of paid work, and less predictability for workers.

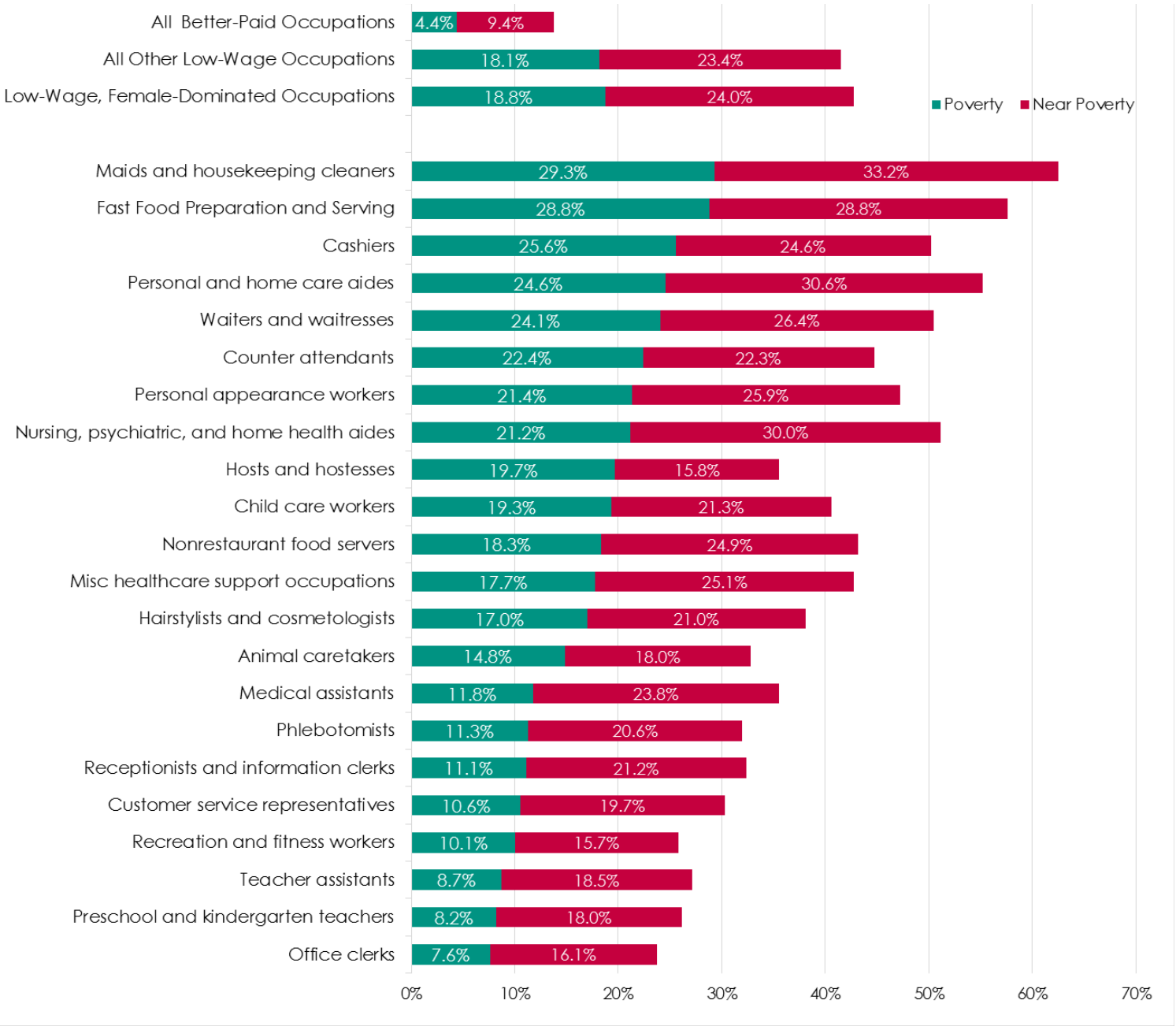
Limited Opportunities for Advancement

For many women, particularly women of color, working in domestic home care, cleaning, working as cashiers, or fast food and other food serving places, opportunities for advancement are typically very limited (Henrici 2013; Andolan Organizing South Aisan Workers et al. 2010; Haynes et al. 2015). The ratio of managers to supervisors, and of supervisors to front-line staff, typically is low; but even being promoted to supervisor, with considerable additional responsibilities for both staff and resources, often does not boost wages much. For example, women supervisors of workers in low-wage occupations have wages in near-poverty (National Employment Law Project 2013; U.S. Bureau of Labor Statistics 2016c). Opportunities for promotions for part-time workers, and the opportunity to work part-time in more senior positions, are especially limited (Webber and Williams 2008).

Poverty and Low-Wage Women Workers

Women working in low-wage occupations have a high probability of living in poor households: 3.6 million women(18.8 percent) working in low-wage, female-dominated jobs live in poverty, and 4.6 million women workers in these occupations (24 percent) live in near-poverty (Figure 6). Levels of poverty and near-poverty are particularly high for some of the largest low-wage, female-dominated occupations: six in ten women who work as maids and cleaners and over half of women working in fast food; as personal, home care, or health aides; or as waitresses live in or near poverty. Even among women who work as teacher assistants or preschool and kindergarten teachers (positions that are often funded by public dollars), at least a quarter live in poverty or near-poverty (Figure 6).

Figure 6. Almost Half of Women in Low-Wage, Female-Dominated Occupations Live In or Near Poverty



Note: "Poverty" is defined as households below 100 percent of the poverty threshold. "Near Poverty" is defined as between 100 and 200 percent of the poverty threshold. Workers age 15 and older.
Source: Institute for Women's Policy Research analysis of Current Population Survey 2013-2015 Annual Social and Economic Supplement.

Mothers in Low-Wage Occupations

Single mothers are almost twice as likely to work in low-wage, female-dominated occupations as in better-paid occupations. Yet, as the sole providers for their families, they are the least likely to be able to manage on lower earnings.[18] One in three women workers (34 percent) in low-wage, female-dominated occupations are mothers, and almost 15 percent are single mothers (Figure 7).

Single mothers face constraints related to both lack of time and money. Being the sole provider means that, with one income, there is likely to be less money to pay for reliable child care; and it means that responsibilities such as picking children up from child care or attending PTA meetings tend to fall on just one parent. Low-wage jobs are also particularly unlikely to offer employees the type of flexibility that makes it possible to respond to something unexpected without being penalized, such as a sick child who cannot go to child care or school. At the same time, as discussed above, the increasing unpredictability of low-wage jobs can wreak havoc with child care and school schedules (Liu 2013). The share of single mothers among women workers is particularly high in health care and related occupations such as medical assistants and nursing, psychiatric, and home care workers (Figure 7). A study of access to work-family related flexibility in a large hospital found that this was something routinely available to higher-paid workers, such as doctors and nurses, but was largely out of reach for lower-paid staff at the hospital (Clawson and Gerstel 2014).

The low earnings in these occupations mean that many mothers working in low-wage, female-dominated jobs turn to taxpayer-funded social assistance programs to support their families. Six in ten mothers working in these occupations (60.1 percent) depend on subsidized lunch programs for their children. Four times as many mothers in low-wage, female-dominated jobs depend on food stamp benefits (SNAP) as mothers in better-paid jobs (Figure 8). Lack of employer-provided health insurance (or affordable employer health insurance) in these low-wage occupations also leaves 3.5 times as many mothers in low-wage, female-dominated jobs dependent on Medicaid (Figure 8).[19]

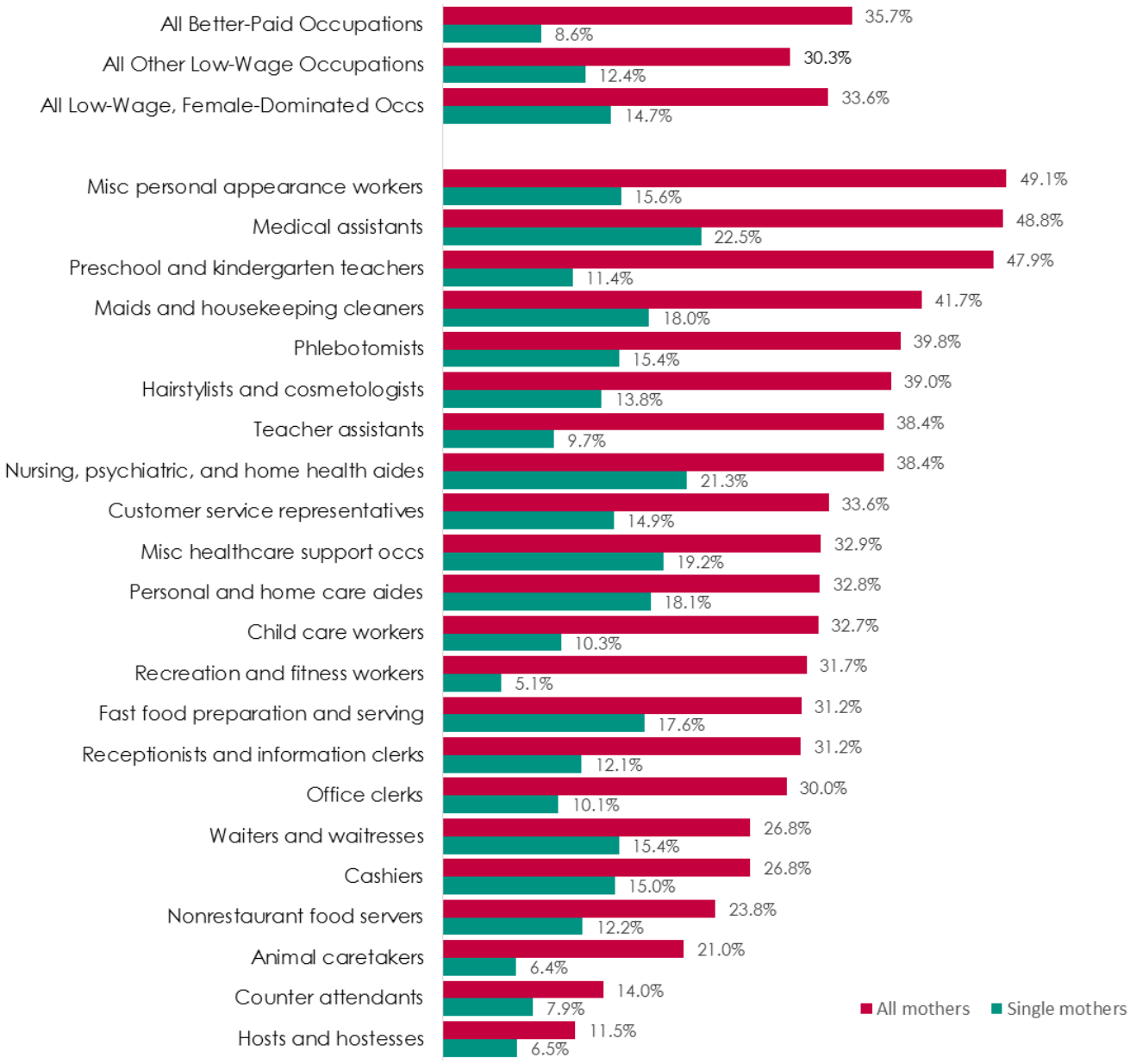
Low-wage jobs are also particularly unlikely to offer employees the type of flexibility that makes it possible to respond to something unexpected without being penalized, such as a sick child who cannot go to child care or school.

[18] While some single mothers may live with a partner or may receive some child support from the father of their child(ren), the numbers of single mothers who live in households with poverty and near poverty incomes suggests that this is not sufficient to lift them out of poverty.

[19] Due to the underreporting of benefits use by the Current Population Survey (Wheaton 2016), our analysis most likely underestimates the true shares of people who use SNAP, subsidized lunch programs, and Medicaid in these occupations.

Figure 7. Single Mothers are More Likely to Work in Low-Wage, Female-Dominated Occupations

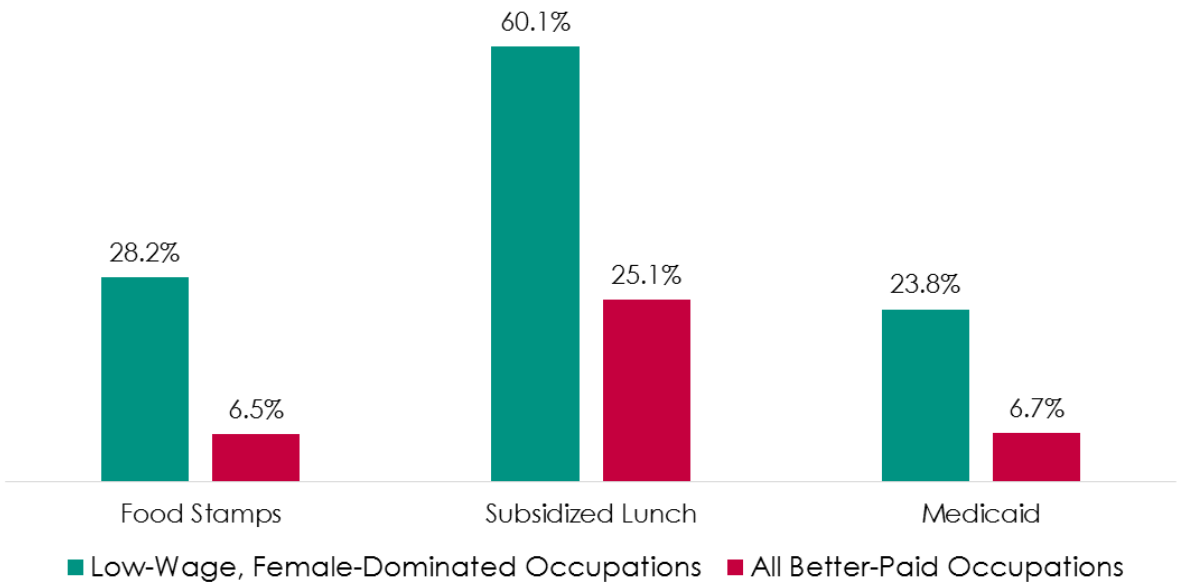
The Proportion of Women Workers who are Mothers of Children Younger than 18 by Occupation, All Mothers and Single Mothers, 2014



Notes: Mothers are defined as having children who reside with them and are younger than 18 years of age. Single mothers are mothers whose marital status is separated, divorced, widowed, or never married/single.
Source: Institute for Women's Policy Research analysis of Current Population Survey 2013-2015 Annual Social and Economic Supplement.

Figure 8. Mothers in Low-Wage, Female-Dominate Occupations are Reliant on Taxpayer-Funded Social Assistance Programs

Percent of Working Mothers That Receive Food Stamps (SNAP), Subsidized School Lunches, or Medicaid, 2014



Note: Mothers are defined as having children who reside with them and are younger than 18 years of age.
Source: Institute for Women's Policy Research analysis of Current Population Survey 2013-2015 Annual Social and Economic Supplement.

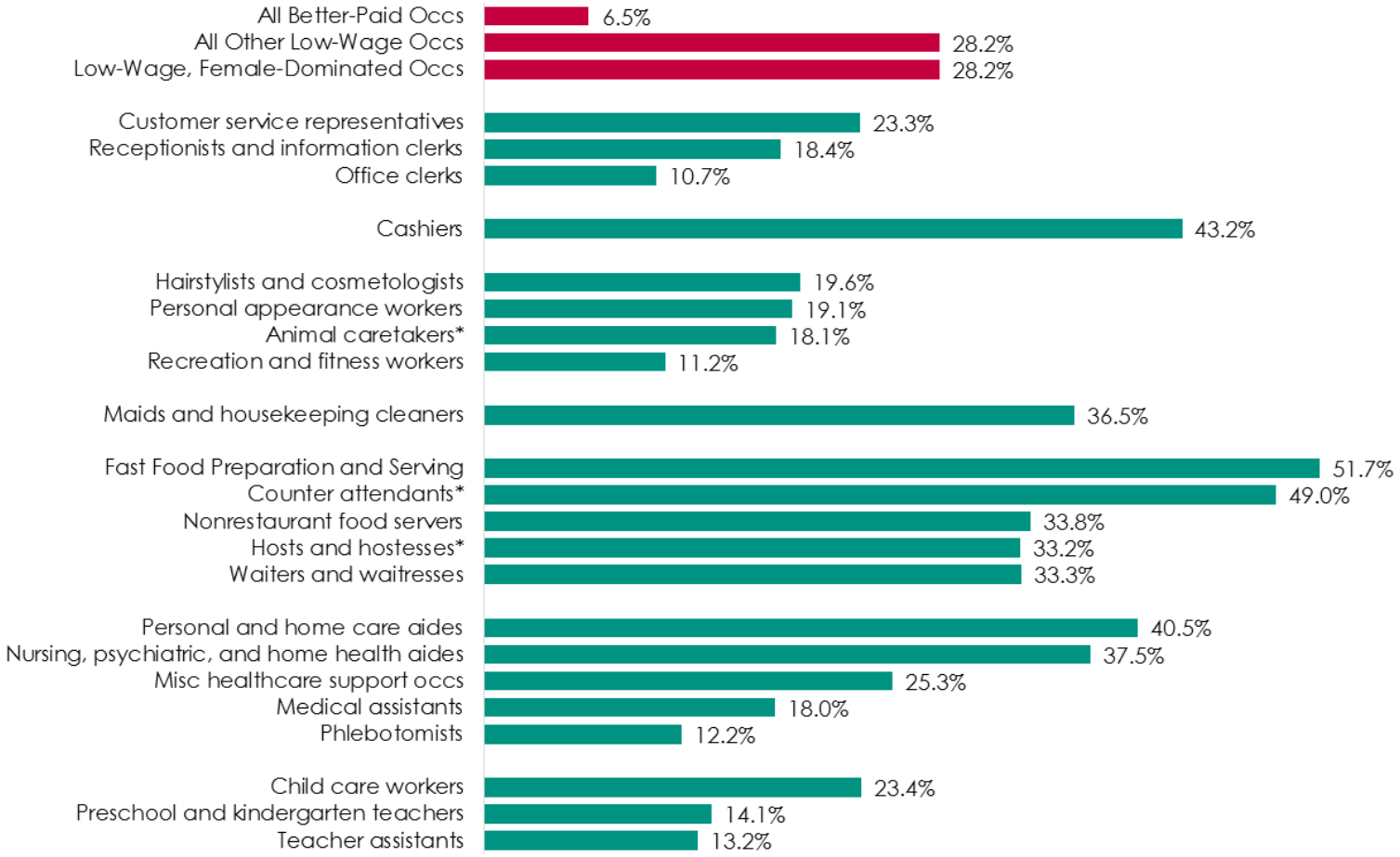
Mothers in low-wage food preparation and serving occupations are particularly likely to be forced to turn to social assistance programs. Half of mothers working fast food occupations use food stamps (SNAP) and a staggering eight in ten rely on subsidized or free lunch to feed their children (Figures 9 and 10).[20] Counter attendants follow closely, with almost half using food stamps and seven in ten reliant on subsidized or free lunch to feed their children. Four in ten mothers who work as cashiers, maids, personal and home care aides, and nursing, psychiatric, and home health aides also rely on food stamps, and seven in ten use free or subsidized lunches (Figures 9 and 10).

Over half of all mothers working in fast food, and at least a third of women working as waitresses are paid too little to provide food for their own families.

[20] Eligibility for SNAP is set at 130 percent of the federal poverty level while reduced price school lunch has a higher income guidance, set at 185 percent of the federal poverty level. Eligibility for Medicaid is closer to the SNAP eligibility, set at 138 percent of the federal poverty level.

