

# ISSUE BRIEF

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# CHILD CARE WORKERS AREN'T PAID ENOUGH TO MAKE ENDS MEET

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## Introduction and key findings

hild care workers play an important role in the U.S. economy by allowing parents of young children to pursue employment outside the home and providing children a stimulating and nurturing environment in which to learn and grow.

In recent decades families have increasingly had to rely on child care because spending more time at work has become an economic necessity for many. Over the last 35 years, most American workers have endured stagnant wages—a reality that has led many two-parent households to work significantly longer hours to cover their rising expenses (Mishel et al. 2012).

Despite the crucial nature of their work, child care workers' job quality does not seem to be valued in today's economy. They are among the country's lowest-paid workers, and seldom receive job-based benefits such as health insurance and pensions. As with any other industry or occupation, paying decent wages and providing necessary benefits is essential to attract and retain the best workers.

This paper directly examines child care workers' job quality, including how much they earn, whether they receive benefits on the job, and whether they and their families are able to make ends meet. Key findings include:

- Child care workers are 95.6 percent female, and are disproportionately workers of color.
- Child care workers receive very low pay.

- The median hourly wage for child care workers is \$10.31, 39.3 percent below the \$17.00 median hourly wage of workers in other occupations. After accounting for demographic differences between child care workers and other workers, child care workers have hourly wages 23.0 percent lower than those of similar workers in other occupations.
- Child care workers rarely receive job-based benefits.
  - Only 15.0 percent of child care workers receive health insurance from their job, compared with 49.9 percent of workers in other occupations. After accounting for demographic differences between child care workers and other workers, child care workers are 27.0 percentage points less likely to receive health insurance than similar workers in other occupations.
  - Only 9.6 percent of child care workers are covered by a pension plan at their job, compared with 39.0 percent of workers in other occupations. After accounting for demographic differences between child care workers and other workers, child care workers are 24.1 percentage points less likely to receive employer-provided pensions than similar workers in other occupations.
- Child care workers have a harder time making ends meet than workers in other occupations.
  - One in seven child care workers (14.7 percent) live in families with income below the official poverty line, compared with 6.7 percent of workers in other occupations. After accounting for demographic differences between child care workers and other workers, child care workers are 5.9 percentage points more likely to be in poverty than similar workers in other occupations.
  - Over one-third (36.7 percent) of child care workers live in families with income below twice the poverty line, compared with 21.1 percent of workers in other occupations. After accounting for demographic differences between child care workers and other workers, child care workers are 10.8 percentage points more likely than similar workers in other occupations to have family income less than twice the federal poverty line.
  - The typical earnings of child care workers (excluding preschool workers) only cover between 39 percent (in Honolulu) and 104 percent (in parts of rural Nevada) of the basic family budget for one person—the amount required for one person to achieve a modest yet adequate standard of living in her community.
  - Preschool workers' typical earnings cover between 56 percent (in the North Carolina suburbs of Virginia Beach-Norfolk-Newport News) and 202 percent (in Owensboro, Kentucky) of their respective one-person budgets.
  - In the majority of metropolitan and nonmetropolitan areas across the country, more than 90 percent of child care workers (excluding preschool workers) cannot meet their local one-person budget.
- Many preschool and child care workers cannot afford child care for their own children.
  - In 32 states and the District of Columbia, center-based infant care costs are equal to more than one-third of typical preschool worker earnings. In other words, a preschool worker's entire pay in those states from January through at least April would be consumed by infant care costs.

■ In 21 states and the District of Columbia, non-preschool child care workers would have to spend over half of their annual earnings to pay for center-based infant care.

#### Who are child care workers?

Child care workers make up a small but significant share of the overall workforce. This workforce is difficult to count. A study based on data from the National Survey of Early Care and Education (NSECE 2013) finds that there are approximately 2 million teachers and caregivers providing child care in center-based and home settings (not counting the estimated 2.7 million unpaid home-based teachers and caregivers).

According to our analysis of Current Population Survey Outgoing Rotation Group data, there are 1.2 million child care workers in the economy today, including workers caring for children in day care centers, in preschools, as nannies, through religious organizations, and in numerous other facilities. While together they only constitute about 1.1 percent of all workers, they comprise a much larger share of certain groups of workers. For example, 2.3 percent of all female workers are child care workers.

**Table 1** displays the demographic characteristics of child care workers compared with all other workers. Child care workers are largely female; 95.6 percent are women, whereas slightly less than half (46.3 percent) of workers in other occupations are women. Child care workers are predominantly U.S.-born, but as compared with other workers are slightly more likely to be foreign-born. In addition, child care workers are more likely than other workers to be younger.