Figure 9. Mothers Working in Low-Wage, Female-Dominated Occupations are Reliant on Food Stamps to Feed Their Families

Percent of Working Mothers Receiving Food Stamps in Low-Wage, Female-Dominated Occupations, 2014

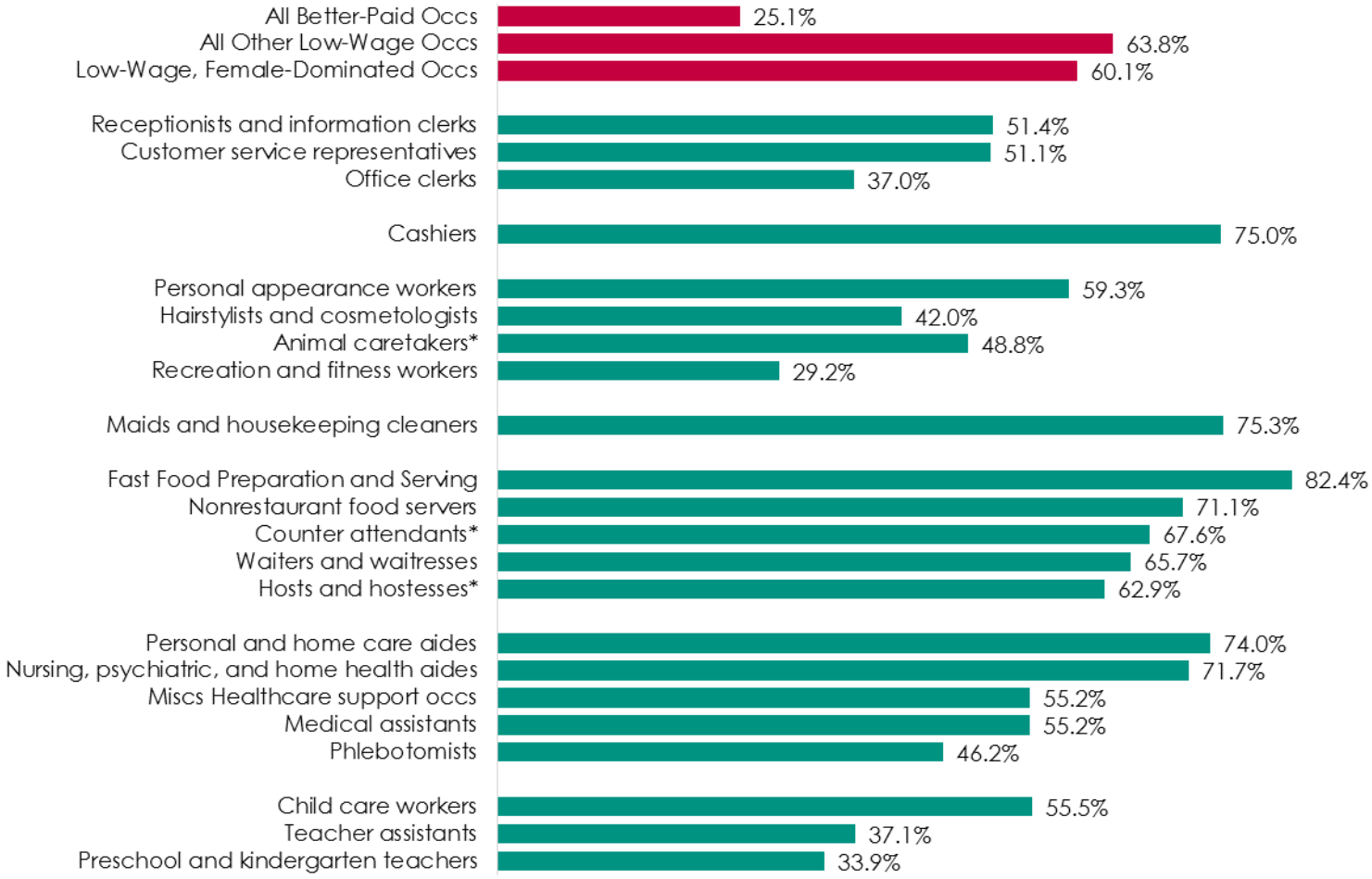


Notes: *Denotes rate of use for mothers and fathers in the occupation; due to sample size constraints, only the overall rate for parents in the occupation can be reported. Mothers/fathers are defined as parents of children who reside with them and are younger than 18 years of age

Source: Institute for Women's Policy Research analysis of Current Population Survey 2013-2015 Annual Social and Economic Supplement.

Figure 10. Mothers in Low-Wage, Female-Dominated Occupations Rely on Free or Subsidized Lunches to Feed Their Children

Percent of Workers in Low-Wage, Female-Dominated Occupations who are Mothers and Use Free or Subsidized Lunch Program, 2014

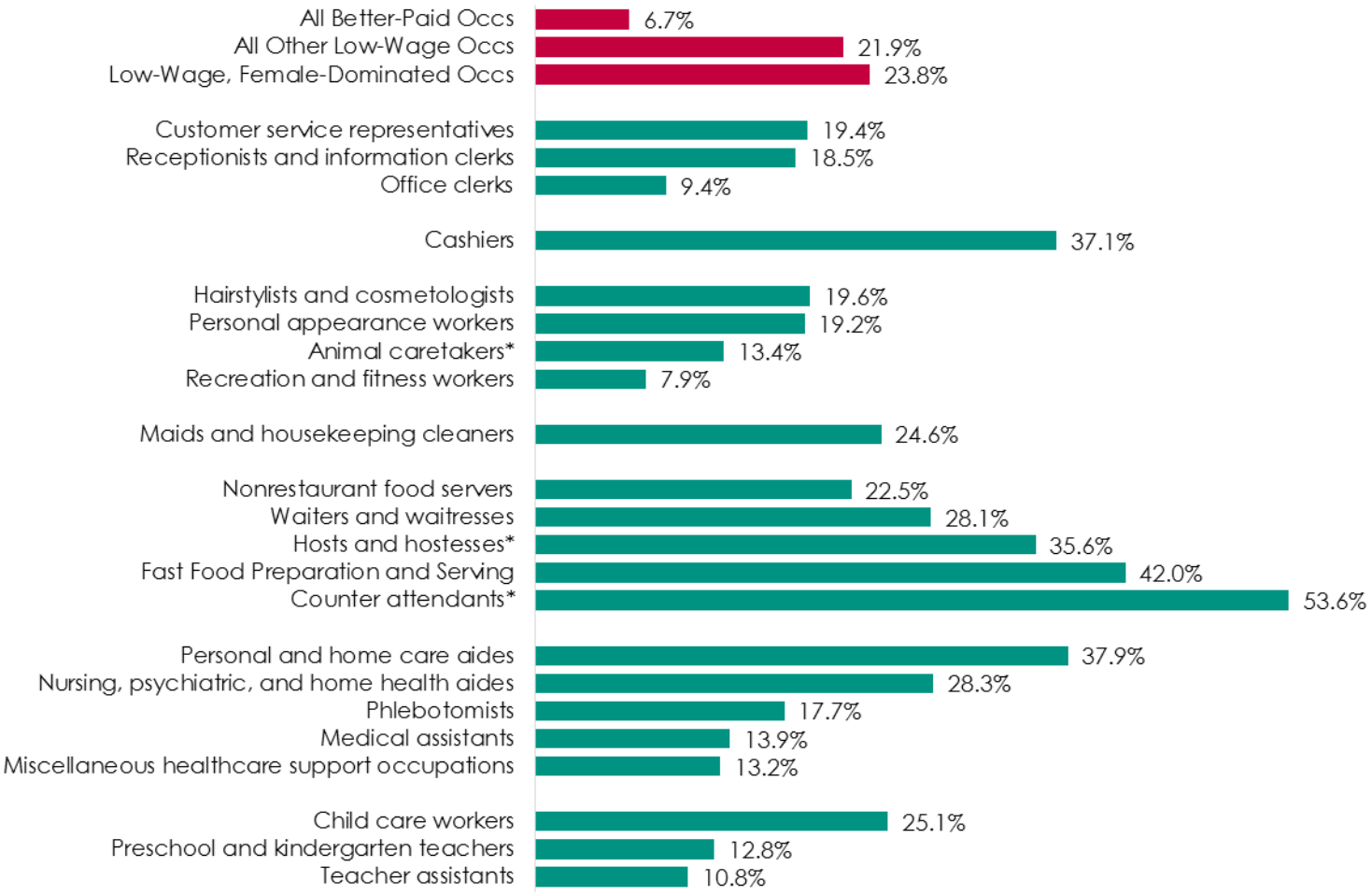


Note: *Denotes rate of use for mothers and fathers in the occupation; due to sample size constraints, only the overall rate for the occupation can be reported. Mothers/fathers are defined as parents of children who reside with them and are younger than 18 years of age.
Source: Institute for Women's Policy Research analysis of Current Population Survey 2013-2015 Annual Social and Economic Supplement.

The use of Medicaid also varies across the 22 low-wage, female-dominated occupations. As with social assistance programs, reliance on Medicaid for health insurance coverage is especially prevalent among mothers in food and restaurant jobs, ranging from 22.5 percent of non-restaurant food servers to 53.6 percent of counter attendants (Figure 11). Even many mothers who work in the health care industry do not have access to employer-provided health care, and rely on Medicaid for medical care for themselves and their families; two in five mothers in personal and home care jobs and almost a third of mothers in nursing and home health jobs rely on Medicaid (Figure 11).

Figure 11. Mothers Working In Low-Wage, Female-Dominated Occupations Rely More on Medicaid for Health Care Coverage

Percent of Workers in Low-Wage, Female-Dominated Occupations who are Mothers and Use Medicaid, 2014, 2014



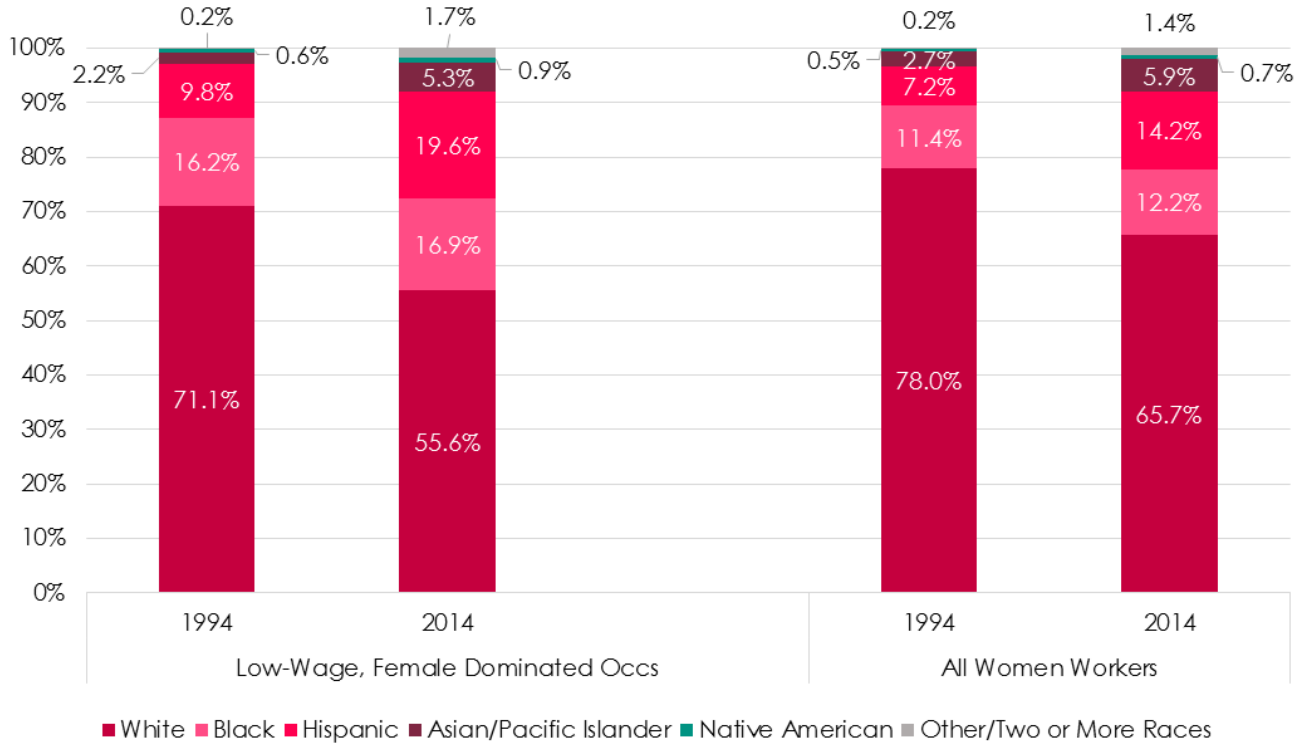
Notes: *Denotes rate of use for mothers and fathers in the occupation; due to sample size constraints, only the overall rate for the occupation can be reported. Mothers/fathers are defined as parents of children who reside with them and are younger than 18 years of age.
Source: Institute for Women's Policy Research analysis of Current Population Survey Current Population Survey 2013-2015 Annual Social and Economic Supplement.

Racial and Ethnic Makeup of the Low-Wage Workforce

Women of all backgrounds work in low-wage occupations; for example, in the three lowest-paid female dominated occupations—fast food preparation and servers, hosts and hostesses, and counter attendants—women workers are as likely to be White as in the overall workforce (Appendix Table B6). Yet women of color are overrepresented in low-wage, female-dominated occupations overall and face additional barriers to finding decent and well-paid jobs (Flippen 2014). Women of color are well over four in ten (44.4 percent of) women in these occupations, compared with just over a third (34.3 percent) in the total workforce. During the last 20 years, the U.S workforce has become increasingly diverse, and the share of women of color has increased substantially among all women workers, but the increase has been especially marked among women who work in low-wage, female-dominated occupations (Figure 12). The share of Hispanic women increased particularly strongly, doubling both among low-wage, female-dominated occupations (where they are over-represented in both time periods) and in the total female workforce.

Figure 12. Women of Color are Increasingly Overrepresented in Low-Wage, Female-Dominated Occupations

The distribution of the female workforce in female-dominated low-wage occupations and the total female workforce, by race and ethnicity, 1994 and 2014



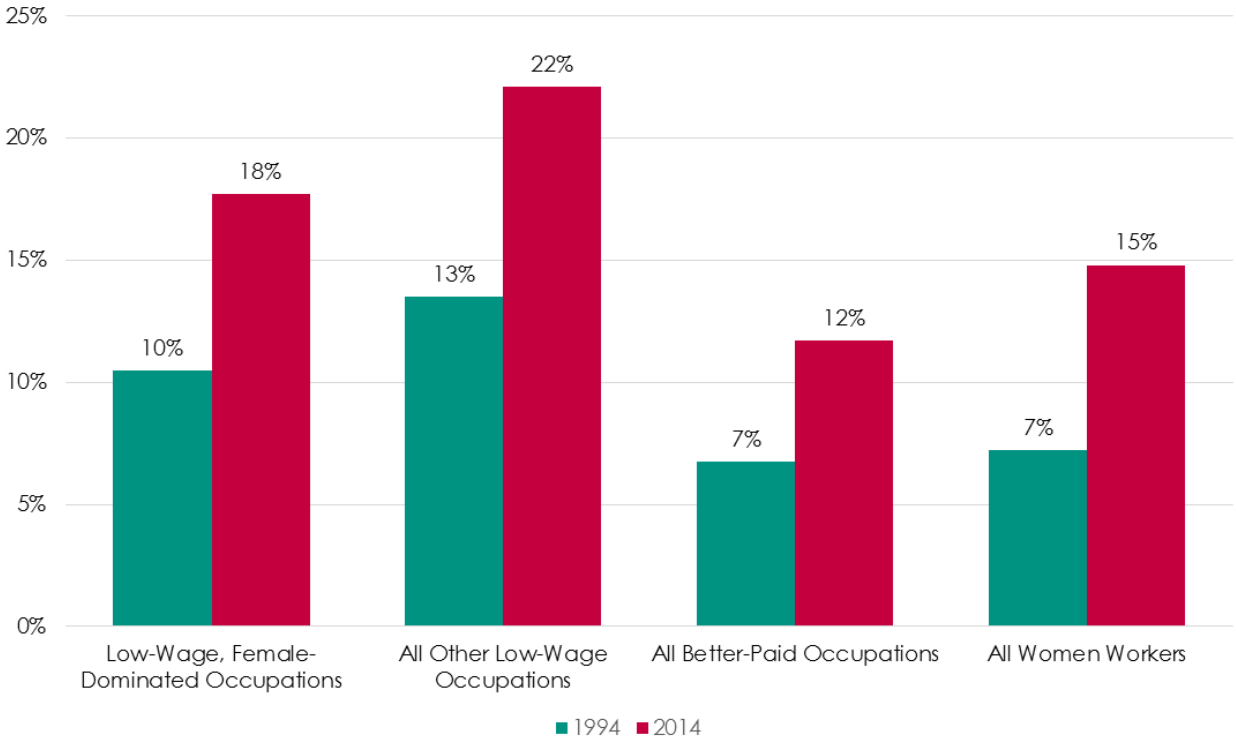
Note: Racial groups are non-Hispanic. Hispanics may be of any race or two or more races. Data for "Low-Wage, Female-Dominated Occs" include all women age 15 and older. Data for "All Women Workers" include all women aged 16 and older.

Source: Institute for Women's Policy Research analysis of Current Population Survey 1993- 1995 and 2013-2015 Annual Social and Economic Supplements.

Low-wage, female-dominated occupations also saw a 50 percent greater increase in immigrant women workers than higher-paid occupations since 1994.[21] Foreign-born women are more than one in six of the female workforce in low-wage, female-dominated occupations compared with one in eight in the better-paid occupations; but their share is highest – more than one in five of all women workers- in other low-wage occupations (Figure 13).

Figure 13: Close to a Fifth of Women in Low-Wage, Female-Dominated, and More than a Fifth in Other Low-Wage Occupations, are Immigrants

The Percent of Women Workers who are Foreign-Born by Broad Occupational Group and for the Total Female Workforce, 1994 and 2014

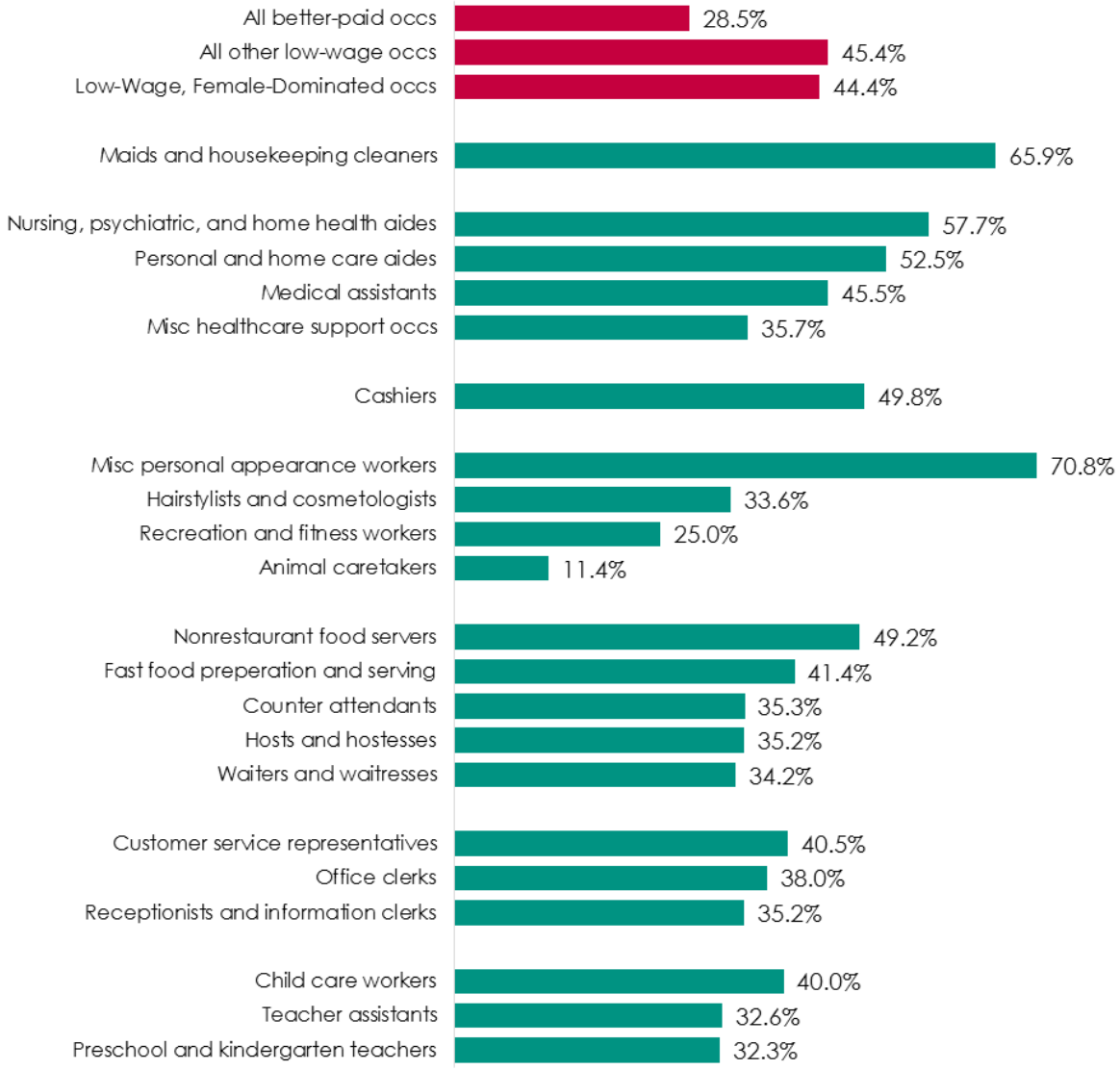


Notes: Workers age 15 and older.
Source: Institute for Women's Policy Research analysis of Current Population Survey 2013-2015 Annual Social and Economic Supplement.

The concentration of women of color varies dramatically across the 22 occupations, from 70 percent of women working in the field of personal appearance—more than twice the national average of 34.3 percent—to just 11 percent of women working as dog walkers and groomers (Figure 14).

[21] IWPR analysis of 2013-2015 CPS ASEC; see Appendix A.

Figure 14: The Share of Women of Color Varies Substantially Among Low-Wage, Female-Dominated Occupations

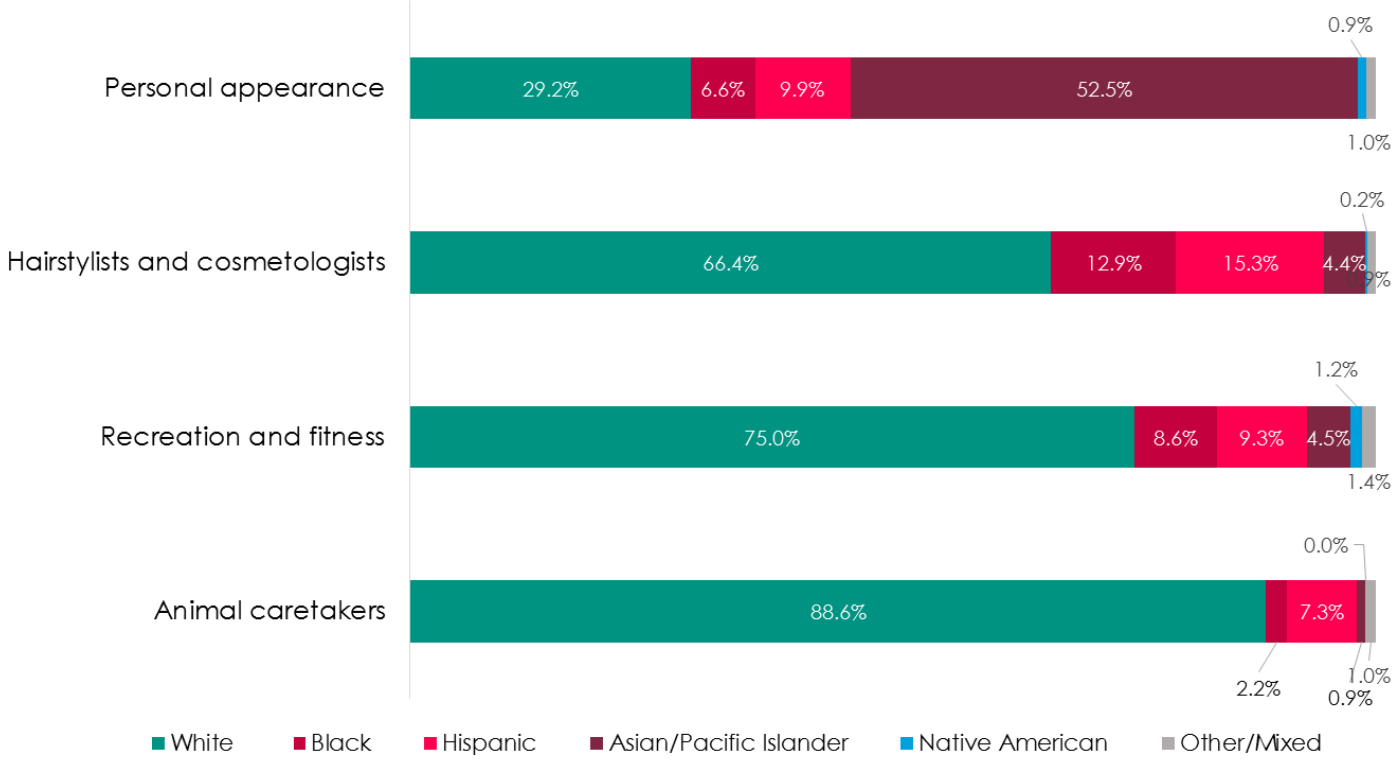


Notes: Women of color are defined as Black non-Hispanic, Asian non-Hispanic, Native American, Hispanic women, and women of two or more races. Due to sample size constraints, the rate for phlebotomists cannot be reported. Workers age 15 years and older.
Source: Institute for Women's Policy Research analysis of Current Population Survey 2013-2015 Annual Social and Economic Supplement.

Over half (52.5 percent) of women employed as personal appearance workers (such as such as mani- or pedicurists) are Asian/Pacific Islanders, the highest concentration of Asian/Pacific women in any of the low-wage occupations studies for this report (Figure 15). The low-wage, female-dominated occupation with the next highest share of Asian/Pacific Islander women is home care aides, with just 7 percent, and in most of the other low-wage, female-dominated occupations it is five percent or less (Appendix Table B6). More than half of personal appearance workers are foreign-born (56.4 percent; Appendix Table B6) and some lack legal immigration status, which can lead to numerous abuses of these workers (Quach et al. 2008; Nir 2015a).

Exploitation in this field is rampant. Some personal appearance workers are required to pay their bosses (illegally) for the first months of their employment until their employers deem them "skillful enough to merit a wage" (Nir 2015a). Women employed as personal appearance workers earn the least of all the low-wage beauty and personal service occupations, with a median hourly wage of $10.16. The closely related occupation of hairdressers and hair stylists has a much more proportional racial and ethnic makeup, almost identical to the racial and ethnic distribution of all women in the workforce. Recreation and fitness workers and dog walkers and groomers, also in this group of personal services occupations, however, are the least diverse and most likely to be White women workers.

Figure 15. Race and Ethnicity of Women in Low-Wage, Female-Dominated Beauty and Personal Service Occupations, 2014



Note: Racial groups are non-Hispanic. Hispanics may be of any race or two or more races. Workers age 15 years and older.
Source: Institute for Women's Policy Research analysis of Current Population Survey, 2013-2015 Annual Social and Economic Supplement.

Immigrant women also make up a large share of maids and housekeepers, where the share of immigrant women workers is almost as high as for personal appearance workers; half of all women (49.9 percent) working as maids and housekeepers are foreign-born, and close to half (45.9 percent) are Hispanic (Appendix Table B6). While the informal nature of some cleaning and housekeeping work can make it more available to women who are undocumented, it can also make it particularly difficult to challenge poor working conditions. As many as 85 percent of undocumented immigrant workers in one study chose not to complain about poor working conditions because they were afraid that their immigration status would be used as leverage against them (Burnham and Theodore 2012). Yet the U.S. immigration system offers few paths to

employment visas for workers in female-dominated, low-wage jobs (Hess and Henrici 2013). Increasing the number of visas available to care workers would have the potential to both improve the lives of workers and more effectively meet the anticipated growth in demand for care workers. Specifically, visas that allow for job mobility and that are not tied to employers reduce the risk of employers mistreating and abusing workers (Hess and Henrici 2013; National Domestic Workers Alliance 2015a).

While Black and Hispanic women are about equally represented among personal and home care aides, Black women make up the largest share of women of color among nursing and home health aides. Black women account for similar proportions of workers in both miscellaneous health care support occupations and personal and home care workers (20.4 and 20.8 percent, respectively; Appendix Table B6) and Hispanic women account for a significant portion of women of color employed as medical assistants (23.7 percent). Almost a quarter of the direct-care workforce is composed of immigrant women, who fill a labor shortage caused by a huge increase in the demand for direct care workers. In the coming years, the direct-care workforce is projected to be the largest occupational grouping in the country (Institute for Women's Policy Research 2015; 2016; Paraprofessional Healthcare Institute 2013).

While care and domestic work is typically low-paid and undervalued for all women, research in this field shows that White women are more likely to hold more visible positions, such as nurses, while Hispanic and Black women are more likely to work in the more informal and less visible (and lowest paid) segments of care work (Duffy 2007; Duffy 2005; Nakano Glenn 1992). The two low-wage health care support occupations that pay the least among the health care support occupations and employ the largest number of women (nursing, psychiatric, and home care aides and personal and home care aides) also have the highest concentrations of women of color. These are also the two low-wage health care support occupations with the highest concentration of immigrant women; 22.9 percent of nursing and home care aides and 22.6 percent of personal and home care aides are immigrants (Appendix Table B6).

A similar segmentation of the labor market seems to exist in child care and early childhood education; four in ten child care workers and a third of teacher assistants and preschool teachers are women of color (Figure 14). A recent study of the early childhood workforce found systematic differences in earnings of Black and White women in this sector; Black women working full-time as preschool teachers made only 84 cents on the dollar earned by White women (median hourly earnings for all were low, less than $15; Ullrich et al. 2016). Only women with at least a bachelor's degree had the same level of earnings in the fields across race and ethnicity (Ullrich et al. 2016).

Occupational differences in the racial and ethnic composition of the low-wage workforce may be associated with a number of environmental or background circumstances. For example, women who are recent immigrants may have difficulty finding employment options if English is their second language, segregation in lower-income neighborhoods and regions may limit employment opportunities, and discrimination inhibits access to better jobs within the restaurant industry (Restaurant Opportunities Centers United 2015; Restaurant Opportunities Centers United 2014a). In addition, Black and Hispanic women are less likely than White and Asian women to have a bachelor's degree or higher, making it more difficult for them to enter better-paid occupations and move out of the low-wage sector (Hess et al. 2015).

Education and Low-Wage Occupations

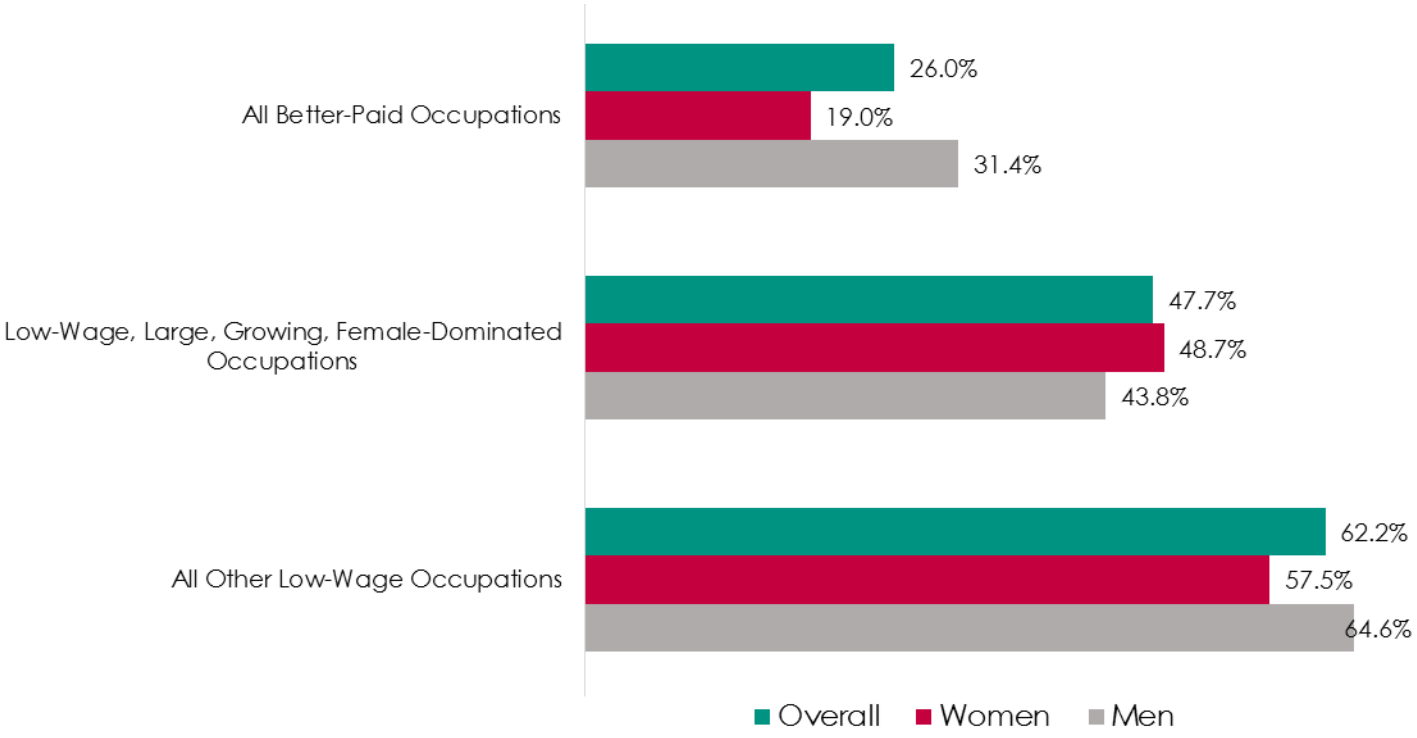
Education matters for access to better paid jobs. In the better-paid occupations with median hourly earnings of $15 or more, 51 percent of women and 42 percent of men have at least a bachelor's degree, compared with 13.9 percent of women and 18.2 percent of men in low-wage, female-dominated jobs; and the overall share of workers in better-paid occupations without credentials beyond high school is just 26.0 percent, compared with 47. 7 percent in low-wage, female-dominated occupations (Figure 16; Appendix Table B7). By contrast, a quarter of workers in low-wage, female-dominated occupations have at least an associate's degree. Women in low-wage, female-dominated occupations are slightly less likely to have post-secondary educational credentials than men; this may be a reflection of the fact that men, at least those working part-time, are more likely than women to work in these occupations while they are pursuing training and education and thus are already more likely to have some college credentials beyond high school (see Figure 5 above).

Workers in female-dominated jobs have higher educational attainment, however, than those in other low-wage occupations, even though the female-dominated jobs pay less. Workers in 'other low-wage occupations' are 15 percentage points more likely to have no credentials beyond high school than workers in low-wage, female-dominated occupations (Figure 16; Table 1 above). A recent analysis of middle-skill jobs—jobs that require credentials beyond high school and/or job training but less than a full four-year college degree—found dramatic earnings differences between middle-skill jobs that were predominantly female, those that had a more even gender balance, and those that were predominantly male. Workers in female-dominated middle-skill jobs earned only 66 cents for each dollar earned by workers in male-dominated middle-skill occupations; the wage gap was calculated for all workers, and did not consider earning differentials between women and men within occupations (Hegewisch et al. 2016).

The number of workers in low-wage, female-dominated occupations has grown since 1994, both in absolute numbers and as a proportion of the total workforce.

Figure 16. Fewer Workers in Low-Wage, Female-Dominated Occupations Have a High School Diploma or Less Compared With Other Low-Wage Occupations

The share of workers with a high school diploma or less by broad occupational group and gender, 2014

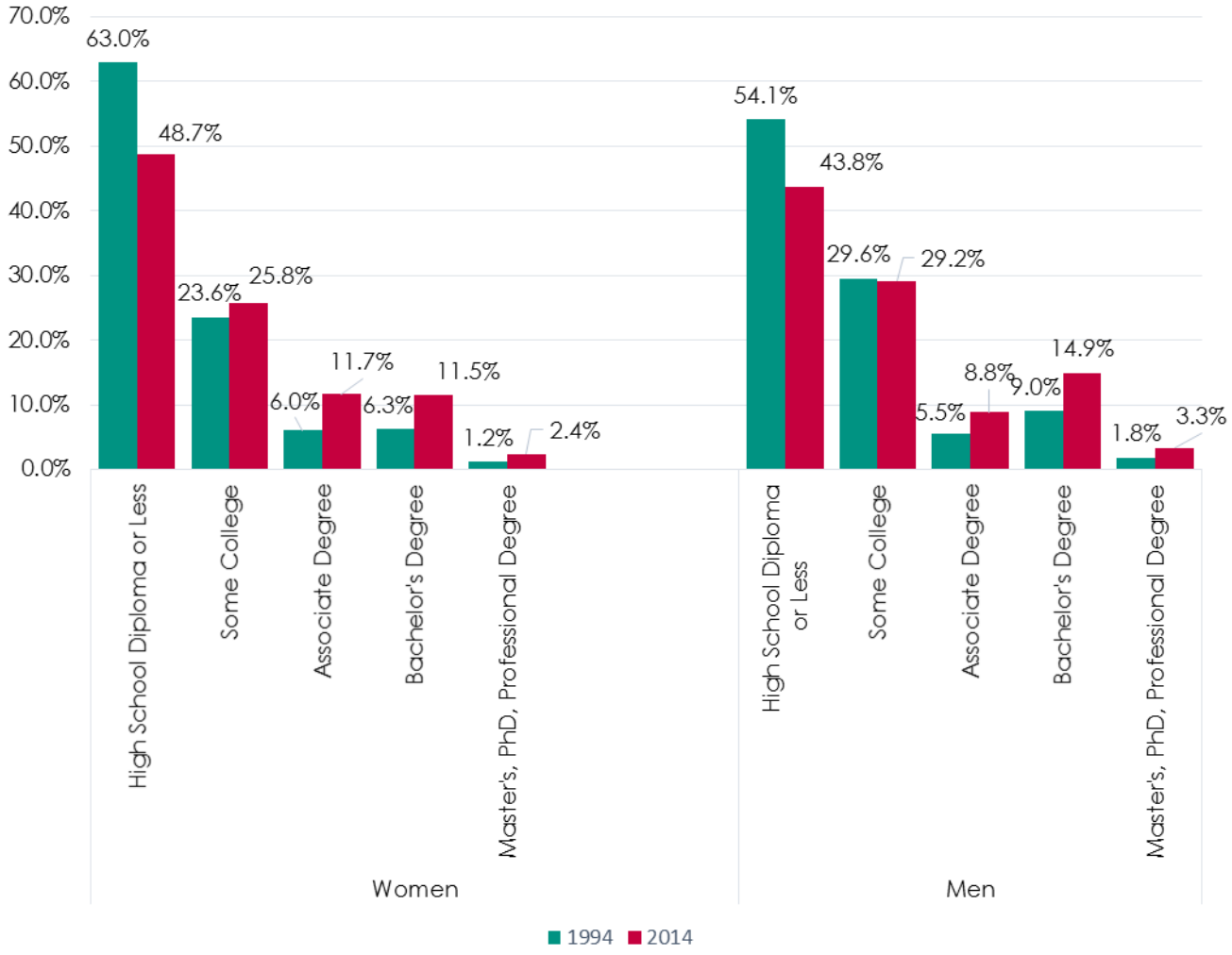


Notes: Workers ages 15 years and older.
Source: Institute for Women's Policy Research analysis of Current Population Survey, Current Population Survey 2013-2015 Annual Social and Economic Supplement.

The number and proportion of workers in low-wage, female-dominated jobs with some college has increased. In 1994, more than six in ten (63.0 percent) women in these jobs had no educational attainment beyond high school; by 2014 that proportion had fallen to fewer than five in ten (48.7 percent) and the majority of women and men in low-wage, female-dominated occupations had education beyond high school (Figure 17). The percent of women in these occupations earning an associate's or a bachelor's degree nearly doubled during that period (Figure 17).

Figure 17. Educational Attainment Has Increased for Low-Wage-Workers in Female-Dominated Jobs

Percent of Women and Men Workers in Low-Wage, Female-Dominated Occupations, by Educational Attainment, 1994 and 2014

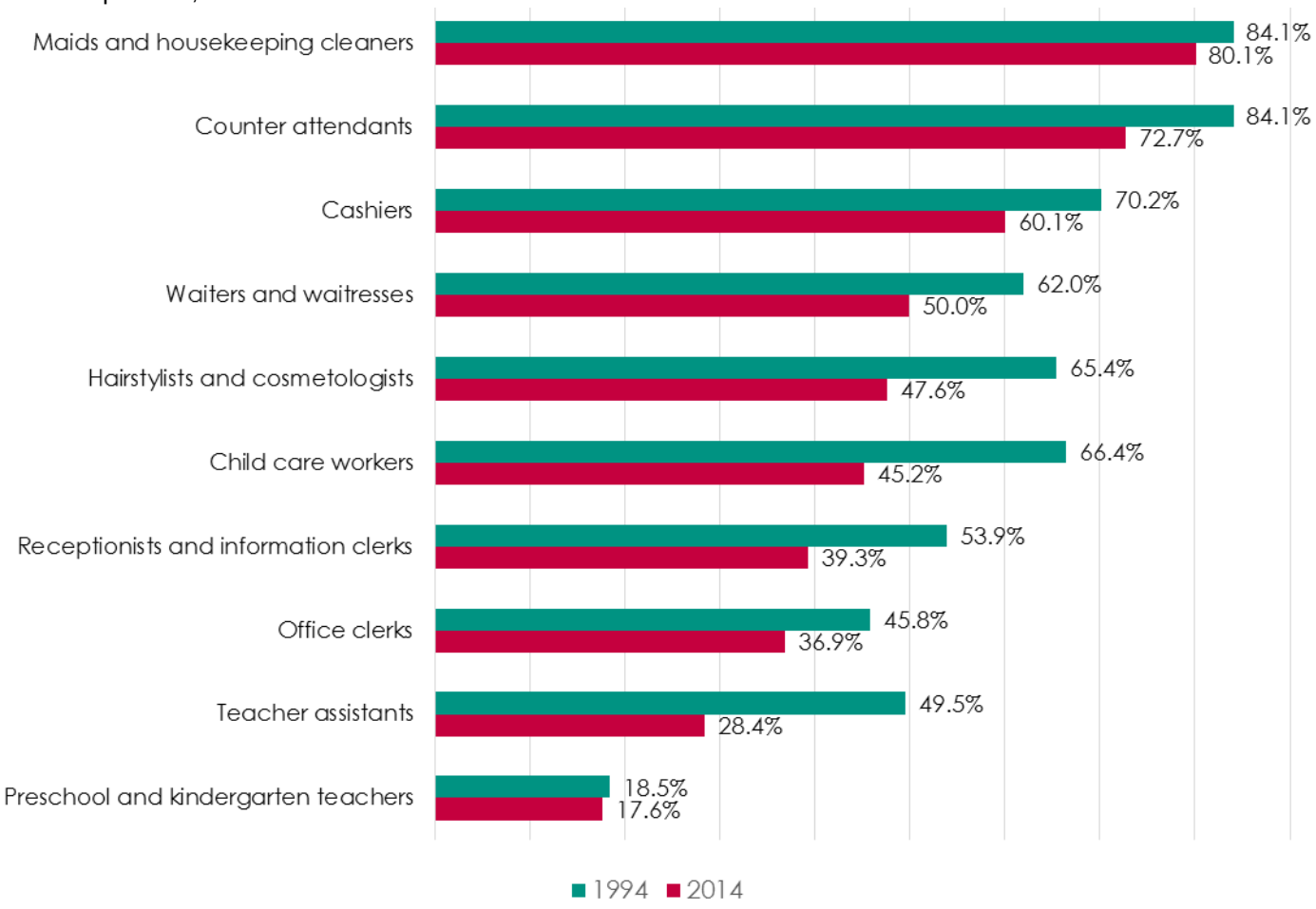


Notes: Women and men ages 15 years and older. In 2000 the Census Bureau introduced a new occupational classifications scheme; several of the 22 occupations did not have a direct equivalent in 1994. Data have been adjusted as far as possible to allow comparisons over time. See Appendix A.
Source: Institute for Women's Policy Research analysis of Current Population Survey, (2015) Annual Social and Economic Supplement.