Most child care workers are non-Hispanic white, but are more likely to be non-white or Hispanic than workers in other occupations. Nearly one-fifth (19.8 percent) of child care workers are Hispanic (compared with 15.7 percent of workers in other occupations), and 14.1 percent of child care workers are black, non-Hispanic (compared with 10.6 percent of workers in other occupations).

Most child care workers have at least some college education, but are less likely than workers in other occupations to have at least a college degree. About one-third (35.2 percent) of other workers have at least a college degree, versus only about one in five child care workers (21.5 percent).

## Child care workers receive very low hourly pay

We turn now to an examination of hourly wages for child care workers. **Table 2** shows median hourly wages of child care workers and other workers, both overall and for various demographic groups. In 2014, the median hourly wage of child care workers was \$10.31, which was 39.3 percent below the \$17.00 median hourly wage of other workers.

It should be noted that our analysis is likely to overestimate child care worker wages because data are not available for a sizable and particularly low-wage subset of this workforce. Specifically, Current Population Survey Outgoing Rotation Group data are not available for self-employed workers, which in this context includes those who provide child care in their own home. They are a substantial portion (24 percent) of child care workers and are likely to have lower wages than other child care workers. For instance, using a different survey, Shierholz (2013) finds that self-employed child care workers who provide care in their own home have 18 percent lower median hourly earnings than nannies (\$7.53 versus \$9.23). Thus, the omission of these self-employed child care workers leads us to find a smaller wage differential than would be found if these lower-paid workers were included.

#### TABLE 1

#### Demographic characteristics of child care workers, 2014

Demographic	Child care workers	All other workers	
Gender			
Men	4.4%	53.7%	
Women	95.6%	46.3%	
Citizenship status			
U.S. born	81.2%	83.5%	
Naturalized U.S. citizen	8.3%	7.8%	
Non-naturalized immigrant	10.5%	8.7%	
Race/ethnicity*			
White	60.1%	66.1%	
Black	14.1%	10.6%	
Hispanic	19.8%	15.7%	
Asian	3.9%	5.8%	
Other	2.1%	1.9%	
Education			
Less than high school	8.6%	8.0%	
High school	30.5%	27.2%	
Some college	39.4%	29.7%	
Bachelor's degree	17.7%	22.8%	
Advanced degree	3.8%	12.4%	
Age			
18–22	15.4%	7.3%	
23–49	55.7%	59.1%	
50+	29.0%	33.7%	

<sup>\*</sup> Race/ethnicity categories are mutually exclusive (i.e., white non-Hispanic, black non-Hispanic, and Hispanic any race).

Note: To ensure sufficient sample sizes, this table draws from pooled 2012–2014 microdata.

**Source:** EPI analysis of Current Population Survey Outgoing Rotation Group microdata

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Table 2 displays key wage differences by demographic group. Among child care workers, the demographic groups with the lowest hourly wages are workers age 18–22 and those with less than a high school education. Young workers also have the lowest hourly wage among *non*-child-care workers, so the disparity between the wages of young child care workers and young non-child-care workers is quite low. Pay increases with educational attainment among child care and non-child-care workers alike; however, the pay disparities increase as well. Wages of child care workers with a high school degree are 28.0 percent lower than those of similarly educated non-child-care workers, while child care workers with a bachelor's degree have wages 44.8 percent lower than those of similarly educated non-child-care workers.

The first three columns of Table 2 demonstrate that child care workers have lower hourly wages than other workers. However, as shown in Table 1, child care workers are more likely to fall into demographic groups that have lower wages on average (e.g., women, immigrants, those with less than a college degree, and racial and ethnic minorities). In order

TABLE 2

## Real median hourly wage, child care workers versus other workers, by demographic (2014 dollars)

Demographic	Child care workers	All other workers	Percent difference	Child care hourly wage penalty <sup>a</sup>
Total	\$10.31	\$17.00	-39.3%	23.0%***
Gender				
Men	\$10.16	\$18.46	-44.9%	32.0%***
Women	\$10.31	\$15.40	-33.0%	23.1%***
Nativity				
U.S. born	\$10.31	\$17.35	-40.6%	23.8%***
Naturalized U.S. citizen	\$11.86	\$17.86	-33.6%	17.1%***
Non-naturalized immigrant	\$10.16	\$12.37	-17.9%	18.5%***
Race/ethnicity <sup>b</sup>				
White	\$10.31	\$18.60	-44.6%	25.9%***
Black	\$10.31	\$14.21	-27.4%	16.8%***
Hispanic	\$10.16	\$12.96	-21.6%	17.3%***
Asian	\$11.18	\$20.00	-44.1%	26.4%***
Other	\$10.31	\$15.00	-31.3%	25.1%***
Education				
Less than high school	\$8.89	\$10.31	-13.8%	12.2%***
High school	\$10.08	\$14.00	-28.0%	15.5%***
Some college	\$10.16	\$15.04	-32.4%	20.0%***
Bachelor's degree	\$13.26	\$24.04	-44.8%	39.8%***
Advanced degree	\$15.64	\$31.43	-50.2%	48.9%***
Age				
18-22	\$9.00	\$9.28	-3.0%	0.5%
23-49	\$11.00	\$17.28	-36.3%	27.3%***
<i>50</i> +	\$11.31	\$19.55	-42.1%	29.5%***