College education among women working as child care workers and teacher assistants has increased especially dramatically in the last two decades. In 1994 one-third of child care workers had a college education; by 2014 that proportion had grown to 55 percent, a growth of more than 20 percentage points. For teacher assistants, too, the change has been dramatic, falling from five in ten workers without college level education to fewer than three in ten workers in the 20 year period (Figure 18).

Figure 18. The Share of Women With a High School Diploma or Less in Low-Wage, Female-Dominated Occupations Has Dropped Significantly Since 1994

Percent of Women Workers with High School or Less in Low-Wage, Female-Dominated Occupations, 1994 and 2014

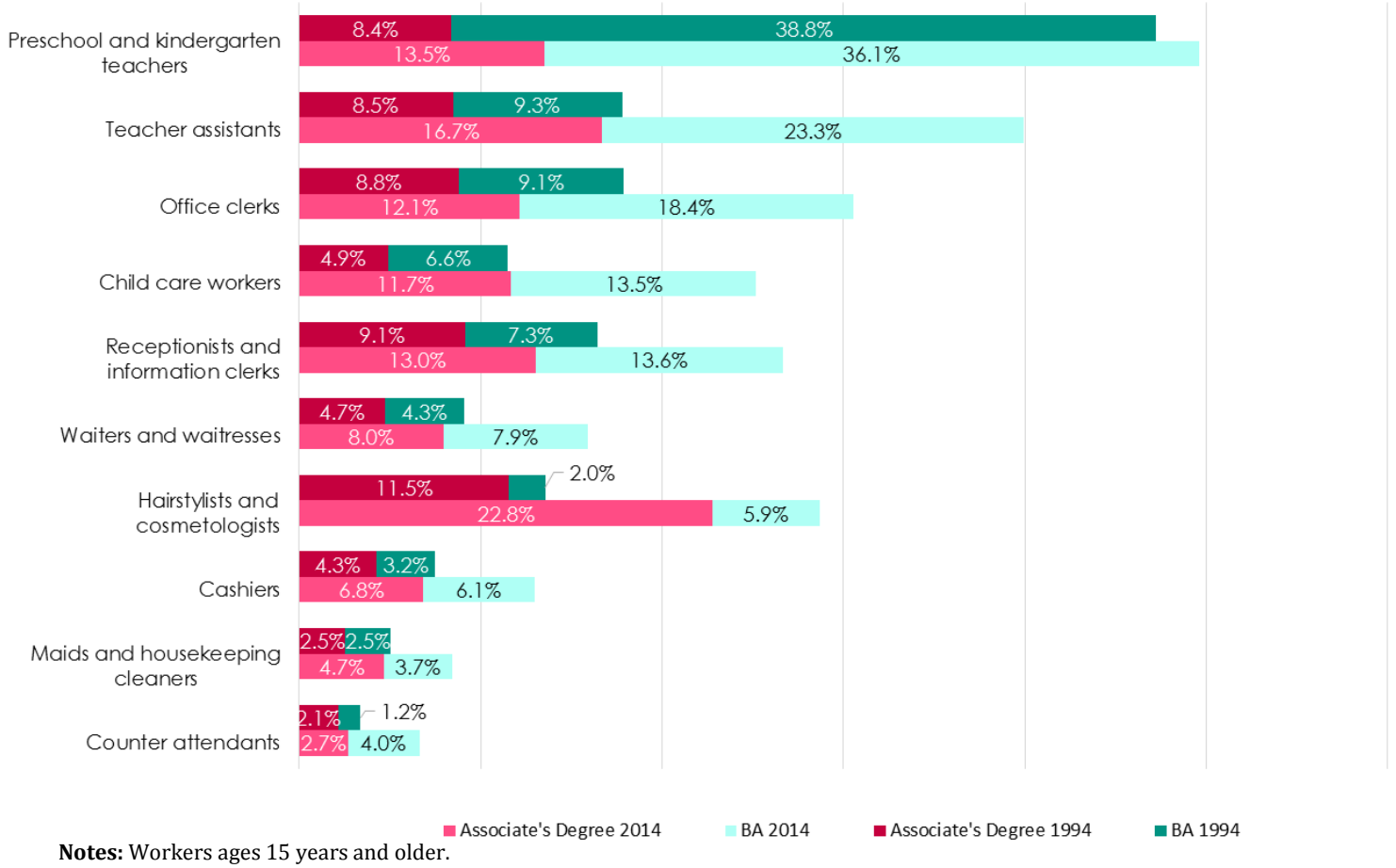


Notes: Women ages 15 years and older.
Source: Institute for Women's Policy Research analysis of Current Population Survey, 2013-2015 Annual Social and Economic Supplement.

The share of women working as teacher assistants with associate's and bachelor's degrees doubled from 1994 to 2014, and the share of women child care workers who had associate's degrees in 2014 was more than the combined share of women with associate's and bachelor's degrees in 1994 (Figure 19). Pre-school and kindergarten teachers have the highest levels of educational attainment among low-wage, female-dominated occupations—half of all women have at least an associate's degree, and a third have a bachelor's degree or more—and still, the median hourly earnings of women preschool and kindergarten teachers is less than $15 per hour. The contrast between early educators' strong credentials on the one hand and low pay on the other, puts undervaluation of traditionally female work into stark relief.

Figure 19. The Share of Low-Wage Women Workers with College Degrees has Grown Substantially Since 1994

Percent of Women Workers with Associate's or Bachelor's Degree in Low-Wage, Female-Dominated Occupations, 1994 and 2014



Notes: Workers ages 15 years and older.

Source: Institute for Women's Policy Research analysis of Current Population Survey, 2013-2015 Annual Social and Economic Supplement.

The differences in educational attainment highlight the diversity of challenges for women in low-wage, female-dominated occupations. For women who have not completed high school and do not have at least some post-secondary credentials, access to vocational training and education can help them gain recognized vocational credentials. Yet the conditions of work in these jobs—low wages combined with precarious schedules, and the lack of affordable child and elder care—limit the opportunities to access education and training (Smith and Halpin 2014). At the same time, a college credential alone is not enough to lift a family out of poverty (United States Government Accountability Office 2011). At an individual level, women need vocational counseling and career advice that can direct them to fields where their education can bring greater returns. At a societal level, child care workers and early childhood educators are performing a very important service, a service that needs increased funding and public resources to ensure that the skills and professional investment of workers in the service are appropriately valued, and that rewards are sufficient to support themselves and their families.

Male-Dominated Versus Female-Dominated Occupations

Compared to female low-wage occupations, workers in comparable male-dominated occupations on average have higher hourly earnings, but lower educational attainment.

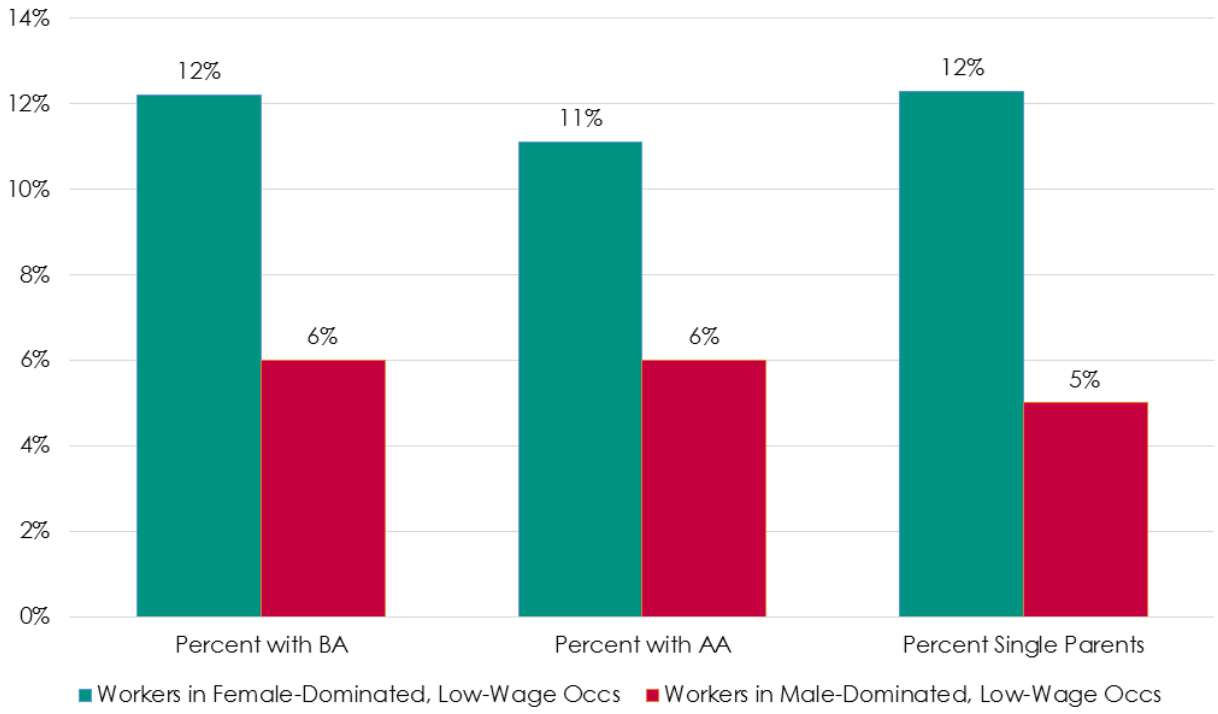
IWPR identified low-wage, growing, male-dominated jobs using the same criteria used to identify the growing, low-wage, female occupations: at least 100,000 male workers in the occupation, at least six in ten workers in the occupation being male, the occupation is projected to add at least 1 percent to the total number of jobs between 2014 and 2024, and median hourly wages are less than $15. These criteria led to identification of 18 low-wage, growing, male-dominated occupations to compare with the 22 female-dominated occupations. These male-dominated occupations include janitors and building cleaners; cooks; laborers and material movers; and construction laborers (for a full list see Appendix Table B8). These 18 occupations, however, employ a substantially lower number of workers, just 16.5 million compared with 23.6 million workers in the 22 female-dominated occupations. Most of these jobs require manual labor and, just as many of the female-dominated occupations are associated with "women's work," they tend to be associated with traditionally "men's work" (such as construction laborers).

The median hourly wage for workers in the low-wage, male-dominated occupations is $12.13 per hour, compared with $11.30 per hour for workers in the low-wage, female-dominated occupations (Appendix Table B8). The median earnings in each of these male-dominated occupations are also more likely to be skewed to the higher end of low-wage earnings, and four of the 18 male-dominated occupations exceed a median wage threshold of $14, while only two of the 22 female-dominated occupations reach that median earnings level. As is the case for female-dominated occupations, median hourly wages vary substantially across these 18 male-dominated occupations. Occupations that involve tasks that fall into the traditionally female realms of domestic work pay lower wages, on average, than occupations that fall more in line with "men's work." For example, cooks earn $9.94 and janitors and building cleaners earn $12.13 in median hourly wages, compared with construction laborers, who earn $14.47 per hour, and industrial truck and tractor operators, who earn $14.90 (Appendix Table B8).

Workers in the low-wage, female-dominated occupations are more than twice as likely to have a bachelor's degree (12.2 percent versus 6 percent) and almost twice as likely to have an associate's degree (11.1 percent versus 6 percent) than workers in low-wage, male-dominated occupations (Figure 20). Workers in male-dominated occupations are also only half as likely as workers in female-dominated occupations to be single parents (5 percent versus 12.3 percent; Figure 20).

Figure 20. Workers in Female-Dominated Low-Wage Occupations have Higher Levels of Educational Attainment and are More Likely to be Single Parents

Percent of Workers with Associate's or Bachelor's Degree and of Single Parents in Low-Wage, Female-Dominated and Low-Wage Male Dominated Occupations, 2014



Notes: Workers ages 15 and older. Single parents are parents of children under age 18 who reside with them, and who are single/never married, divorced, widowed, or separated.
Source: Institute for Women's Policy Research analysis of Current Population Survey, 2013-2015 Annual Social and Economic Supplement.

Conclusion & Policy Recommendations

The Case for Policy Interventions to Improve Female-Dominated, Low-Wage Occupations

The occupations reviewed in this report all fit four criteria: Large numbers of women work in these occupations, workers receive low wages, most employees are women, and they are growing. The majority of these occupations easily fit the definition of "women's work": caring, cleaning, and serving occupations. These occupations have the lowest median hourly wages, high concentrations of women workers, and high shares of women in poverty—and, as a consequence, high shares of employees receiving government-subsidized assistance. The list includes occupations that are predicted to be some of the fastest growing in the next decade. If conditions for these low-wage workers do not improve in the coming years, the United States will see an increase in poverty and economic strain on families, especially those who are headed by single mothers and/or depend on women's earnings to support their family.

The low earnings in low-wage, female-dominated occupations leave workers and their families in or near poverty, and many use taxpayer-funded social assistance programs to make ends meet. With 40 percent of women in low-wage, female-dominated occupations living in poverty, high rates of social assistance program use, including SNAP (also known as food stamps), Medicaid, Temporary Assistance for Needy Families (TANF), and Earned Income Tax Credits (EITC), become unavoidable. Taxpayer dollars subsidize employees' low wages, with more than half of the $152.8 billion spent each year in state and federal assistance going to working families (Jacobs, Perry, and MacGillvary 2015). Yet the benefits provided by these programs are not enough to eliminate economic hardship for these women and their families, because benefit levels are often quite low (Huber, Kassabian, and Cohen 2014).

Workers in these occupations also face daunting challenges in addition to low wages. Nonstandard, unpredictable, and unstable hours, often assigned by scheduling software designed to cut employers' labor costs, leave workers unable to plan important logistics like child care or with early-morning hours following late-night shifts, and with too few hours of work to afford necessities (Vogtman and Schulman 2016; Levin-Epstein 2016).

Most jobs in these occupations do not provide workers with paid sick days, forcing them to go to work sick—even when working with food, the public, children, the elderly, and those that are already ill. These workers also often lack access to paid family or medical leave, forcing workers to choose between their health or the health of their families and a paycheck. While some of the occupations in this report do have pathways toward better paying jobs through career ladders within an industry, many can be considered "dead end" jobs—jobs with very limited opportunities for upward mobility.

For some low-wage occupations that involve provision of care, such as child care, the costs of care are borne by service users; yet most parents have earnings that are too low for them to afford quality care with decent wages for the workers who provide that care. The economic benefits of a well-developed, care-related infrastructure and public investments in such services are well established. They include increased labor force participation (particularly of women), improved human capital development, better health among the next generation of workers, and increased economic activity when resources are redistributed to low income workers who are most likely to spend these monies, and thus create demand for more work (Warner and Liu 2006; White House 2014).

Policy Recommendations

To ensure that all workers have the same opportunities to achieve economic security, we must both improve wages and working conditions in low-wage, female-dominated jobs, and build equitable pathways to higher paying jobs.

Improving Wages and Working Conditions for Workers Who Enter or Remain in Low-Wage, Female-Dominated Jobs

Raise the Minimum Wage. The value of the federal minimum wage has decreased since the late 1960's, leaving many minimum-wage earners living in poverty (Cooper 2015). Raising the minimum wage is central to improving low-wage, female-dominated occupations. While local efforts to raise the minimum wage at the city and state level have gained ground in reducing poverty and the gender wage gap (Robbins, Vogtman, and Entmacher 2015), overall conditions will not improve without movement on this issue nationally.

Eliminate the Tipped Minimum Wage. The subminimum wage, or tipped minimum wage, has been fixed at $2.13 per hour since 1991 (Cooper 2015). Abolishing the tipped minimum wage would not only help bring economic security to tipped employees; it may also help reduce sexual and racial harassment as tipped workers will no longer feel they need to endure harassment to earn their wage.

Strengthen equal pay laws. Women's median hourly earnings are lower than men's in each of these occupations. To tackle potential pay discrimination, women need more effective protections to increase pay transparency and prevent retaliation against employees who discuss their pay with coworkers.

Proactive enforcement of wage and hours, equal pay, and nondiscrimination laws and an increase in the number of staff at regulatory agencies are key for addressing high levels of wage theft and other violations experienced by many workers in low-wage occupations (National Domestic Workers Alliance 2015b; Luce, Hammad, and Sipe 2015).

Guarantee paid sick days and paid family leave. Lack of access to paid sick days and paid family leave is common among workers in female-dominated low-wage jobs. Enacting paid family and medical leave laws at both the federal and state levels would allow low-income workers, especially women workers who are pregnant, parents, or caregivers of elderly parents or other adult family members, to care for themselves and their families without worrying about lost wages.

Improved access to quality part-time work. Part-time workers are particularly likely to work in low wage occupations and are much less likely than full-time workers to have access to paid vacation, paid sick days, and other benefits. Right to request laws can make it easier for those who need to switch to part-time work for caregiving reasons to stay with their employer in the same job instead of having to take a lower level job because they are unable to work full-time (Hegewisch and Gornick 2008). Equal treatment for part-time workers with full-time workers – as is common in Europe and other high income countries (Fagan et al. 2012) – will provide pro- rata benefits to part-time workers and will make it illegal to pay part-time workers lower rates just because they work part-time.

Ensure Fair Scheduling for Workers. In addition to poverty-level wages, employer-controlled variable scheduling practices pose a growing risk to low-wage workers' economic stability and work/life balance. One potential policy solution to unpredictable scheduling practices and its negative impacts on workers' lives is to strengthen "Reporting Pay" legislation, which specifies that employees will be paid for a minimum number of hours per shift even if sent home early. Another policy solution to combat unpredictable scheduling practices is Guaranteed Minimum Hour legislation, which requires employers to schedule workers at or above an agreed-upon minimum number of hours each week. A third solution is to enact new legislation designed to provide predictability in pay for workers who are assigned to on-call shifts or shifts with little advance notice, as well as workers whose assigned shifts are cancelled before they report to work.

Improve Work Environments/Sites & Tools/Equipment. With the various health and safety hazards that can come with working in low-wage, female-dominated occupations, health risks could be greatly reduced by ensuring that workers have safe working environments. Special attention should be paid to protecting women workers who work in secluded environments, such as those providing in-home care.

Investing in the Caregiving Infrastructure

Improve access to affordable, quality child care. While raising the minimum wage and reducing unpredictable scheduling could make it easier for parents to find reliable child care, greater public investments are needed to ensure that quality and affordable child care is within reach of all working women. Universal Pre-K can help working parents and is an investment in the next generation of Americans. Increased federal and state funding for child care assistance and policies that incentivize employer subsidies for child care can reduce child care costs for low-wage workers, improve job retention, and reduce work-family stress, especially for women workers (Liu 2013; Shellenback 2009).

Improve investment in elder care and care of dependent adults. An increasing number of workers have caregiving responsibilities for elderly or other adult relatives. Improving investment in elder care facilities, in caregiving for elders within homes, increasing Medicaid disbursement rates, and ensuring access to paid family leave for those who need to care for elderly relatives will

improve working conditions of low-wage women workers in elder care, many of whom are older themselves, and will increase job retention and employment and the quality of care.