a. Percent difference between the hourly wages earned by a child care worker and those earned by a demographically similar worker in another occupation

**Note:** OLS regressions control for gender, nativity, citizenship, race/ethnicity, educational attainment, age, marital status, urbanicity, region of the country, and year. Complete regression results available from the author upon request. To ensure sufficient sample sizes, this table draws from pooled 2012–2014 microdata.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

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to ascertain the true "penalty" of holding a job in child care—the difference between the wages a child care worker receives and what she would get if she worked in another occupation—it is important to account for the fact that child care workers have a different demographic profile than workers in other jobs. We thus turn to a regression analysis that controls for the differences in demographics between child care workers and other workers (in particular, it controls for gender, nativity, citizenship, race and ethnicity, educational attainment, age, marital status, urbanicity, and region of the

b. Race/ethnicity categories are mutually exclusive (i.e., white non-Hispanic, black non-Hispanic, and Hispanic any race).

<sup>\*\*\*</sup> indicates significance at the .01 level; \*\* indicates significance at the .05 level; \* indicates significance at the 0.1 level.

#### TABLE 3

#### Employer-provided benefits, child care workers versus other workers, 2014

	All child care	All others	Difference	Child care benefit penalty <sup>a</sup>
Health insurance coverage	15.0%	49.9%	-34.9 ppt.	27.0 ppt.***
Pension coverage	9.6%	39.0%	-29.4 ppt.	24.1 ppt.***

a. Percentage-point difference between the coverage rate of child care workers and that of demographically similar workers in other occupations

**Note:** OLS regressions control for gender, nativity, citizenship, race/ethnicity, educational attainment, age, marital status, urbanicity, region of the country, and year. Complete regression results available from the author upon request. To ensure sufficient sample sizes, this table draws from pooled 2012–2014 microdata.

Source: EPI analysis of Current Population Survey Annual Social and Economic Supplement microdata

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country). In other words, the results of this analysis demonstrate not the raw difference in hourly wages between child care workers and other workers, but the difference between the hourly wages earned by a child care worker and those earned by a similar worker in another occupation. This is the "wage penalty" of child care work.

The last column in Table 2 presents the results. The top row in column 4 shows that child care workers make 23.0 percent less than similar workers in other occupations. The remainder of the table shows how the wage penalty of child care work differs for various demographic groups. The difference between what a child care worker makes and what that worker would make if he or she were in another occupation is somewhat higher for men (32.0 percent) than for women (23.1 percent). At 18.5 percent, the child care wage penalty for immigrants who are not naturalized U.S. citizens is very large, but is smaller than for U.S.-born citizens. Similarly, at 17.3 percent, the child care wage penalty for Hispanic workers is large, but is smaller than for most other racial and ethnic groups.

The more education credentials a worker has, the greater the wage penalty of child care work, since workers with higher levels of educational attainment are more able to secure higher wages in other occupations. However, while workers without a high school degree face the lowest child care work wage penalty of any education category, they still make 12.2 percent less than similar workers in other occupations. Similarly, the older a worker is, the greater the wage penalty of child care work, since older workers are typically able to secure higher wages in other occupations.

In short, Table 2 shows that the wages of child care jobs are low. With the sole exception of workers age 18–22, child care workers make significantly less than similar workers in other occupations.

## Very few child care workers receive job-based benefits

We now turn to a comparison of the fringe benefits received by child care workers and those received by other workers. **Table 3** examines the share of workers covered by employer-sponsored health insurance plans—i.e., the share covered by their own employer and not a spouse's employer—and the share of workers covered by employer-provided pension plans. Just 15.0 percent of child care workers have employer-sponsored health insurance through their own job, compared with 49.9 percent of workers in other occupations.

<sup>\*\*\*</sup> indicates significance at the .01 level; \*\* indicates significance at the .05 level; \* indicates significance at the 0.1 level.

#### TABLE 4

#### Poverty rates, child care workers versus other workers, 2014

	All child care	All others	Difference	Child care poverty penalty <sup>a</sup>
Poverty rate	14.7%	6.7%	7.9 ppt.	5.9 ppt.***
200% poverty rate	36.7%	21.1%	15.6 ppt.	10.8 ppt.***

a. Percentage-point difference between poverty/"twice poverty" rates of child care workers and those of demographically similar workers in other occupations

**Note:** Poverty rates refer to the share of workers whose family income places them below the indicated poverty line. OLS regressions control for gender, nativity, citizenship, race/ethnicity, educational attainment, age, marital status, urbanicity, region of the country, and year. Complete regression results available from the author upon request. To ensure sufficient sample sizes, this table draws from pooled 2012–2014 data.

Source: EPI analysis of Current Population Survey Annual Social and Economic Supplement data

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However, to ascertain the true "penalty" of working in a child care job—a child care worker's likelihood of receiving employer-sponsored health insurance as compared with the likelihood she would receive this benefit if employed in another occupation—it is important to account for the fact that child care workers have a different demographic profile than other workers. As before, we turn to a regression analysis that controls for these demographic differences. The analysis demonstrates that the employer-sponsored health insurance coverage rate is 27.0 percentage points lower for child care workers than for similar workers in other occupations.

Table 3 also shows that just 9.6 percent of child care workers are covered by an employer-provided pension plan, compared with 39.0 percent of workers in other occupations. And as is true with other measures, even after controlling for the demographic differences between child care workers and other workers, the discrepancies in employer-provided pension plan coverage are stark: Coverage is 24.1 percentage points lower for child care workers than for similar workers in other occupations. The key message of Table 3 is that child care workers are much less likely to receive fringe benefits from their employers than are similar workers in other jobs.

## Most child care workers do not have incomes high enough to make ends meet

We next examine how the earnings of child care workers compare with a variety of benchmarks. **Table 4** shows that child care workers are much more likely than workers in other occupations to live in families with incomes below the poverty line. Nearly 15 percent of child care workers live in poverty, compared with 6.7 percent of workers in other occupations, a 7.9 percentage-point difference. Even after controlling for demographic differences between child care workers and other workers, the poverty rate among child care workers is still 5.9 percentage points higher than among similar workers in other occupations.

Table 4 also shows the "twice-poverty rate," the share of child care and other workers whose family income is below twice the official poverty line. Poverty researchers generally do not consider the poverty rate to be a sufficient measure of the share of families who cannot make ends meet, in part because the poverty thresholds were set in the 1960s and

<sup>\*\*\*</sup> indicates significance at the .01 level; \*\* indicates significance at the .05 level; \* indicates significance at the 0.1 level.

have not evolved to reflect changing shares of spending on various necessities by low-income families. Instead, "twice poverty" is often used as a better cutoff for whether or not a family is able to make ends meet. For reference, in 2014, the poverty threshold for a family of four (with two adults and two children) was \$24,008; therefore, the "twice poverty" threshold was \$48,016.

More than one-third of child care workers (36.7 percent) live in families with income below twice the poverty threshold, compared with 21.1 percent of other workers, a 15.6 percentage-point difference. Even after controlling for demographic differences between child care workers and other workers, the share of child care workers living below twice the poverty line is still 10.8 percentage points higher than that of similar workers in other occupations.

## Child care worker earnings and EPI's family budget thresholds

The official poverty threshold (or even twice this threshold) is only one measure of earnings adequacy, and arguably a low bar. Furthermore, there are substantial differences across states and metro areas that are masked by focusing on national-level data. Thus, perhaps the best way to evaluate the adequacy of child care worker earnings is to determine whether these workers earn enough to attain a modest yet adequate standard of living in their community.

To make this comparison, this paper relies upon the Bureau of Labor Statistics Occupational Employment Statistics (OES),<sup>3</sup> which produces wage estimates by occupation for 625 metropolitan and nonmetropolitan areas, and EPI's Family Budget Calculator (Gould, Cooke, and Kimball 2015), which measures the income families need in order to attain a modest yet adequate living standard where they live by estimating community-specific costs of housing, food, child care, transportation, health care, other necessities, and taxes, for 10 family types living in all 618 U.S. metropolitan and rural areas.

EPI's basic family budget thresholds differ by location, since certain costs, such as housing, vary significantly depending on where one resides. Geographical cost-of-living differences are built into the budget calculations by incorporating regional, state, or local variations in prices (depending on item). Basic family budget measurements are also adjustable by family type because expenses vary considerably depending on the number of children in a family (if any), and whether a family is headed by a single parent or two parents. (For more on the methodology used to construct the budgets, see Gould et al. 2015.)