Building Ladders to Higher-Paying Occupations

Improve access to education and training for well-paid careers. Additional education and training can help workers gain skills that will transition them out of the low-wage workforce. Yet, as our analysis shows, additional education does not guarantee a well-paying job. Women need advice and guidance on careers that come with higher earnings in middle-skilled occupations, allowing them to better support themselves and their families with less education and training. Career and technical education providers need to be held accountable for making progress towards greater gender equity in their programs. Additional supports—such as child care supports—for women would also help low-income women access additional education and training.

Incentivize transparent promotion pathways. Policies that encourage employers to hire and train low-skill, low-wage workers can reduce discrimination and segregation and enable workers to access career ladders (Henrici 2013; Restaurant Opportunities Centers United 2015; Morgan and Farrar 2015; Haynes et al. 2015). In the restaurant industry in particular, policies that have incentivized transparent promotion pathways can reduce racial and gender segregation and inequality within the industry (Restaurant Opportunities Centers United 2015). Workforce development programs that train workers in important skills can help low-wage workers gain access to career ladders and upward mobility. Government-business training partnerships in incumbent worker and customized training programs, and Career Ladders initiatives can fill gaps in education and training services for low-wage, low-skilled workers (Duke, Martinson, and Strawn 2006).

Strengthen protections for immigrant workers. Lack of legal status puts undocumented low-wage workers at risk of abuse and exploitation at work. Increasing the number of visas available to immigrant workers in fast-growing occupations such as heath and home care work, and allowing for workers to have flexible work visas—where workers are not tied to one employer—will decrease employer abuse of immigrant and undocumented workers.

Restore collective bargaining rights. Many policies that could improve low-wage workers' economic stability and wellbeing are only realistically accessible to workers represented by unions and other worker organizations (Luce, Hammad, and Sipe 2015). Additionally, cities and states that have high union density are more likely to have higher minimum wages and paid sick leave (U.S. House Committee on Education and the Workforce 2015). Unions can also protect and enhance internal promotion pathways and advocate for specific worker needs such as child care.

As this report shows, women working in low-wage, female-dominated occupations face numerous challenges every day as they try to balance their financial and family obligations. With the low wages, poor working conditions, and general undervaluing of female-dominated jobs, eliminating segregation in these occupations plays a crucial part of achieving economic equality for all women. Without the policy changes described above, too many families will lack the necessary income to allow children to thrive and to ensure that adult workers can make the best use of their talent and effort.

Appendix A. Methodology

The analysis of employment in this report is based on the Current Population Survey Annual Social and Economic Supplements (CPS ASEC). Employment projections to 2024 are based on the Bureau of Labor Employment Projections data base.

The CPS ASEC is a household survey of the civilian non-institutional population of the United States and provides microdata at the individual, family, and household levels. The Current Population Survey (CPS) is the source of the official Government statistics on employment and unemployment. The ASEC contains the basic monthly demographic and labor force data contained in the CPS, plus additional data on work experience, income, and noncash benefits for the previous calendar year.

The CPS ASEC provides the data used in this report to estimate for each occupation: total employment; employment of women and men; hourly earnings distribution; demographic characteristics of the workforce by gender, age, race, ethnicity, and nativity; parenthood and marital status; educational attainment; the rates of poverty and near-poverty among workers; the rate of workers who are mothers and use social assistance programs (including SNAP, subsidized lunch programs, Medicaid, public housing, rent subsidy programs, and energy subsidy programs); and rates of part-time work and reasons for working part-time. These indicators are defined in the sections below. The CPS ASEC collects employment data based on the current year; earnings data and receipt of social assistance are based on the prior calendar year.

To allow a sufficient sample for the occupational and demographic analysis, the merged three year CPS ASEC dataset for 2013-2015 is used as harmonized and distributed by the University of Minnesota, Miriam King, Steven Ruggles, J. Trent Alexander, Sarah Flood, Katie Genadek, Matthew B. Schroeder, Brandon Trampe, and Rebecca Vick Integrated Public Use Microdata Series (IPUMS), Version 3.0. Earnings are harmonized to 2014 dollars; adjustments for data from other years to 2014 dollars are computed on the basis of the Consumer Price Index Research Series (U.S. Bureau of Labor Statistics 2016).

The report compares the composition of employment between 2013-2015 and 1993-1995. Since 1995, the system of occupational classification was changed twice, in 2000 and 2010. IPUMS includes a harmonized occupational classification based on the 2010 system (occ2010) to make it possible to compare occupational trends between the different occupational classification systems (Flood et al. 2015). Occ2010 was used to identify the occupations selected in the 2013-2015 time period and in the earlier time period, 1993-1995, to examine change over time.

Aggregate statistics for the 2013-2015 and 1993-1995 sets of variables were calculated using a weighting strategy accounting for the number of workers in each occupation.

The U.S. Bureau of Labor Statistics Employment Projections (BLS EP) database is the source for estimates of employment growth by detailed occupation from 2014 and 2024. To project changes in occupational demand, BLS economists thoroughly review qualitative sources such as articles, expert interviews, and news stories, as well as quantitative resources such as historical data and externally produced projections. These reviews identify structural changes in the economy which are expected to change an occupation's share of employment (U.S. Bureau of Labor Statistics 2016).

The occupational Employment Projections Standard Occupational Classification (SOC) codes were matched to the ASEC Census occupation codes using crosswalks provided by the Bureau of Labor Statistics at http://www.bls.gov/emp/ep_crosswalks.htm.

Analysis Indicators

Employment data for the 1994 and 2014 periods are based on microdata analysis of three-year weighted averages for 1993-1995 and 2013-2015 respectively and is reported by number of workers employed and percent of the workforce composed of women. Employment projection data for the 2014—2024 period are available for the occupations, but are not gender- or race-disaggregated. Because the BLS Employment Projection database and the CPS ASEC differ in their methodology for estimating 2014 employment levels, in order to be able to analyze employment change from 1994 to 2024, the projected growth rate based on the BLS Employment Projection database has been applied to the 2014 CPS ASEC employment estimate.

Race and ethnicity are coded into six categories for this report: White, Black, Hispanic, Asian or Pacific Islander, American Indian or Alaska Native, and Other/Mixed Race. Those identifying as Hispanic may be of any race; those identifying as White, Black, Asian and Pacific Islander, and American Indian and Alaska Native are non-Hispanic. Nativity is coded as a dichotomous variable between born in the United States or born abroad to an American citizen and not born abroad to an American citizen or in the United States. Respondents self-identified their own race and ethnicity.

Earnings: The report uses median hourly wages to describe occupations' wage levels. The CPS ASEC collects earnings data for the previous calendar year; hourly wages were calculated by dividing annual 2012- 2014 earnings by weeks worked multiplied by hours worked per week, and rounded to the nearest cent, for all workers with non-zero, non-missing work hours in the previous year. The report also provides data on the number and percent of workers earning below $15 per hour in each occupation. Outliers defined as wages less than one dollar or greater than 500 dollars per hour were dropped from the analysis. Earnings are harmonized to 2014 dollars; adjustments for data from other years to 2014 dollars are computed on the basis of the Consumer Price Index Research Series (U.S. Bureau of Labor Statistics 2016).

Respondents' poverty and near-poverty status were calculated by dividing total family income by the official poverty cutoff (calculated for each respondent's family composition) for all respondents identified as within the poverty universe. If the resulting value was below 100, respondents were identified as below the poverty threshold for their family types. If the value was below 200, respondents were identified as below 200 percent of the poverty threshold for their family type, putting them in the "near poverty" category, which includes those in poverty.

Educational attainment rates were coded into five categories: "high school or less," "some college," "associate degree," "bachelor's degree," and "master's degree, doctorate, or professional degree." The first category, "high school or less," encompasses respondents who did not complete any schooling, whose highest educational achievement was a high school diploma or GED, or who completed some schooling but did not receive a high school diploma or GED. The "some college" includes all respondents who indicated they had some college education but did not receive a degree. The category "associate degree" includes those with an academic, occupational, or vocational associate degree from a college. The category of "bachelor's degree" is composed of respondents whose highest educational attainment was a bachelor's degree. The "master's degree, doctorate, or professional degree" category contains those who attained a master's, professional, or doctorate degree as their highest educational attainment.

Respondents' ages are analyzed using two approaches: median age, and percent of workers in three age brackets. The first age bracket includes workers between 15 and 25 years of age, the second includes those 25 to 54 years old, and the final bracket includes those 55 to 99 years old.

Respondents' parenthood and marital status are analyzed in two respects. First, the percent of workers who are parents of dependent children are reported. Next, the percent of all workers who

are not married (that is, who reported they were either separated, divorced, widowed, or never married/single) and are parents of a dependent child are reported.

Part-time work: Information on the rates of different reasons for workers' part-time schedules are coded into fourteen categories. The first is a count of the percent of workers in each occupation working part-time, defined as fewer than 35 hours per week combined for all jobs. The other thirteen categories present workers' reasons for working part-time in the last week. The reasons are: "slack work, business conditions; material shortage; plant or machine repairs"; "seasonal work"; "weather affected job"; "labor dispute"; "job started/ended during week; new job started; job terminated"; "could only find part-time"; "not want full time work; retired/SS limit on earnings"; "full time work week under 35 hours; full time peak season only"; "holiday"; "own illness; health/medical limitation"; "on vacation; vacation/personal day"; "too busy with house, school etc.; child care problems; other family/personal obligations; school/training; civic/military duty"; and "other."

Social Assistance Program Use

All indicators measuring workers' use of social assistance programs are for parents of dependent children only, as most of these programs stipulate parenthood as a condition of receipt.

Food stamp recipience was coded as "yes" if the respondent was a parent of a dependent and if one or more members of the household received benefits from the Supplemental Nutrition Assistance Program (SNAP) during the prior year, and "no" if none of the members received benefits or the respondent was not a parent of at least one dependent child.

Subsidized lunch program use was coded as "yes" if the respondent was a parent of a dependent child and responded, "Yes, children receive free or reduced price lunch." The variable was coded "no" if one of those conditions was not true. Students receiving free lunches live in households with incomes below 125 percent of the poverty level; students receiving reduced price lunches (10 to 20 cents per meal) live in households with incomes between 125 percent and 195 percent of the official poverty threshold for their household type.

Medicaid program use was coded as "yes" if the respondent was a parent of a dependent child and indicated that s/he was covered by health insurance from Medicaid in the last year. The variable was coded "no" otherwise. Interviewers defined Medicaid as "the government assistance that pays for health care," and they mentioned both federal Medicaid programs and the Medicaid programs specific to the state where the household was located when collecting this information. Medicaid pays for medical assistance to low-income families with dependent children and to aged, blind, or permanently and totally disabled individuals with incomes insufficient to meet the costs of medical services.

Public housing program use indicates whether the house, apartment, or mobile home of the respondent was part of a government housing project for people with low incomes, commonly known as a "public housing project." Participation in public housing is determined by two factors: program eligibility and the availability of housing. Income standards for initial and continuing occupancy vary across local housing authorities, although federal guidelines set broad limits. Rental charges define net benefits and cannot exceed 30 percent of the family's or the individual's net monthly income. A public housing unit can be occupied by a family of two or more related persons or an individual who is handicapped, elderly, or displaced by urban renewal or natural disaster.

Rent subsidy program use indicates whether the rent on the house, apartment or mobile home is reduced because a federal, state or local government is paying part of the cost. With rent subsidies,

the difference between the "fair market" rent and the rent charged to the tenant in private sector housing is paid to the owner by a government agency, using federal, state, or local funds.

Energy subsidy program use indicates whether the respondent's household had been enrolled in or had received benefits from the federal home heating and cooling assistance program at any time since the beginning of October of the previous year. The Low-Income Home Energy Assistance Program provides financial assistance to qualified households to help them pay heating costs. The program is funded by the federal government and administered by the states under broad guidelines. In some states a household may automatically be eligible for this program if the members receive: (1) Aid to Families with Dependent Children (AFDC); (2) Food Stamps; (3) Supplemental Security Income (SSI); or (4) certain veterans' benefits.

Description of Largest Low-Wage, Growing, Female-Dominated Occupations[22]

2010 Census Occupation Classification	Available in 1993-1995 ASEC using occ2010	Full Occupation Titles	Occupation Definitions
2300	✓	Preschool and kindergarten teachers	This broad occupation includes the following two detailed occupations: 25 - 2011 Preschool Teachers, Except Special Education 25 - 2012 Kindergarten Teachers, Except Special Education. 25 - 2011 **Preschool Teachers, Except Special Education** Instruct preschool - aged children in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. May be required to hold State certification. Substitute teachers are included in "Teachers and Instructors, All Other" (25 - 3099). Excludes "Childcare Workers" (39 - 9011) and "Special Education Teachers" (25 - 2050). **25 - 2012 Kindergarten Teachers, Except Special Education** Teach elemental natural and social science, personal hygiene, music, art, and literature to kindergarten students. Promote physical, mental, and social development. May be required to hold State certification. Substitute teachers are included in "Teachers and Instructors, All Other" (25 - 3099). Excludes "Special Education Teachers" (25 - 2050)
2540	✓	Teacher assistants	Perform duties that are instructional in nature or deliver direct services to students or parents. Serve in a position for which a teacher has ultimate responsibility for the design and implementation of educational programs and services. Excludes "Graduate Teaching Assistants" (25 - 1191).
3600	N/A	Nursing, psychiatric, and home health aides	This broad occupation includes the following four detailed occupations: 31 - 1011 Home Health Aides, 31 - 1013 Psychiatric Aides, 31 - 1014 Nursing Assistants, 31 - 1015 Orderlies. **31 - 1011 Home Health Aides** Provide routine individualized healthcare such as changing bandages and dressing wounds, and applying topical medications to the elderly, convalescents, or persons with disabilities at the patient's home or in a care facility. Monitor or report changes in health status. May also provide personal care such as bathing, dressing, and grooming of patient. **31 - 1013 Psychiatric Aides** Assist mentally impaired or emotionally disturbed patients, working under direction of nursing and medical staff. May assist with daily living activities, lead patients in educational and recreational activities, or accompany patients to and from examinations and treatments. May restrain violent patients. Includes psychiatric orderlies. **31 - 101 4 Nursing Assistants** Provide basic patient care under direction of nursing staff. Perform duties such as feed, bathe, dress, groom, or move patients, or change linens. May transfer or transport patients. Includes nursing care attendants, nursing aides, and nursing attendants. Excludes "Home Health Aides" (31 - 1011), "Orderlies" (31 - 1015), "Personal Care Aides" (39 - 9021), and "Psychiatric Aides" (31 - 1013). **31 - 101 5 Orderlies** Transport patients to areas such as operating rooms or x - ray rooms using wheelchairs, stretchers, or moveable b eds. May maintain stocks of supplies or clean and transport equipment. Psychiatric orderlies are included in "Psychiatric Aides" (31 - 1013). Excludes "Nursing Assistants" (31 - 1014).
3645	✓	Medical assistants	Perform administrative and certain clinical duties under the direction of a physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician. Excludes "Physician Assistants" (29 - 1071).

[22] These occupational descriptions come directly from the Bureau of Labor Statistics and have been copied verbatim.

3649	N/A	Phlebotomists	Draw blood for tests, transfusions, donations, or research. May explain the procedure to patients and assist in the recovery of patients with adverse reactions.
3655	N/A	Miscellaneous healthcare support occupations, including medical equipment preparers	N/A
4050	N/A	Combined food preparation and serving workers, including fast food	Perform duties which combine preparing and serving food and nonalcoholic beverages
4060	✓	Counter attendants, cafeteria, food concession, and coffee shop	Serve food to diners at counter or from a steam table. Counter attendants who also wait tables are included in "Waiters and Waitresses" (35 - 3031)
4110	✓	Waiters and waitresses	Take orders and serve food and beverages to patrons at tables in dining establishment. Excludes "Counter Attendants, Cafeteria, Food Concession, and Coffee Shop" (35 - 3022).
4120	N/A	Food servers, nonrestaurant	Serve food to individuals outside of a restaurant environment, such as in hotel rooms, hospital rooms, residential ca re facilities, or cars. Excludes "Door - to - Door Sales Workers, News and Street Vendors, and Related Workers" (41 - 9091) and "Counter Attendants, Cafeteria, Food Concession, and Coffee Shop" (35 - 3022).
4150	N/A	Hosts and hostesses, restaurant, lounge, and coffee shop	Welcome patrons, seat them at tables or in lounge, and help ensure quality of facilities and service.
4230	✓	Maids and housekeeping cleaners	Perform any combination of light cleaning duties to maintain private households or commercial establishments, such as hotels and hospitals, in a clean and orderly manner. Duties may include making beds, replenishing linens, cleaning rooms and halls, and vacuuming.
4350	✓	Nonfarm animal caretakers	Feed, water, groom, bathe, exercise, or otherwise care for pets and other nonfarm animals, such as dogs, cats, ornamental fish or birds, zoo animals, and mice. Work in settings such as kennels, animal shelters, zoos, circuses, and aquariums. May keep records of feedings, treatments, and animals received or discharged. May clean, disinfect, and repair cages, pens, or fish tanks. Excludes "Veterinary Assistants and Laboratory Animal Caretakers" (31 - 9096).
4510	✓	Hairdressers, hairstylists, and cosmetologists	Provide beauty services, such as shampooing, cutting, coloring, and styling hair, and massaging and treating scalp. May apply makeup, dress wigs, perform hair removal, and provide nail and skin care services. Excludes “ Makeup Artists, Theatrical and Performance” (39 - 5091), “Manicurists and Pedicurists” (39 - 5092), and “Skincare Specialists” (39 - 5094).

4520	N/A	Miscellaneous personal appearance workers	This broad occupation includes the following four detailed occupations: 39 - 5091 Makeup Artists, Theatrical and Performance 39 - 5092 Manicurists and Pedicurists 39 - 5093 Shampooers 39 - 5094 Skincare Specialists. **39 - 5091 Makeup Artists, Theatrical and Performance** Apply makeup to performers to reflect period, setting, and situation of their role. **39 - 5092 Manicurists and Pedicurists** Clean and shape customers' fingernails and toenails. May polish or decorate nails. **39 - 5093 Shampooers** Shampoo and rinse customers' hair. **39 - 5094 Skincare Specialists** Provide skincare treatments to face and body to enhance an individual's appearance. Includes electrologists and laser hair removal specialists.
4600	✓	Child care workers	Attend to children at schools, businesses, private households, and childcare institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play. Excludes "Preschool Teachers, Except Special Education" (25 - 2011) and "Teacher Assistants" (25 - 9041).
4610	N/A	Personal and home care aides	Assist the elderly, convalescents, or persons with disabilities with daily living activities at the person's home or in a care facility. Duties performed at a place of residence may include keeping house (making beds, doing laundry, washing dishes) and preparing meals. May provide assistance at non - residential care facilities. May advise families, the elderly, convalescents, and persons with disabilities regarding such things as nutrition, cleanliness, and household activities.
4620	✓	Recreation and fitness workers	This broad occupation includes the following two detailed occupations: 39 - 9031 Fitness Trainers and Aerobics Instructors 39 - 9032 Recreation Workers. **39 - 9031 Fitness Trainers and Aerobics Instructors** Instruct or coach groups or individuals in exercise activities. Demonstrate techniques and form, observe participants, and explain to them corrective measures necessary to improve their skills. Excludes teachers classified in 25 - 0000 Education, Training, and Library Occupations. Excludes "Coaches and Scouts" (27 - 2022) and "Athletic Trainers" (29 - 9091). **39 - 9032 Recreation Workers** Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities, such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members.
4720	✓	Cashiers	This broad occupation includes the following two detailed occupations: 41 - 2011 Cashiers 41 - 2012 Gaming Change Persons and Booth Cashiers. **41 - 2011 Cashiers** Receive and disburse money in establishments other than financial institutions. May use electronic scanners, cash registers, or related equipment. May process credit or debit card transactions and validate checks. Excludes "Gaming Cage Persons and Booth Cashiers" (41 - 2012). **41 - 2012 Gaming Change Persons and Booth Cashiers** Exchange coins, tokens, and chips for patrons' money. May issue payoffs and obtain customer's signature on receipt. May operate a booth in the slot machine area and furnish change persons with money bank at the start of the shift, or count and audit money in drawers. Excludes "Cashiers" (41 - 2011).
5240	N/A	Customer service representatives	Interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints. Excludes individuals whose duties are primarily installation, sales, or repair.

5400	✓	Receptionists and information clerks	Answer inquiries and provide information to the general public, customers, visitors, and other interested parties regarding activities conducted at establishment and location of departments, offices, and employees within the organization. Excludes "Switchboard Operators, Including Answering Service" (43 - 2011).
5860	✓	Office clerks, general	Perform duties too varied and diverse to be classified in any specific office clerical occupation, requiring knowledge of office systems and procedures. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of answering telephones, bookkeeping, typing or word processing, stenography, office machine operation, and filing.

Appendix B. Tables

Appendix Table B1. Employment and Earnings in Low-Wage, Large, Growing, Female-Dominated Occupations by Gender, 2014

Occupation	Number in Occupation			Percent Female	Median Wage		
	All	Women	Men		All	Women	Men
All Low-Wage, Large, Growing, Female-Dominated Occupations	23,539,845	19,030,524	4,509,321	80.8%	$11.30	$11.18	$11.96
All Other Low-Wage Occupations	31,967,876	10,846,733	21,121,143	33.9%	$12.21	$11.36	$12.69
All Better-Paid Occupations	100,810,433	43,796,676	57,013,757	43.4%	$23.18	$21.23	$24.84
Medical assistants	525,312	498,574	N/A	94.9%	$13.87	$13.67	N/A
Miscellaneous healthcare support occupations, including medical equipment preparers	179,513	123,855	N/A	69.0%	$12.85	$12.42	N/A
Nursing, psychiatric, and home health aides	2,248,116	2,000,742	247,374	89.0%	$12.13	$11.83	$14.32
Personal and home care aides	1,405,018	1,201,405	203,612	85.5%	$10.25	$10.16	$10.74
Phlebotomists	121,140	103,840	N/A	85.7%	$14.43	$14.18	N/A
Customer service representatives	2,317,385	1,507,402	809,982	65.0%	$14.90	$14.65	$15.68
Office clerks, general	1,307,900	1,094,624	213,275	83.7%	$14.90	$14.90	$14.90
Receptionists and information clerks	1,423,826	1,304,213	119,613	91.6%	$13.14	$13.14	$13.96
Hairdressers, hairstylists, and cosmetologists	756,573	704,108	N/A	93.1%	$11.37	$11.12	N/A
Miscellaneous personal appearance workers	326,179	282,689	N/A	86.7%	$10.74	$10.16	N/A
Nonfarm animal caretakers	206,068	142,597	63,471	69.2%	$10.16	$10.33	$10.16
Recreation and fitness workers	446,480	294,948	151,532	66.1%	$13.18	$12.79	$16.25
Combined food preparation and serving workers, including fast food	437,417	281,793	155,624	64.4%	$8.99	$9.27	$8.61
Counter attendants, cafeteria, food concession, and coffee shop	277,106	195,807	81,299	70.7%	$8.42	$7.95	$9.82
Food servers, nonrestaurant	214,407	140,572	73,835	65.6%	$10.33	$10.11	$10.86

Occupation	Number in Occupation			Percent Female	Median Wage		
	All	Women	Men		All	Women	Men
Hosts and hostesses, restaurant, lounge, and coffee shop	341,196	293,181	N/A	85.9%	$8.79	$8.67	N/A
Waiters and waitresses	2,262,305	1,609,711	652,594	71.2%	$10.16	$9.94	$10.78
Cashiers	3,797,870	2,721,034	1,076,837	71.6%	$9.44	$9.31	$9.86
Maids and housekeeping cleaners	1,717,005	1,515,499	201,506	88.3%	$9.94	$9.94	$11.07
Child care workers	1,425,315	1,344,310	81,006	94.3%	$9.77	$9.77	$9.86
Preschool and kindergarten teachers	722,461	705,292	N/A	97.6%	$13.41	$13.41	N/A
Teacher assistants	1,081,251	964,325	116,926	89.2%	$11.68	$11.43	$12.21
Total	23,539,845	19,030,524	4,509,321	80.8%	$11.30	$11.18	$11.96

Notes: Workers ages 15 and older. N/A indicates sample sizes are insufficient to report data. Data include both full- and part-time workers.

Appendix Table B2. Employment in Low-Wage Large, Growing, Female-Dominated Occupations by Gender and Age, 2014

Occupation	Total Number of Workers Employed	Percent of Workers Who Are Women	Under 25 Years Old	25 to 54 Years Old	55 and older	Median Age
All Low-Wage, Large, Growing, Female-Dominated Occupations	23,539,845	80.8%	25.0%	57.0%	18.0%	36
All Other Low-Wage Occupations	31,967,876	33.9%	22.2%	56.2%	21.6%	40
All Better-Paid Occupations	100,810,433	43.4%	6.6%	69.2%	24.2%	44
Medical assistants	525,312	94.9%	15.2%	72.5%	12.3%	34
Miscellaneous healthcare support occupations, including medical equipment preparers	179,513	69.0%	23.9%	56.0%	20.2%	39
Nursing, psychiatric, and home health aides	2,248,116	89.0%	14.7%	65.3%	20.0%	41
Personal and home care aides	1,405,018	85.5%	11.7%	60.4%	27.9%	45
Phlebotomists	121,140	85.7%	6.9%	74.9%	18.2%	41
Customer service representatives	2,317,385	65.0%	19.9%	61.7%	18.4%	38
Office clerks, general	1,307,900	83.7%	14.9%	61.0%	24.1%	44
Receptionists and information clerks	1,423,826	91.6%	21.7%	56.6%	21.7%	37
Hairdressers, hairstylists, and cosmetologists	756,573	93.1%	14.8%	65.9%	19.3%	39
Miscellaneous personal appearance workers	326,179	86.7%	9.0%	79.7%	11.3%	40
Nonfarm animal caretakers	206,068	69.2%	30.0%	54.2%	15.8%	33
Recreation and fitness workers	446,480	66.1%	19.8%	60.2%	20.0%	39
Combined food preparation and serving workers, including fast food	437,417	64.4%	38.4%	46.5%	15.1%	29
Counter attendants, cafeteria, food concession, and coffee shop	277,106	70.7%	71.3%	22.9%	5.8%	20
Food servers, nonrestaurant	214,407	65.6%	28.6%	51.4%	20.0%	39
Hosts and hostesses, restaurant, lounge, and coffee shop	341,196	85.9%	72.8%	20.5%	6.8%	20
Waiters and waitresses	2,262,305	71.2%	47.8%	45.0%	7.1%	25
Cashiers	3,797,870	71.6%	46.0%	41.1%	12.9%	26

Occupation	Total Number of Workers Employed	Percent of Workers Who Are Women	Under 25 Years Old	25 to 54 Years Old	55 and older	Median Age
Maids and housekeeping cleaners	1,717,005	88.3%	9.3%	69.9%	20.8%	43
Child care workers	1,425,315	94.3%	27.1%	55.4%	17.5%	36
Preschool and kindergarten teachers	722,461	97.6%	11.5%	71.2%	17.3%	38
Teacher assistants	1,081,251	89.2%	13.1%	59.9%	27.0%	45

Note: Workers ages 15 and older. Data include both part- and full-time workers.

Appendix Table B3. Employment in Low-Wage, Large, Growing, Female-Dominated Occupations, 1994 and 2014, and Projected Job Growth, 2014 – 2024

Occupation	Total Employment (CPS ASEC) 1994 (1)	Total Employment (CPS ASEC) 2014 (2)	Total Employment (BLS EP), 2014	Projected Total Employment (BLS EP), 2024 (3)	Percent Projected Job Growth (BLS EP), 2014 - 2024 (4)	Projected Total Employment (CPS ASEC), 2024 (5)
All Low-Wage, Large, Growing, Female-Dominated Occupations	14,676,851	23,539,845	28,121,900	26,270,945	9.5%	25,777,902
All Other Low-Wage Occupations	29,416,712	31,967,876	N/A	N/A	N/A	N/A
All Better-Paid Occupations	87,488,515	100,810,433	N/A	N/A	N/A	N/A
All Occupations	131,582,077	156,318,154	150,539,900	160,328,800	6.5%	166,478,834
Medical assistants (6)	2,293,663	525,312	591,300	664,212	23.5%	648,760
Miscellaneous healthcare support occupations, including medical equipment preparers	N/A	179,513	102,700	198,813	12.5%	201,953
Nursing, psychiatric, and home health aides	N/A	2,248,116	2,482,900	2,868,416	24.5%	2,798,905
Personal and home care aides	N/A	1,405,018	1,768,400	1,863,118	25.9%	1,768,917
Phlebotomists	N/A	121,140	112,700	149,240	24.9%	151,304
Customer service representatives (7)	1,459,588	2,317,385	2,581,800	2,570,385	9.8%	2,544,488
Office clerks, general	757,666	1,307,900	3,062,500	1,403,600	3.1%	1,348,445
Receptionists and information clerks	1,069,331	1,423,826	1,028,600	1,521,526	9.5%	1,559,089
Hairdressers, hairstylists, and cosmetologists	800,530	756,573	597,200	814,973	9.8%	830,717
Miscellaneous personal appearance workers	N/A	326,179	196,000	347,579	10.9%	361,732
Nonfarm animal caretakers	97,118	206,068	204,800	227,668	10.5%	227,706
Recreation and fitness workers	98,204	446,480	301,200	508,880	9.5%	488,896

Occupation	Total Employment (CPS ASEC) 1994 (1)	Total Employment (CPS ASEC) 2014 (2)	Total Employment (BLS EP), 2014	Projected Total Employment (BLS EP), 2024 (3)	Percent Projected Job Growth (BLS EP), 2014 - 2024 (4)	Projected Total Employment (CPS ASEC), 2024 (5)
Combined food preparation and serving workers, including fast food	N/A	437,417	3,159,700	780,917	10.9%	485,096
Counter attendants, cafeteria, food concession, and coffee shop	433,808	277,106	481,200	305,906	6.0%	293,732
Food servers, nonrestaurant	N/A	214,407	253,100	248,307	13.4%	243,138
Hosts and hostesses, restaurant, lounge, and coffee shop	N/A	341,196	376,400	357,996	4.5%	356,550
Waiters and waitresses	1,648,421	2,262,305	2,465,100	2,331,205	2.8%	2,325,650
Cashiers	3,212,821	3,797,870	3,803,500	3,863,370	1.9%	3,870,030
Maids and housekeeping cleaners	1,406,802	1,717,005	1,457,700	1,828,705	7.7%	1,849,215
Child care workers	1,165,546	1,425,315	1,260,600	1,494,615	5.5%	1,503,708
Preschool and kindergarten teachers	560,358	722,461	600,400	761,561	6.5%	769,421
Teacher assistants	1,132,584	1,081,251	1,234,100	1,159,951	6.4%	1,150,451

Notes: Workers ages 15 and older. Value for "all occupations" in 1994 is an estimate based on sum of three employment categories (low-wage, large, growing, female-dominated occupations; other low-wage occupations; and better-paid occupations). The CPS IPUMS OCC2010 variable was used to compare the distribution of employment across occupations between 2014 and 1994 (see Appendix A). Data include both full- and part-time workers. In the first column, N/A indicates that employment estimates are not available due to changes in occupational definitions between 1994 and the present.

(5) The CPS ASEC and BLS EP employment estimates are based on different methodologies and cannot be strictly compared (see Methodology Appendix A); in order to estimate employment growth from 1994 to 2024, the projected percentage 2014 – 2024 BLS EP job change rate(column 4) was applied to the CPS ASEC 2014 employment estimates (Column 2) to derive an estimate of the additional number of jobs; these were added to the 2014 estimates to derive a 2024 employment estimate more closely corresponding the the CPS ASEC methodology.

(6) The 1990 occupational category 'medical assistants' was much broader than the 2014 category.

(7) The occupational category of "customer service representatives" was newly created in the occupational reclassification of 2000; it includes workers whose tasks were previously classified as part of 15 other occupations. In 1990, according to the Census Bureau, there were 1,459,588 workers whose work corresponded to the occupation of "customer service representatives." Some of these occupations were not female dominated, or low wage, or were partly captured by other occupations. Hence, to prevent double-counting, data are not included in the estimate for low-wage, female occupations in 1994.

Source: IWPR analysis of CPS ASEC (1993-1995) and (2013-2015). Projected growth estimates: IWPR analysis of U.S. Bureau of Labor Statistics Employment Projections, Occupational Projections database.

Appendix Table B4. Median Hourly Wages and Percent of Workers Earning Less Than $15 per hour in Low-Wage, Large, Growing, Female-Dominated Occupations, by Gender, 2014

Occupation	Overall Median Hourly Wages	Women's Median Hourly Wages, 2014	Men's Median Hourly Wages, 2014	Percent of Workers Earning less than $15/hour, 2014	Percent of Female Workers Earning less than $15/hour, 2014	Percent of Male Workers Earning less than $15/hour, 2014
All Low-Wage, Large, Growing, Female-Dominated Occupations	$11.30	$11.18	$11.96	69.9%	71.3%	63.9%
All Other Low-Wage Occupations	$12.21	$11.36	$12.69	65.0%	71.8%	61.5%
All Better-Paid Occupations	$23.18	$21.23	$24.84	24.2%	27.1%	22.0%
Medical assistants	$13.87	$13.67	N/A	58.5%	60.1%	N/A
Miscellaneous healthcare support occupations, including medical equipment preparers	$12.85	$12.42	N/A	60.8%	65.0%	N/A
Nursing, psychiatric, and home health aides	$12.13	$11.83	$14.32	70.3%	72.0%	57.0%
Personal and home care aides	$10.25	$10.16	$10.74	77.9%	78.8%	72.8%
Phlebotomists	$14.43	$14.18	N/A	54.8%	57.0%	N/A
Customer service representatives	$14.90	$14.65	$15.68	50.9%	53.0%	47.0%
Office clerks, general	$14.90	$14.90	$14.90	50.7%	50.7%	50.3%
Receptionists and information clerks	$13.14	$13.14	$13.96	60.6%	61.5%	51.6%
Hairdressers, hairstylists, and cosmetologists	$11.37	$11.12	N/A	68.0%	69.6%	N/A
Miscellaneous personal appearance workers	$10.74	$10.16	N/A	74.8%	76.0%	N/A
Nonfarm animal caretakers	$10.16	$10.33	$10.16	72.8%	73.0%	72.2%
Recreation and fitness workers	$13.18	$12.79	$16.25	53.7%	57.8%	45.7%
Combined food preparation and serving workers, including fast food	$8.99	$9.27	$8.61	83.0%	82.5%	83.9%
Counter attendants, cafeteria, food concession, and coffee shop	$8.42	$7.95	$9.82	87.8%	91.4%	79.4%
Food servers, nonrestaurant	$10.33	$10.11	$10.86	76.3%	77.1%	74.8%

Occupation	Overall Median Hourly Wages	Women's Median Hourly Wages, 2014	Men's Median Hourly Wages, 2014	Percent of Workers Earning less than $15/hour, 2014	Percent of Female Workers Earning less than $15/hour, 2014	Percent of Male Workers Earning less than $15/hour, 2014
Hosts and hostesses, restaurant, lounge, and coffee shop	$8.79	$8.67	N/A	85.2%	85.9%	N/A
Waiters and waitresses	$10.16	$9.94	$10.78	76.4%	78.3%	71.8%
Cashiers	$9.44	$9.31	$9.86	80.0%	82.2%	74.4%
Maids and housekeeping cleaners	$9.94	$9.94	$11.07	80.3%	81.3%	73.0%
Child care workers	$9.77	$9.77	$9.86	79.1%	79.4%	73.6%
Preschool and kindergarten teachers	$13.41	$13.41	N/A	56.4%	56.6%	N/A
Teacher assistants	$11.68	$11.43	$12.21	71.2%	72.3%	62.4%

Notes: Workers ages 15 and older. N/A indicates sample sizes are insufficient to report data. Data include both full- and part-time workers.
Source: IWPR analysis of CPS ASEC (2013-2015).

Appendix B5. Share of Part-Time Workers and by Reasons for Part-Time Work Low-Wage, Large, Growing, Female-Dominated Occupations, by Gender, 2014

	Part-Time Workers		Economic		Home/Family		School/Training		Other	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
All Low-Wage, Large, Growing, Female-Dominated Occupations	42.2%	40.7%	21.3%	26.2%	22.5%	5.0%	24.7%	43.7%	31.5%	25.1%
All Other Low-Wage Occupations	38.8%	23.1%	23.9%	35.4%	19.4%	5.0%	21.9%	23.2%	34.8%	36.4%
All Better-Paid Occupations	17.5%	8.0%	12.4%	21.9%	28.5%	6.8%	9.3%	10.4%	49.8%	60.8%
Medical assistants	21.5%	N/A	19.7%	N/A	34.4%	N/A	7.1%	N/A	38.8%	N/A
Miscellaneous healthcare support occupations, including medical equipment preparers	32.7%	31.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nursing, psychiatric, and home health aides	32.3%	22.1%	25.3%	N/A	20.3%	N/A	15.6%	N/A	38.8%	N/A
Personal and home care aides	45.2%	36.0%	27.3%	N/A	25.5%	N/A	7.0%	N/A	40.2%	N/A
Phlebotomists	14.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Customer service representatives	23.8%	23.5%	20.0%	27.8%	19.6%	7.3%	25.2%	35.9%	35.1%	29.0%
Office clerks, general	27.2%	30.8%	10.7%	N/A	22.2%	N/A	27.1%	N/A	40.0%	N/A
Receptionists and information clerks	29.7%	30.0%	15.2%	N/A	24.7%	N/A	23.4%	N/A	36.7%	N/A
Hairdressers, hairstylists, and cosmetologists	41.7%	22.9%	19.9%	N/A	29.6%	N/A	6.2%	N/A	44.4%	N/A
Miscellaneous personal appearance workers	31.8%	N/A	29.0%	N/A	33.7%	N/A	12.4%	N/A	24.8%	N/A
Nonfarm animal caretakers	44.2%	51.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Recreation and fitness workers	57.1%	39.9%	14.5%	N/A	40.3%	N/A	16.2%	N/A	29.0%	N/A
Combined food preparation and serving workers, including fast food	54.4%	55.9%	30.4%	N/A	12.3%	N/A	29.2%	N/A	28.1%	N/A
Counter attendants, cafeteria, food concession, and coffee shop	78.3%	80.7%	19.5%	N/A	10.2%	N/A	59.3%	N/A	11.0%	N/A
Food servers, nonrestaurant	53.2%	39.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	Part-Time Workers		Economic		Home/Family		School/Training		Other	
	Women	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**
Hosts and hostesses, restaurant, lounge, and coffee shop	82.3%	81.5%	14.9%	N/A	10.9%	N/A	59.1%	N/A	15.1%	N/A
Waiters and waitresses	63.7%	51.8%	19.2%	27.5%	19.1%	4.4%	37.6%	51.0%	24.0%	17.1%
Cashiers	61.2%	56.2%	23.8%	26.4%	15.3%	3.6%	37.5%	49.8%	23.5%	20.2%
Maids and housekeeping cleaners	43.8%	20.2%	33.7%	N/A	29.8%	N/A	4.3%	N/A	32.2%	N/A
Preschool and kindergarten teachers	28.2%	N/A	9.5%	N/A	40.9%	N/A	9.3%	N/A	40.2%	N/A
Child care workers	44.0%	59.2%	17.8%	N/A	25.1%	N/A	29.1%	N/A	28.0%	N/A
Teacher assistants	38.2%	37.6%	12.4%	N/A	28.1%	N/A	13.0%	N/A	46.5%	N/A

Notes: Workers ages 15 and older. N/A indicates sample sizes are insufficient to report data. Economic reasons include slack work and buisness conditions; could only find part-time work; seasonal work; and job started/ended during week. Home and family reasons include child care problems and other family/personal problems. School and training reasons include school and training. Other reasons include weather affected job; labor dispute; retired and Social Security limit on earnings; full time work week under 35 hours; holiday; own illness; health/medical limation; vacation/personal day; civic/military duty; and other.
Source: IWPR analysis of CPS ASEC (2013-2015).