It is important to note that the OES calculates annual wages by multiplying the hourly mean wage by year-round, full-time hours, or 2,080 hours. To the extent that child care workers work less than 40 hours per week or fewer than 52 weeks throughout the year, the annual earnings figures will overstate their actual annual earnings. Therefore, the results comparing local OES annual earnings with EPI's family budgets may be biased to find greater family budget affordability—that is, a higher share of workers able to make ends meet than may occur in reality.

It is also important to point out that in the OES data, we cannot obtain an aggregated picture of child care workers as we could with the CPS data in tables 1 through 4. Here, public data are only available by individual occupation; we cannot combine data for the "preschool teacher" occupation and "child care worker" occupation to look at them together. Obviously, this distinction between the two occupations is somewhat arbitrary; as the U.S. Department of Health and Human Services has pointed out, "The current SOC [Standard Occupational Classification] definitions for the ECCE [Early Childhood Care and Education] workforce are problematic. For example, they make artificial distinc-

tions between child care workers and preschool teachers even though there is substantial overlap in between the nature of work performed in these occupations" (Brandon et al. 2014). We thus report results for both separately. When discussing the results from the OES data, "other child care workers" refers to the subset of childhood educators classified specifically as being in the child care worker occupation, while "preschool workers" are those classified in the preschool worker occupation.

The comparison between the earnings data and EPI's family budget thresholds makes clear that the income required to get by varies greatly across the country, and that child care and preschool workers have a difficult time making ends meet. **Figures A and B** compare the pay of typical preschool and other child care workers, respectively, with the one-person budget threshold in each area across the country. The percentages displayed are the share of each one-person local budget threshold that can be met by median earnings in each occupation. For instance, a value of 120 percent in Minneapolis means that annual earnings of the typical preschool worker are actually 1.2 times—or 20 percent higher than—the cost of living for one person in Minneapolis. And in Boston, a typical preschool worker salary only covers 73 percent of a one-person budget.

As depicted in Figure A, preschool workers' earnings cover between 56 percent (in the North Carolina suburbs of Virginia Beach-Norfolk-Newport News) and 202 percent (in Owensboro, Kentucky) of their local one-person budgets. Other child care workers' earnings are typically lower, only covering between 39 percent (in Honolulu) and 104 percent (in parts of rural Nevada) of their respective one-person budget thresholds, as depicted in Figure B.

Another way to examine these data is to determine what share of preschool and child care workers can actually meet the one-person budget threshold in the area where they work.<sup>4</sup> For instance, in Anchorage, Alaska, 39 percent of preschool workers have annual earnings below their local one-person budget threshold. In other words, nearly two-fifths of preschool workers in Anchorage cannot attain a modest yet adequate standard of living for one person. The share of workers whose earnings fail to meet their local one-person budget thresholds are shown in **Figures C and D** for preschool and other child care workers, respectively.

The extent to which preschool workers can meet their local one-person budget threshold varies greatly across the country, as depicted in Figure C. The share of these workers who cannot afford a modest yet adequate living standard ranges from less than 10 percent in places such as parts of rural Kentucky, Tennessee, or Texas to more than 90 percent in places such as Boston; Olympia, Washington; and Idaho Falls, Idaho.

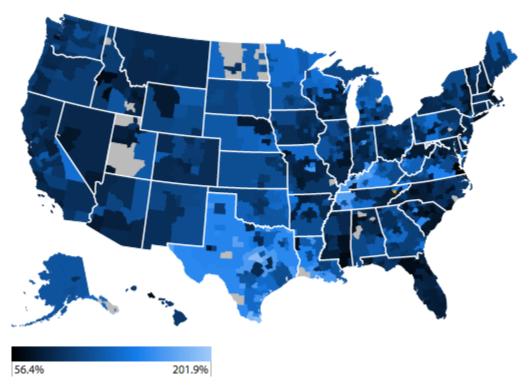
Figure D illustrates that other child care workers have a much harder time making ends meet. Only in Worcester, Massachusetts, and parts of rural Nevada can more than half of these workers afford a modest yet adequate standard of living. In the majority of metropolitan and nonmetropolitan areas across the country, more than 90 percent of non-preschool child care workers cannot meet their local one-person budget threshold. Clearly, preschool and other child care workers would have even greater difficulty making ends meet if they were responsible for supporting others in addition to themselves.

## Can child care workers afford child care?

Among families with children, child care costs account for a significant portion of family budgets. This burden is especially heavy for child care workers, who earn considerably less than workers in other occupations. This section examines

FIGURE A

# Share of local one-person budget met by local median preschool worker earnings



**Note:** Budgets are the amount required for one person to secure a modest yet adequate standard of living in his or her community. Gray areas denote locales for which earnings data are unavailable.