Appendix Table B6. Distribution of Women Workers in Low-Wage, Large, Growing, Female-Dominated Occupations by Race and Ethnicity, 2014

Occupation	Percent White	Percent Black	Percent Hispanic	Percent Asian and Pacific Islander	Percent American Indian and Alaska Native	Percent Other or Mixed Race	Percent Born in the US (or abroad to US citizen parents)
All Low-Wage, Large, Growing, Female-Dominated Occupations	55.6%	16.9%	19.6%	5.3%	0.9%	1.7%	82.3%
All Other Low-Wage Occupations	54.6%	14.2%	23.4%	5.6%	0.8%	1.4%	77.9%
All Better-Paid Occupations	71.5%	10.6%	10.0%	6.0%	0.6%	1.3%	88.3%
Medical assistants	54.5%	14.1%	23.7%	5.1%	0.8%	1.8%	87.2%
Miscellaneous healthcare support occupations, including medical equipment preparers	64.3%	20.4%	9.6%	2.7%	0.4%	2.7%	91.8%
Nursing, psychiatric, and home health aides	42.3%	35.9%	14.5%	5.0%	0.8%	1.5%	77.1%
Personal and home care aides	47.5%	20.8%	21.6%	7.3%	1.3%	1.6%	77.4%
Phlebotomists	N/A	N/A	N/A	N/A	N/A	N/A	90.4%
Customer service representatives	59.5%	17.9%	16.0%	3.6%	0.9%	2.2%	90.3%
Office clerks, general	62.0%	13.9%	16.2%	5.0%	1.0%	1.8%	89.9%
Receptionists and information clerks	64.8%	11.4%	17.9%	4.2%	0.4%	1.4%	91.6%
Hairdressers, hairstylists, and cosmetologists	66.4%	12.9%	15.3%	4.4%	0.2%	0.9%	83.2%
Miscellaneous personal appearance workers	29.2%	6.6%	9.9%	52.5%	0.9%	1.0%	44.9%
Nonfarm animal caretakers	88.6%	2.2%	7.3%	0.9%	0.0%	1.0%	95.3%
Recreation and fitness workers	75.0%	8.6%	9.3%	4.5%	1.2%	1.4%	90.5%

Occupation	Percent White	Percent Black	Percent Hispanic	Percent Asian and Pacific Islander	Percent American Indian and Alaska Native	Percent Other or Mixed Race	Percent Born in the US (or abroad to US citizen parents)
Combined food preparation and serving workers, including fast food	58.6%	18.1%	15.5%	4.3%	1.3%	2.3%	90.4%
Counter attendants, cafeteria, food concession, and coffee shop	64.7%	14.0%	13.1%	2.9%	2.4%	2.9%	95.1%
Food servers, nonrestaurant	50.8%	22.6%	17.3%	6.0%	0.5%	2.7%	80.8%
Hosts and hostesses, restaurant, lounge, and coffee shop	64.8%	9.1%	19.0%	5.2%	0.3%	1.6%	89.5%
Waiters and waitresses	65.8%	7.9%	17.5%	5.9%	0.8%	2.1%	86.2%
Cashiers	50.2%	19.8%	20.7%	5.6%	1.1%	2.6%	86.2%
Maids and housekeeping cleaners	34.1%	14.7%	45.9%	3.8%	0.9%	0.6%	51.1%
Child care workers	60.0%	13.0%	21.3%	3.3%	0.9%	1.6%	79.7%
Preschool and kindergarten teachers	67.7%	13.5%	13.2%	3.5%	0.9%	1.2%	90.3%
Teacher assistants	67.4%	13.0%	14.4%	3.0%	0.7%	1.4%	89.1%

Notes: Workers ages 15 and older. Racial groups are non-Hispanic. Hispanics may be of any race or two or more races. Data include both full- and part-time workers.
Source: IWPR analysis of CPS ASEC (2013-2015).

Appendix Table B7. Workers' Highest Educational Attainment in Low-Wage, Large, Growing, Female-Dominated Occupations, by Gender, 2014

Occupation	High School Diplomma or Less			Some College			Associate Degree			Bachelor's Degree			Master's, PhD, Professional Degree		
	Overall	Women	Men	Overall	Women	Men	Overall	Women	Men	Overall	Women	Men	Overall	Women	Men
All Low-Wage, Large, Growing, Female-Dominated Occupations	47.7%	48.7%	43.8%	26.4%	26.4%	25.8%	11.1%	11.7%	8.8%	12.2%	11.5%	14.9%	2.5%	2.4%	3.3%
All Other Low-Wage Occupations	62.2%	57.5%	64.6%	20.7%	20.7%	22.8%	7.0%	7.8%	6.6%	8.6%	10.1%	7.9%	1.5%	1.8%	1.3%
All Better-Paid Occupations	26.0%	19.0%	31.4%	16.7%	16.7%	16.6%	11.3%	13.1%	9.9%	28.4%	31.4%	26.0%	17.7%	20.0%	15.9%
Medical assistants	21.7%	22.5%	N/A	32.7%	33.3%	N/A	35.0%	35.6%	N/A	8.6%	7.4%	N/A	2.0%	1.1%	N/A
Miscellaneous healthcare support occupations, including medical equipment preparers	48.9%	49.6%	N/A	24.3%	24.1%	N/A	11.4%	10.0%	N/A	13.0%	13.2%	N/A	2.4%	3.1%	N/A
Nursing, psychiatric, and home health aides	50.5%	51.7%	40.2%	27.2%	26.8%	30.7%	12.8%	13.1%	10.0%	7.7%	7.1%	13.2%	1.8%	1.3%	5.9%
Personal and home care aides	53.1%	54.9%	42.0%	24.4%	23.9%	27.3%	10.9%	10.9%	11.2%	9.0%	8.1%	14.6%	2.6%	2.2%	5.0%
Phlebotomists	28.9%	30.2%	N/A	32.6%	34.7%	N/A	25.4%	24.4%	N/A	10.1%	7.6%	N/A	3.0%	3.0%	N/A
Customer service representatives	36.4%	38.5%	32.3%	27.9%	27.2%	29.2%	12.6%	13.6%	10.8%	19.7%	17.7%	23.5%	3.4%	2.9%	4.2%
Office clerks, general	36.1%	36.9%	31.8%	29.7%	29.5%	30.5%	12.1%	12.1%	11.8%	18.5%	18.4%	18.8%	3.6%	3.0%	7.0%
Receptionists and information clerks	38.7%	39.3%	31.2%	32.2%	32.1%	34.0%	12.9%	13.0%	11.1%	14.2%	13.6%	21.2%	2.0%	1.9%	2.5%
Hairdressers, hairstylists, and cosmetologists	47.5%	47.6%	N/A	21.6%	22.1%	N/A	22.8%	22.8%	N/A	6.0%	5.9%	N/A	2.0%	1.6%	N/A
Miscellaneous personal appearance workers	58.2%	57.0%	N/A	15.7%	16.3%	N/A	13.9%	14.9%	N/A	10.9%	10.6%	N/A	1.3%	1.2%	N/A
Nonfarm animal caretakers	47.7%	45.5%	N/A	29.0%	29.9%	N/A	12.1%	14.4%	N/A	10.0%	9.5%	N/A	1.2%	0.7%	N/A
Recreation and fitness workers	24.3%	22.7%	27.2%	24.6%	22.8%	28.1%	10.7%	12.3%	7.4%	32.3%	33.7%	29.5%	8.2%	8.4%	7.8%

Occupation	High School Diplomma or Less			Some College			Associate Degree			Bachelor's Degree			Master's, PhD, Professional Degree		
	Overall	Women	Men	Overall	Women	Men	Overall	Women	Men	Overall	Women	Men	Overall	Women	Men
Combined food preparation and serving workers, including fast food	65.0%	65.2%	64.7%	25.5%	23.9%	28.3%	5.6%	6.4%	4.2%	3.4%	3.9%	2.5%	0.5%	0.6%	0.3%
Counter attendants, cafeteria, food concession, and coffee shop	69.5%	72.7%	N/A	21.7%	20.2%	N/A	2.9%	2.7%	N/A	4.7%	4.0%	N/A	1.2%	0.4%	N/A
Food servers, nonrestaurant	58.0%	62.8%	N/A	25.2%	22.8%	N/A	8.0%	6.9%	N/A	7.8%	6.9%	N/A	1.1%	0.7%	N/A
Hosts and hostesses, restaurant, lounge, and coffee shop	56.7%	55.9%	N/A	29.9%	31.0%	N/A	5.9%	5.7%	N/A	6.8%	6.5%	N/A	0.7%	0.9%	N/A
Waiters and waitresses	48.3%	50.0%	44.2%	33.9%	33.2%	35.5%	7.6%	8.0%	6.7%	9.4%	7.9%	12.9%	0.8%	0.9%	0.7%
Cashiers	57.5%	60.1%	51.1%	27.2%	26.0%	30.1%	7.0%	6.8%	7.4%	7.1%	6.1%	9.4%	1.2%	0.9%	2.0%
Maids and housekeeping cleaners	79.4%	80.1%	74.4%	11.5%	10.7%	17.6%	4.4%	4.7%	2.3%	3.8%	3.7%	4.7%	0.8%	0.8%	1.0%
Child care workers	45.2%	45.2%	N/A	27.1%	27.0%	N/A	11.6%	11.7%	N/A	13.5%	13.5%	N/A	2.6%	2.6%	N/A
Preschool and kindergarten teachers	17.4%	17.6%	N/A	16.2%	16.4%	N/A	13.5%	13.5%	N/A	36.4%	36.1%	N/A	16.4%	16.3%	N/A
Teacher assistants	27.2%	28.4%	16.8%	28.2%	28.1%	29.7%	16.3%	16.7%	13.3%	24.3%	23.3%	32.6%	4.0%	3.6%	7.6%

Notes: Workers are ages 15 and older. Data include both full- and part-time workers.
Source: IWPR analysis of CPS ASEC (2013-2015).

Appendix Table B8. Employment, Earnings and Educational Attainment in Low-Wage, Large, Growing, Male-Dominated Occupations, 2014

Occupation	Total Number of Workers	Percent Female	Median Hourly Earnings	Single Parents	Associates Degree	Bachelors Degree
Overall	**16,560,457**	**20.8%**	**$12.27**	**6%**	**6%**	**6%**
Butchers and other meat, poultry, and fish processing workers	333,317	24.63%	$13.14	8%	4%	5%
Carpet, floor, and tile installers and finishers	144,667	0.77%	$14.90	6%	4%	2%
Chefs and head cooks	442,918	20.21%	$13.67	6%	16%	16%
Cleaners of vehicles and equipment	413,451	15.30%	$11.92	4%	4%	2%
Construction laborers	1,867,375	3.82%	$14.47	4%	4%	5%
Cooks	2,261,171	39.57%	$9.94	9%	5%	4%
Drywall installers, ceiling tile installers, and tapers	160,319	3.11%	$14.35	5%	6%	1%
Grounds maintenance workers	1,436,719	5.63%	$11.62	4%	5%	4%
Industrial truck and tractor operators	654,472	5.30%	$14.90	6%	6%	3%
Janitors and building cleaners	2,467,138	33.15%	$12.13	6%	6%	5%
Laborers and freight, stock, and material movers, hand	2,141,681	18.05%	$12.86	7%	7%	5%
Miscellaneous vehicle and mobile equipment mechanics, installers, and repairers	106,705	0.19%	$13.25	5%	3%	5%
Painters, construction and maintenance	595,061	5.60%	$13.67	5%	5%	7%
Roofers	240,430	1.16%	$13.85	5%	3%	3%
Security guards and gaming surveillance officers	1,005,681	19.48%	$13.48	5%	12%	14%
Service station attendants	119,788	9.82%	$11.62	3%	6%	15%
Stock clerks and order fillers	1,752,771	34.86%	$12.13	7%	7%	8%
Taxi drivers and chauffeurs	416,790	16.61%	$12.69	6%	10%	16%

Note: Workers ages 15 and older. Data includes both part- and full-time workers. Largest growing male-dominated occupations are defined as occupations with at least 100,000 male workers, at least 60 percent of the workforce are men, and which are projected to add at least 1 percent of total employment 2014 to 2024. Single parents are workers whose marital status is separated, divorced, widowed, or never married/single with own children who reside with them and are younger than 18 years of age.
Source: IWPR analysis of CPS ASEC (2013-2015).

References

Allegretto, Sylvia A. and David Cooper. 2014. *Twenty-Three Years and Still Waiting for Change: Why It's Time to Give Tipped Workers the Regular Minimum Wage*. Washington, DC: Economic Policy Institute. <http://www.epi.org/publication/waiting-for-change-tipped-minimum-wage/> (accessed November 10, 2015).

Anderson, Julie. 2016. "Breadwinner Mothers by Race/Ethnicity and State." Quick Figures, IWPR #Q054. Washington DC: Institute for Women's Policy Research. <http://iwpr.org/publications/pubs/breadwinner-mothers-by-race-ethnicity-and-state> (accessed October 26, 2016).

Andolan Organizing South Aisan Workers, CASA of Maryland, Domestic Workers United, Global Rights, University of North Carolina School of Law Human Rights Policy Clinic, Stefani Bonato, McKenna Coll, and Eric Tars. 2010. *Domestic Workers' Rights in the United States: A Report Prepared for the United Nations Human Rights Committee in Response to the Second and Third Periodic Report of the United States*. Chapel Hill, NC: University of North Carolina School of Law. <http://www.law.unc.edu/documents/clinicalprograms/domesticworkersreport.pdf> (accessed February 17, 2016).

Appelbaum, Eileen, Annette Bernhardt, and Richard Murnane, eds. 2003. *Low-Wage America: How Employers Are Reshaping Opportunity in the Workplace*. New York: Russell Sage Foundation.

Autor, David H. and David Dorn. 2013. "The Growth of Low-Skill Service Jobs and the Polarization of the US Labor Market." *The American Economic Review* 103 (5): 1553–97.

Autor, David H., David Dorn, and Gordon H. Hanson. 2013. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States." *The American Economic Review* 103 (6): 2121–68.

Belleville, Geneviève, André Marchand, Marie-Hélène St-Hilaire, Mélissa Martin, and Cidalia Silva. 2012. "PTSD and Depression Following Armed Robbery: Patterns of Appearance and Impact on Absenteeism and Use of Health Care Services." *Journal of Traumatic Stress* 25 (August): 465–68.

Bergmann, Barbara R. 2011. "Sex Segregation in the Blue-Collar Occcupations: Women's Choices or Unremedied Discrimination? Comment on England." *Gender and Society* 25 (1): 88–93.

Bernhardt, Annette, Laura Dresser, and Erin Hatton. 2003. "The Coffee Pot Wars: Unions and Firm Restructuring in the Hotel Industry." In *Low-Wage America: How Employers Are Reshaping Opportunity in the Workplace*, ed. Eileen Appelbaum, Annette Bernhardt, and Richard Murnane, 33–76. New York: Russell Sage Foundation.

Bernhardt, Annette, Ruth Milkman, Nik Theodore, Douglas Heckathorn, Mirabai Auer, James DeFilippis, Ana Luz Gonzalez, et al. 2009. *Broken Laws, Unprotected Workers: Violations of Employment and Labor Laws in America's Cities*. Chicago, IL: Center for Urban Economic Development. <http://www.unprotectedworkers.org/index.php/broken_laws/index> (accessed November 10, 2015).

Blau, Francine D. and Lawrence M. Kahn. 2016. *The Gender Wage Gap: Extent, Trends, and Explanations*. Bonn, Germany: Institute for the Study of Labor. <http://ftp.iza.org/dp9656.pdf> (accessed February 17, 2016).

Brandon, Richard, Yasuyo Abe, Hui Kim, A. Rupa Datta, Carolina Milesi, Robert Goerge, Nicole Forry, Lisa Gennetian, Ann Witte, and Wladimir Zanoni. 2013. *Number and Characteristics of Early Care and Education (ECE) Teachers and Caregivers: Initial Findings from the National Survey of Early Care and Education (NSECE)*. Office of Planning, Research and Evaluation, Administration for Children and Families.

<http://www.acf.hhs.gov/sites/default/files/opre/nsece_wf_brief_102913_0.pdf> (accessed February 23, 2016).
Browne, C. V. and Kathryn L. Braun. 2008. "Globalization, Women's Migration, and the Long-Term-Care Workforce." *The Gerontologist* 48 (1): 16–24.
Burnham, Linda and Nik Theodore. 2012. *Home Economics: The Invisible and Unregulated World of Domestic Work*. New York, NY: National Domestic Workers Alliance. <http://www.domesticworkers.org/homeeconomics/> (accessed February 18, 2016).
California Department of Health Services and California Department of Industrial Relations. 2006. *Grocery Cashiers: Serving Customers Shouldn't Hurt You*. Sacramento, CA: California Department of Public Health. <https://www.cdph.ca.gov/programs/hesis/Documents/cashiers.pdf> (accessed October 12, 2016).
Center for Research and Public Policy. 2015. *The Mind of the Food Worker: Behaviors and Perceptions That Impact Safety and Operations*. Ludlow, VT: Alchemy Systems. <http://cdn2.hubspot.net/hubfs/403157/Mind_of_the_Food_Worker_Report.pdf?submissionGuid=d79c417a-c7cf-41d3-b3fb-46ce0f70c50f> (accessed February 18, 2016).
Child Care Aware. 2014. *Parents and the High Cost of Child Care: 2014 Report*. Arlington, VA. <https://www.ncsl.org/documents/cyf/2014_Parents_and_the_High_Cost_of_Child_Care.pdf>.
Clawson, Dan and Naomi Gerstel. 2014. *Unequal Time: Gender, Class, and Family in Employment Schedules*. New York: Russell Sage Foundation.
Committee on the Long-Run Macro-Economic Effects of the Aging U.S. Population. 2012. *Aging and the Macro Economy: Long Term Implications of an Older Population.* Washington, DC: National Academies. <https://www.ncbi.nlm.nih.gov/pubmed/23885367> (accessed October 12, 2016).
Cooper, David. 2015. *Raising the Minimum Wage to $12 by 2020 Would Lift Wages for 35 Million American Workers*. Washington DC: Economic Policy Institute. <http://www.epi.org/publication/raising-the-minimum-wage-to-12-by-2020-would-lift-wages-for-35-million-american-workers/> (accessed November 10, 2015).
Duffy, Mignon. 2007. "Doing the Dirty Work Gender, Race, and Reproductive Labor in Historical Perspective." *Gender & Society* 21 (3): 313–36. doi:10.1177/0891243207300764.
Duffy, Mignon. 2005. "Reproducing Labor Inequalities: Challenges for Feminists Conceptualizing Care at the Intersections of Gender, Race, and Class." *Gender and Society* 19 (February): 66–82.
Duffy, Mignon, Amy Armenia, and Clare L. Stacey. 2015. "On the Clock, Off the Radar: Paid Care Work in the United States." In *Caring on the Clock: The Complexities and Contradictions of Paid Care Work*, 3–13. New Brunswick, NJ: Rutgers University Press.
———. 2015b. *Caring on the Clock: The Complexities and Contradictions of Paid Care Work*. New Brunswick, NJ: Rutgers University Press.
Duke, Amy-Ellen, Karin Martinson, and Julie Strawn. 2006. *Wising Up: How Government Can Partner with Business to Increase Skills and Advance Low-Wage Workers*. Washington DC: Center for Law and Social Policy. <http://www.clasp.org/resources-and-publications/publication-1/0288.pdf> (accessed November 12, 2015).
Ehrenreich, Barbara and Arlie Russell Hochschild, eds. 2004. *Global Woman: Nannies, Maids, and Sex Workers in the New Economy*. New York, NY: Holt Paperbacks.
England, Paula. 2011. "Reassessing the Uneven Gender Revolutiion and Its Slowdown." *Gender and Society* 25 (1): 113–23.
England, Paula, Michelle Budig, and Nancy Folbre. 2002. "Wages of Virtue: The Relative Pay of Care Work." *Social Problems* 49 (4): 455–73.
England, Paula and Nancy Folbre. 1999. "The Cost of Caring." *Annals of the American Academy of Political and Social Science* 561 (January): 39–51.

Entmacher, Joan, Lauren Frohlich, Katherine Robbins, Emily Martin, and Liz Watson. 2014. *Underpaid & Overloaded: Women in Low-Wage Jobs*. <http://www.nwlc.org/resource/underpaid-overloaded-women-low-wage-jobs> (accessed September 15, 2015).

Fagan, Colette, Helen Norman, Mark Smith, and Maria C. Gonzales Menendez. 2012. *In Search of Good Quality Part-Time Employment* (Conditions of Work and Employment Series 43). Geneva: International Labour Office. <http://www.ilo.org/wcmsp5/groups/public/@ed_protect/@protrav/@travail/documents/publication/wcms_237781.pdf> (accessed November 2, 2016).

Flippen, Chenoa A. 2014. "Intersectionality at Work Determinants of Labor Supply among Immigrant Latinas." *Gender & Society* 28 (3): 404–34. doi:10.1177/0891243213504032.

Folbre, Nancy. 2012. "Valuing Care." In *For Love or Money*. New York, NY: Russell Sage Foundation. <http://www.jstor.org.proxygw.wrlc.org/stable/10.7758/9781610447904> (accessed November 6, 2015).

Gallicchio, Lisa, Susan R. Miller, Teresa Greene, Howard Zacur, and Jodi A. Flaws. 2011. "Somatic Symptoms Among Cosmetologists Compared to Women in Other Occupations." *Journal of Women's Health* 20 (April): 605–15.

Golden, Lonnie. 2015. *Irregular Work Scheduling and Its Consequences* (EPI Briefing Paper). Washingon, DC: Economic Policy Institute. <http://www.epi.org/files/pdf/82524.pdf> (accessed September 15, 2016).

Goldstein, Dana. 2014. *The Teacher Wars: A History of America's Most Embattled Profession*. New York: Knopf Doubleday Publishing Group.

Goleman, Daniel. 1996. *Emotional Intelligence: Why It Can Matter More Than IQ*. London: Bloomsbury Publishing.

Gould, Elise and Tanyell Cooke. 2015. *High Quality Child Care Is out of Reach for Working Families*. Issue Brief, #404. Washington, D.C.: Economic Policy Institute. <http://www.epi.org/files/2015/child-care-is-out-of-reach.pdf> (accessed March 16, 2016).