**Source:** EPI analysis of EPI Family Budget Calculator (Gould, Cooke, and Kimball 2015) and the Bureau of Labor Statistics Occupational Employment Statistics (OES)

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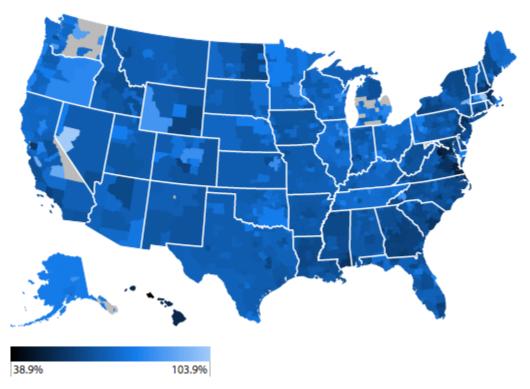
the share of preschool and other child care workers' median earnings that would be needed to pay for center-based infant and 4-year-old care for their own children. **Figures E and F** compare preschool worker wages to infant and 4-year-old care costs, respectively, on a statewide basis. **Figures G and H** do the same for other child care workers' typical wages.<sup>6</sup>

The U.S. Department of Health and Human Services' official affordability threshold for child care costs is 10 percent or less of a family's income (Office of the President 2014). Typical preschool workers' wages are not sufficient to meet that affordability standard anywhere. The share of their earnings going to center-based infant care ranges from 17 percent in Louisiana to 66 percent in D.C., as shown in Figure E. In 32 states and D.C., it takes more than one-third of total earnings to cover infant care costs. That means that a preschool worker's entire pay in those states from January through at least April would be consumed by infant care costs.

Four-year-old care is slightly less expensive than infant care, primarily because of the lower teacher-to-child ratios. The National Association for the Education of Young Children recommends a 1:4 staffing ratio for infants, compared with a

FIGURE B

# Share of local one-person budget met by local median earnings of other child care workers



**Note:** Budgets are the amount required for one person to secure a modest yet adequate standard of living in his or her community. Gray areas denote locales for which earnings data are unavailable.

**Source:** EPI analysis of EPI Family Budget Calculator (Gould, Cooke, and Kimball 2015) and the Bureau of Labor Statistics Occupational Employment Statistics (OES)

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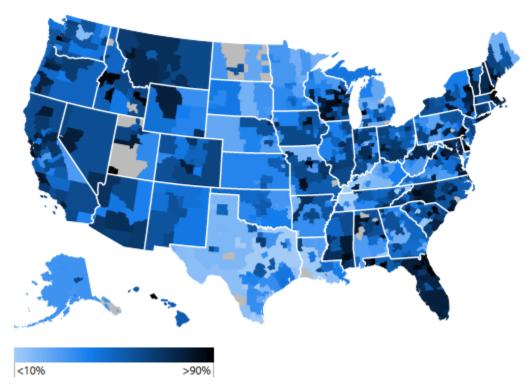
1:10 ratio for 4-year-olds (CCAA 2013). Even so, when it comes to 4-year-old care, in no state are typical preschool or other child care workers' earnings sufficient to meet the HHS 10 percent affordability standard. Child care costs range from 14 percent of total earnings in Louisiana to 52 percent of earnings in D.C., as shown in Figure F. A preschool teacher in D.C. would have to devote half her annual earnings to 4-year-old care.

Child care is even more out of reach for other child care workers. To pay for center-based infant care, these workers in 21 states and the District of Columbia would have to set aside over half of their annual earnings, as illustrated in Figure G. In all but five states, these workers need to spend more than one-third of their earnings on infant care. Four-year-old care is slightly more affordable, but in every state the cost of this care is equal to or exceeds one-fourth of these workers' typical earnings, as depicted in Figure H.

Of course, many preschool and other child care workers cannot afford to spend a quarter or a third of their earnings on child care when they also have to put a roof over their head and feed their families. Many rely on informal or family

FIGURE C

# Share of preschool workers who cannot afford their local one-person budget



**Note:** Budgets are the amount required for one person to secure a modest yet adequate standard of living in his or her community. The OES earnings data provide wages for substate areas at several points in the wage distribution: the 10th, 25th, 50th, 75th, and 90th percentiles. To calculate the percent of the worker wage distribution that falls below the local one-person family budget, we linearly interpolate between the two values surrounding the appropriate family budget threshold. For family budget thresholds that lie above the 90th percentile of the wage distribution, we cannot reasonably estimate without stronger distribution assumption. Therefore, we simply characterize those areas as ones where at least 90 percent of workers have earnings below their local family budget threshold, or less than 10 percent are above. Gray areas denote locales for which earnings data are unavailable.

**Source:** EPI analysis of EPI Family Budget Calculator (Gould, Cooke, and Kimball 2015) and the Bureau of Labor Statistics Occupational Employment Statistics (OES)

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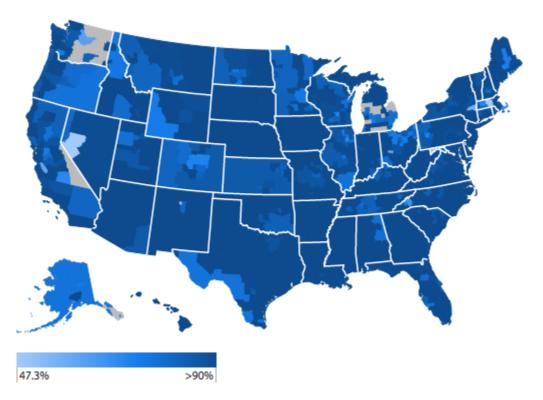
care to meet their child care needs. And some rely on resources other than wages to make ends meet. Nearly half (46 percent) of child care workers are in families that rely on one or more public support program each year, compared with 25 percent of the overall workforce (Whitebook, Phillips, and Howes 2014). However, only one-quarter of child care workers with hourly wages of at least \$15.00 participated in a public support program.

### Conclusion

This paper has detailed that child care workers receive compensation so low that many are unable to make ends meet. At the same time, it has been well documented that the cost of high-quality child care puts it out of reach of many

FIGURE D

# Share of other child care workers who cannot afford their local one-person budget



**Note:** Budgets are the amount required for one person to secure a modest yet adequate standard of living in his or her community. The OES earnings data provide wages for substate areas at several points in the wage distribution: the 10th, 25th, 50th, 75th, and 90th percentiles. To calculate the percent of the worker wage distribution that falls below the local one-person family budget, we linearly interpolate between the two values surrounding the appropriate family budget threshold. For family budget thresholds that lie above the 90th percentile of the wage distribution, we cannot reasonably estimate without stronger distribution assumption. Therefore, we simply characterize those areas as ones where at least 90 percent of workers have earnings below their local family budget threshold, or less than 10 percent are above. Gray areas denote locales for which earnings data are unavailable.

**Source:** EPI analysis of EPI Family Budget Calculator (Gould, Cooke, and Kimball 2015) and the Bureau of Labor Statistics Occupational Employment Statistics (OES)

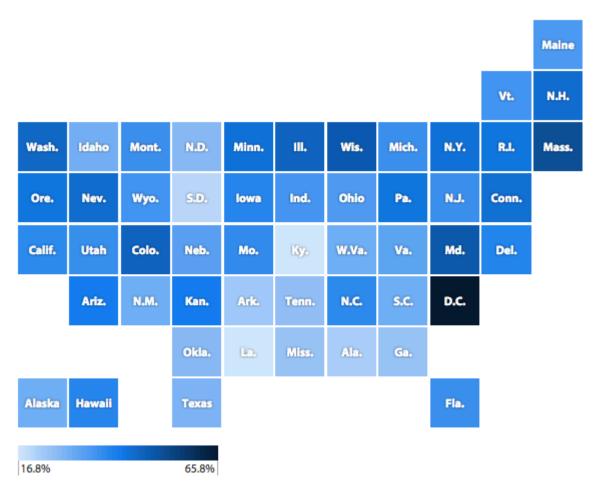
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workers and their families (Gould and Cooke 2015). It is abundantly clear that the unaffordability of child care is not driven by excessively lavish pay in the sector.

As society looks for ways to make child care more affordable for American families, it is crucial to keep in mind that in the child care sector—unlike in other sectors—it is impossible to improve productivity (and hence decrease costs) without lowering quality. For example, increasing the ratio of children to the workers who care for them would register as a productivity improvement in a narrow-minded accounting framework, but boosting this ratio would conflict with the desire to provide high-quality care. Simply put, high-quality, dependable child care is not an inexpensive proposition,

FIGURE E

## Share of median preschool worker earnings required to pay for center-based infant care



**Source:** EPI analysis of EPI Family Budget Calculator (Gould, Cooke, and Kimball 2015) and the Bureau of Labor Statistics Occupational Employment Statistics (OES)

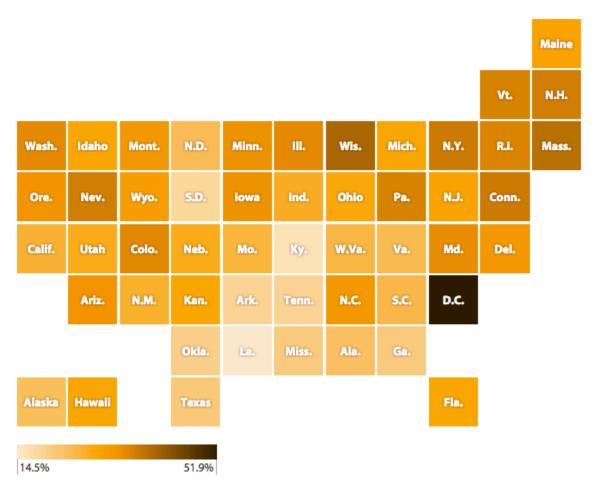
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and this is especially true if we care about the quality of the child care workforce and their economic security. Yet this high-quality care is something every child and family in the United States deserves.