Gould, Elise and Dan Essrow. 2015. "Most Child Care Workers Can't Even Afford Care for Their Own Children." *Economic Policy Institute*. November 10. <http://www.epi.org/publication/most-child-care-workers-cant-even-afford-care-for-their-own-children/> (accessed February 18, 2016).

Greenberg, Mark. 2009. *It's Time for a Better Poverty Measure*. Washington DC: Center for American Progress. <https://www.americanprogress.org/issues/poverty/report/2009/08/25/6582/its-time-for-a-better-poverty-measure/> (accessed February 22, 2016).

Guy, Mary Ellen and Meredith A. Newman. 2004. "Women's Jobs, Men's Jobs: Sex Segregation and Emotional Labor." *Public Administration Review* 64 (May): 289–98.

Halliday-Bell, Jacqueline A., Mika Gissler, and Jouni J. K. Jaakkola. 2009. "Work as a Hairdresser and Cosmetologist and Adverse Pregnancy Outcomes." *Occupational Medicine* 59 (May): 180–84.

Hartmann, Heidi, Jeff Hayes, and Jennifer Clark. 2014. *How Equal Pay for Working Women Would Reduce Poverty and Grow the American Economy*. Briefing Paper, IWPR #C411. Washington, DC: Institute for Women's Policy Research.

Haynes, Michelle C., Meg A. Bond, Robin A. Toof, Teresa Shroll, and Michelle D. Holmberg. 2015. "Healthy Diversity: Promoting a Diverse Healthcare Work Force Through Innovative Partnerships." In *Caring on the Clock:The Complexities and Contradictions of Paid Care Work*, ed. Mignon Duffy, Amy Armenia, and Clare L. Stacey, 263–74. New Brunswick, NJ: Rutgers University Press.

Hegewisch, Ariane, Marc Bendick Jr, Barbara Gault, and Heidi Hartmann. 2016. *Pathways to Equity: Narrowing the Wage Gap by Improving Women's Access to Good Middle-Skill Jobs — IWPR*.

Washington, DC: Institute for Women's Policy Research. <http://www.iwpr.org/publications/pubs/pathways-to-equity-narrowing-the-wage-gap-by-improving-women2019s-access-to-good-middle-skill-jobs> (accessed September 20, 2016).

Hegewisch, Ariane and Asha DuMonthier. 2016. "The Gender Wage Gap by Occupation 2015 and by Race and Ethnicity." Fact Sheet, IWPR #C440. Washington, DC: Institute for Women's Policy Research.

Hegewisch, Ariane and Janet C. Gornick. 2008. *Statutory Routes to Workplace Flexibility in Cross-National Perspective* (IWPR Report #B258). Washington, DC: Institute for Women's Policy Research. <http://www.iwpr.org/publications/pubs/statutory-routes-to-workplace-flexibility-in-cross-national-perspective-b258>.

Hegewisch, Ariane and Heidi Hartmann. 2014. "Occupational Segregation and the Gender Wage Gap: A Job Half Done" Scholars' Paper Series in commemoration of the 50th Anniversary of American Women: Report of the President's Commission on the Status of Women, 1963. Washington, DC: U.S. Department of Labor. < http://www.iwpr.org/publications/pubs/occupational-segregation-and-the-gender-wage-gap-a-job-half-done>

Henrici, Jane. 2013. *Improving Career Opportunities for Immigrant Women In-Home Care Workers*. Report, IWPR #I925. Washington, DC: Institute for Women's Policy Research.

Herdt-Losavio, Michele L., Shao Lin, Charlotte M. Druschel, Syni-An Hwang, Matthew P. Mauer, and G. Anders Carlson. 2008. "The Risk of Having a Low Birth Weight or Preterm Infant among Cosmetologists in New York State." *Maternal and Child Health Journal* 13 (January): 90–97.

Hess, Cynthia and Jane Henrici. 2013. *Increasing Pathways to Legal Status for Immigrant In-Home Care Workers* (I924). Washington, DC: Institute for Women's Policy Research. <http://www.iwpr.org/publications/pubs/increasing-pathways-to-legal-status-for-immigrant-in-home-care-workers>.

Hess, Cynthia, Jessica Milli, Jeff Hayes, and Ariane Hegewisch. 2015. *The Status of Women in the States: 2015* (IWPR #400). Washington, DC: Institute for Women's Policy Research. <http://statusofwomendata.org/app/uploads/2015/02/Status-of-Women-in-the-States-2015-Full-National-Report.pdf>.

Hochschild, Arlie Russell. 1979. "Emotion Work, Feeling Rules, and Social Structure." *American Journal of Sociology* 85 (November): 551–75.

———. 2003. *The Second Shift*. New York, NY: Penguin Books.

———. 2012. *The Managed Heart: Commercialization of Human Feeling*. 3 edition. Berkeley, CA: University of California Press.

———. 2013. *The Outsourced Self: What Happens When We Pay Others to Live Our Lives for Us*. New York: Picador.

Institute for Women's Policy Research. 2015. *IWPR Analysis of 2013-2015 Current Population Survey Annual Social and Economic Supplement (for Calendar Years 2012-2014)*.

———. 2016. *IWPR Analysis of United States Department of Labor, Bureau of Labor Statistics Employment Projections, Occupational Projections Database*. Washington, DC.

Jacobs, Ken, Ian Perry, and Jenifer MacGillvary. 2015. *The High Public Cost of Low Wages*. Berkeley, CA: University of California at Berkeley Labor Center. <http://laborcenter.berkeley.edu/the-high-public-cost-of-low-wages/> (accessed February 19, 2016).

Kalleberg, Arne L. 2011. *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s-2000s*. New York: Russell Sage Foundation.

Kurowski, Alicia, Jon Boyer, and Laura Punnett. 2015. "The Health Hazards of Health Care: Physical and Psychosocial Stressors in Paid Care Work." In *Caring on the Clock: The Complexities and*

Contradictions of Paid Care Work, ed. Mignon Duffy, Amy Armenia, and Clare L. Stacey, 83–93. New Brunswick, NJ: Rutgers University Press.

Lambert, Susan J., Peter J. Fugiel, and Julia R. Henly. 2014. *Precarious Work Schedules among Early-Career Employees in the US: A National Snapshot*. Chicago, IL: EINet (Employment Instability, Family Well-Being, and Social Policy Network) at the University of Chicago. <https://ssascholars.uchicago.edu/sites/default/files/work-scheduling-study/files/lambert.fugiel.henly_.precarious_work_schedules.august2014_0.pdf> (accessed January 8, 2015).

Lawless, Michael. 2014. "Checking Out: A Qualitative Study of Supermarket Cashiers' Emotional Response to Customer Mistreatment." Tampa, Florida: University of South Florida. <http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=6254&context=etd> (accessed February 18, 2016).

Levin-Epstein, Jodie. 2016. *Giving Retail Workers the Gift of Standards for Job Schedules*. Washington, DC: The Aspen Journal of Ideas. <http://aspen.us/journal/editions/januaryfebruary-2016/giving-retail-workers-gift-standards-job-schedules#_ftn19> (accessed February 19, 2016).

Liu, Yvonne Yen. 2013. *The Third Shift: Child Care Needs and Access for Working Mothers in Restaurants*. New York, NY: Restaurant Opportunities Centers United. <http://rocunited.org/the-third-shift/> (accessed October 12, 2016).

Luce, Stephanie, Sasha Hammad, and Darrah Sipe. 2015. *Short Shifted*. New York, NY: Retail Action Project. <http://retailactionproject.org/wp-content/uploads/2014/09/ShortShifted_report_FINAL.pdf> (accessed November 6, 2015).

Meixell, Brady and Ross Eisenbrey. 2014. *An Epidemic of Wage Theft Is Costing Workers Hundreds of Millions of Dollars a Year*. Washington, DC: Economic Policy Institute. <http://www.epi.org/files/2014/wage-theft.pdf> (accessed November 10, 2015).

Mishel, Lawrence, John Schmitt, and Heidi Shierholz. 2013. *Assessing the Job Polarization Explanation of Growing Wage Inequality*. Economic Policy Institute. <http://www.epi.org/files/2012/wp295-assessing-job-polarization-explanation-wage-inequality.pdf> (accessed October 12, 2016).

Morgan, Jennifer C. and Brandy Farrar. 2015. "Building Meaningful Career Lattices: Direct Care Workers in Long-Term Care." In *Caring on the Clock: The Complexities and Contradictions of Paid Care Work*, ed. Mignon Duffy, Amy Armenia, and Clare L. Stacey, 275–86. New Brunswick, NJ: Rutgers University Press.

Nakano Glenn, Evelyn. 1992. "From Servitude to Service Work: Historical Continuities in the Racial Division of Paid Reproductive Labor." *Signs* 18 (1): 1–43.

National Domestic Workers Alliance. 2015a. "Immigration and Trafficking." <http://www.domesticworkers.org/initiatives/immigration-and-trafficking> (accessed September 23, 2015).

———. 2015b. "Initiatives: Labor Protections." <http://www.domesticworkers.org/initiatives/labor-protections> (accessed September 23, 2015).

National Employment Law Project. 2013. *Going Nowhere Fast: Limited Occupational Mobility in the Fast Food Industry*. Brief. New York, NY: National Employment Law Project. <http://nelp.3cdn.net/84a67b124db45841d4_o0m6bq42h.pdf> (accessed October 12, 2016).

National Women's Law Center and Restaurant Opportunities Centers United. 2016. "Raise the Wage: Women Fare Better in States with Equal Treatment for Tipped Workers." Washington, DC. <https://nwlc.org/resources/raise-the-wage-women-fare-better-in-states-with-equal-treatment-for-tipped-workers/> (accessed November 1, 2016).

Nir, Sarah Maslin. "The Price of Nice Nails." *The New York Times*, May 7, 2015a. <http://www.nytimes.com/2015/05/10/nyregion/at-nail-salons-in-nyc-manicurists-are-underpaid-and-unprotected.html> (accessed October 12, 2016).
———. "Perfect Nails, Poisoned Workers." *The New York Times*, May 8, 2015b. <http://www.nytimes.com/2015/05/11/nyregion/nail-salon-workers-in-nyc-face-hazardous-chemicals.html> (accessed October 12, 2016).
O'Connor, Rachel, Jeff Hayes, and Barbara Gault. 2014. "Paid Sick Days Access Varies by Race/Ethnicity, Sexual Orientation, and Job Characteristics." Fact Sheet, IWPR #B337. Washington, DC: Institute for Women's Policy Research.
O'Connor, Sarah. "When Your Boss Is an Algorithm." *Financial Times*, September 8, 2016, Weekend FT life&arts edition. <http://www.ft.com/cms/s/2/88fdc58e-754f-11e6-b60a-de4532d5ea35.html> (accessed September 15, 2016).
OECD. 2011. *Doing Better for Families*. Paris, France: OECD. <http://www.oecd.org/els/soc/doingbetterforfamilies.htm> (accessed October 12, 2016).
Panikkar, Bindu, Mark A. Woodin, Doug Brugge, Raymond Hyatt, David M. Gute, and Community Partners of the Somerville Community Immigrant Worker Project. 2014. "Characterizing the Low Wage Immigrant Workforce: A Comparative Analysis of the Health Disparities among Selected Occupations in Somerville, Massachusetts." *American Journal of Industrial Medicine* 57 (5): 516–26.
Paraprofessional Healthcare Institute. 2013. *Occupational Projections for Direct-Care Workers 2010 – 2020*. Bronx, NY: Paraprofessional Healthcare Institute. <http://phinational.org/sites/phinational.org/files/phi_factsheet1update_singles_2.pdf> (accessed September 18, 2016).
PHI. 2016. *U.S. Nursing Assistants Employed in Nursing Homes: Key Facts*. New York, NY: PHI. <http://phinational.org/sites/phinational.org/files/phi-nursing-assistants-key-facts.pdf> (accessed September 6, 2016).
Pierce, Jennifer L. 1999. "Emotional Labor among Paralegals." *The Annals of the American Academy of Political and Social Science* 561: 127–42.
Pugliesi, Karen. 1999. "The Consequences of Emotional Labor: Effects on Work Stress, Job Satisfaction, and Well-Being." *Motivation and Emotion* 23 (2): 125–54. doi:http://dx.doi.org.proxygw.wrlc.org/10.1023/A:1021329112679.
Quach, Thu, Kim-Dung Nguyen, Phuong-An Doan-Billings, Linda Okahara, Cathyn Fan, and Peggy Reynolds. 2008. "A Preliminary Survey of Vietnamese Nail Salon Workers in Alameda County, California." *Journal of Community Health* 33 (5): 336–43.
Restaurant Opportunities Centers United. 2014a. *The Great Service Divide: Occupational Segregation and Inequality in the US Restaurant Industry*. Washington, DC: Restaurant Opportunities Centers United. <http://rocunited.org/wp-content/uploads/2014/10/REPORT_The-Great-Service-Divide2.pdf> (accessed November 1, 2016).
———. 2014b. *The Glass Floor: Sexual Harassment in the Restaurant Industry Report*. ROC United. <http://rocunited.org/wp-content/uploads/2014/10/REPORT_TheGlassFloor_Sexual-Harassment-in-the-Restaurant-Industry.pdf> (accessed June 27, 2016).
———. 2015. *Ending Jim Crow in America's Restaurants: Racial and Gender Occupational Segregation in the Restaurant Industry*. New York, NY: Restaurant Opportunities Centers United. <http://rocunited.org/wp2015b/wp-content/uploads/2015/10/RaceGender_Report_LR.pdf> (accessed November 5, 2015).
Robbins, Katherine Gallagher, Julie Vogtman, and Joan Entmacher. 2015. "States with Equal Minimum Wages for Tipped Workers Have Smaller Wage Gaps for Women Overall and Lower Poverty Rates for Tipped Workers." Washington, DC: National Women's Law Center. <http://www.nwlc.org/sites/default/files/pdfs/tipped_minimum_wage_worker_wage_gap_may_2015.pdf> (accessed November 10, 2015).

Rogers, Heather. "A Decent Living for Home Caregivers—And Their Clients." *The American Prospect*, 2015. <http://prospect.org/article/decent-living-home-caregivers%E2%80%94and-their-clients> (accessed November 2, 2016).

Rosenfeld, Jake, Patrick Denice, and Jennifer Laird. 2016. *Union Decline Lowers Wages of Nonunion Workers: The Overlooked Reason Why Wages Are Stuck and Inequality Is Growing*. Washington, DC: Economic Policy Institute. <http://www.epi.org/publication/union-decline-lowers-wages-of-nonunion-workers-the-overlooked-reason-why-wages-are-stuck-and-inequality-is-growing/> (accessed September 3, 2016).

Shellenback, Karen. 2009. *Cornell University Child Care and Child Care Grant Survey: Impact on the Cornell Community - Summary Report*. Ithaca, NY: Cornell University.

Shierholz, Heidi and Sharon Block. 2016. "Here's a Tip: Eliminate the Subminimum Wage for Tipped Workers." *U.S. Department of Labor Blog*. <https://blog.dol.gov/2016/06/23/heres-a-tip-eliminate-the-subminimum-wage-for-tipped-workers/> (accessed September 8, 2016).

Short, Kathleen. 2015. *The Supplemental Poverty Measure: 2014*. Current Population Reports, P60-254. Washington D.C.: United States Census Bureau. <http://www.census.gov/content/dam/Census/library/publications/2015/demo/p60-254.pdf>.

Smith, Victoria and Brian Halpin. 2014. *Low-Wage Work Uncertainty Often Traps Low-Wage Workers*. Davis, CA: University of California at Davis Center for Poverty Research. <http://poverty.ucdavis.edu/policy-brief/low-wage-work-uncertainty-often-traps-low-wage-workers>.

Theodore, Nik, Beth Gutelius, and Linda Burnham. 2013. *Home Truths: Domestic Workers in California*. National Domestic Workers Alliance. <http://www.domesticworkers.org/sites/default/files/HomeTruths.pdf> (accessed November 6, 2015).

Torpey, Elka. 2014. "Healthcare: Millions of Jobs Now and in the Future." *Occupational Outlook Quarterly* 2014 (Spring): 28–43.

Ullrich, Rebecca, Katie Hamm, Rachel Herzfeldt-Kamprath, and August 26. 2016. *Underpaid and Unequal: Racial Wage Disparities in the Early Childhood Workforce*. Center for American Progress. <https://www.americanprogress.org/issues/early-childhood/report/2016/08/26/141738/underpaid-and-unequal/> (accessed August 26, 2016).

United States Government Accountability Office. 2011. *Gender Pay Differences: Progress Made, but Women Remain Overrepresented among Low-Wage Workers*. Washington DC: United States Government Accountability Office. <http://www.gao.gov/assets/590/585721.pdf>.

U.S. Bureau of Labor Statistics. 2015. "Labor Force Statistics from the Current Population Survey: Employed Persons by Detailed Occupation, Sex, Race, and Hispanic or Latino Ethnicity." <http://www.bls.gov/cps/cpsaat11.htm> (accessed February 17, 2016).

———. 2016a. *National Compensation Survey Table 32. Leave Benefits: Access, Private Industry Workers, March 2015* (Paid Time-Off Benefits, March 2015). Washington DC: U.S. Department of Labor. <http://www.bls.gov/ncs/ebs/benefits/2015/ownership/private/table32a.pdf> (accessed September 8, 2016).

———. 2016b. *National Compensation Survey, Table 16. Insurance Benefits: Access, Participation, and Take-up Rates, Private Industry Workers, March 2015*. Washington D.C.: U.S. Department of Labor. <http://www.bls.gov/ncs/ebs/benefits/2015/ownership/private/table16a.pdf> (accessed September 8, 2016).

———. 2016c. "Median Weekly Earnings of Full-Time Wage and Salary Workers by Detailed Occupation and Sex." <http://www.bls.gov/cps/cpsaat39.htm> (accessed October 12, 2016).

———. 2016d. “Employment Projections: Occupations with the Most Job Growth, 2014 and Projected 2024.” April 18. <http://www.bls.gov/emp/ep_table_104.htm> (accessed August 26, 2016).
U.S. Chamber of Commerce. 2010. *Starting Smart & Finishing Strong: Fixing the Cracks in America’s Workforce Pipeline Through Investments in Early Childhood Development*. Washington DC: U.S. Chamber of Commerce. <https://www.uschamberfoundation.org/publication/starting-smart-finishing-strong> (accessed February 18, 2016).
U.S. Department of Commerce, Bureau of the Census. 2015. “Poverty Thresholds by Size of Family and Number of Children.” <https://www.census.gov/hhes/www/poverty/data/threshld/> (accessed May 20, 2016).
U.S. House Committee on Education and the Workforce. 2015. *Stronger Together: How Unions Help Strengthen Families and the Nation*. Washington, DC: U.S. House Committee on Education and the Workforce. <http://democrats-edworkforce.house.gov/imo/media/doc/Stronger%20Together%20E&L%20Dems%20Report2.pdf> (accessed October 27, 2016).
Vogtman, Julie and Karen Schulman. 2016. *Set Up To Fail: When Low-Wage Work Jeopardizes Parents’ and Children’s Success*. Washington, DC: National Women’s Law Center. <http://nwlc.org/resources/set-up-to-fail-when-low-wage-work-jeopardizes-parents-and-childrens-success/> (accessed February 19, 2016).
Warner, Mildred and Zhilin Liu. 2006. “The Importance of Child Care in Economic Development: A Comparative Analysis of Regional Economic Linkage.” *Economic Development Quarterly* 20 (1): 97–103. doi:10.1177/0891242405282892.
Webber, Gretchen and Christine Williams. 2008. “Mothers in ‘Good’ and ‘Bad’ Part-Time Jobs Different Problems, Same Results.” *Gender & Society* 22 (6): 752–77. doi:10.1177/0891243208325698.
Western, Bruce and Jake Rosenfeld. 2011. “Unions, Norms, and the Rise in U.S. Wage Inequality.” *American Sociological Review* 76 (4): 513–37.
Wheaton, Laura. 2016. “Underreporting of Means-Tested Transfer Programs in the CPS and SIPP.” *Urban Institute*. June 4. <http://www.urban.org/research/publication/underreporting-means-tested-transfer-programs-cps-and-sipp> (accessed October 28, 2016).
White House. 2014. *The Economics of Early Childhood Investments*. Washington DC: The White House. <https://www.whitehouse.gov/sites/default/files/docs/early_childhood_report1.pdf> (accessed September 26, 2016).
Wilson, Valerie. 2016. *Black Workers’ Wages Have Been Harmed by Both Widening Racial Wage Gaps and the Widening Productivity-Pay Gap*. Washington D.C.: Economic Policy Institute. <http://www.epi.org/files/pdf/115812.pdf> (accessed November 2, 2016).
Works, Delilah. 2014. “Preschool First Step in Military Readiness.” <http://www.missionreadiness.org/2014/preschool-first-step-in-military-readiness/> (accessed February 18, 2016).