Policies to solve the dual problem of low child care worker pay and issues of access and affordability, while ensuring high-quality care, should be considered at all levels of government. Possible solutions should be at the scale of the problem, and can include strategies such as more-widely-available income-based subsidies or the public provision of high-quality child care. Such solutions would ensure that high-quality child care is widely accessible, and would provide the resources to raise wages and improve job quality for the nation's child care workers.

FIGURE F

# Share of median preschool worker earnings required to pay for center-based 4-year-old care



**Source:** EPI analysis of EPI Family Budget Calculator (Gould, Cooke, and Kimball 2015) and the Bureau of Labor Statistics Occupational Employment Statistics (OES)

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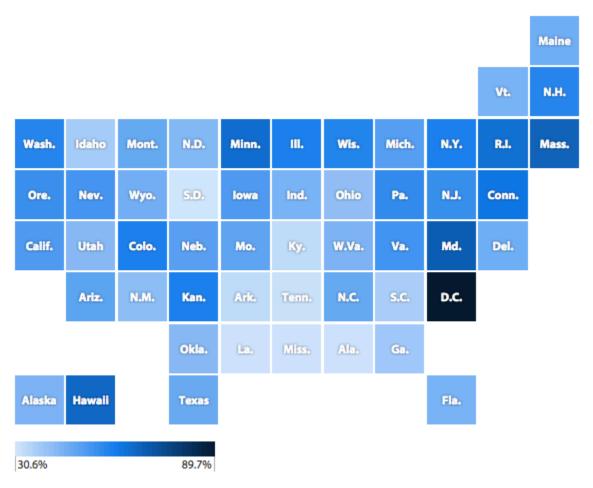
— This paper would not be possible without the outstanding research assistance in a multitude of areas provided by **Tanyell Cooke** and **Will Kimball**, and **Chris Frazier** for his map creation skills. The author would also like to acknowledge **Dan Essrow** for his acute skill at encouraging the display of understandable facts and **Heidi Shierholz** for the example set by her paper on in-home workers.

## About the author

**Elise Gould**, senior economist, joined EPI in 2003 and is the institute's director of health policy research. Her research areas include wages, poverty, economic mobility, and health care. She is a co-author of *The State of Working America*, 12th Edition. In the past, she has authored a chapter on health in *The State of Working America* 2008/09; co-authored a

FIGURE G

# Share of median earnings of other child care workers required to pay for center-based infant care



**Source:** EPI analysis of EPI Family Budget Calculator (Gould, Cooke, and Kimball 2015) and the Bureau of Labor Statistics Occupational Employment Statistics (OES)

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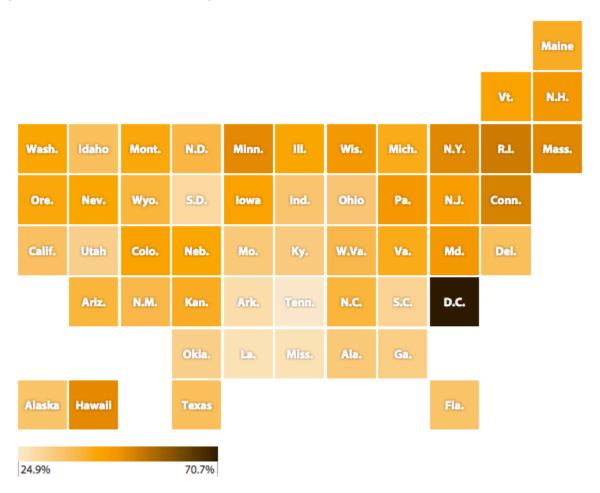
book on health insurance coverage in retirement; published in venues such as *The Chronicle of Higher Education*, *Challenge Magazine*, and *Tax Notes*; and written for academic journals including *Health Economics*, *Health Affairs*, *Journal of Aging and Social Policy, Risk Management & Insurance Review, Environmental Health Perspectives*, and *International Journal of Health Services*. She holds a master's in public affairs from the University of Texas at Austin and a Ph.D. in economics from the University of Wisconsin at Madison.

#### **Endnotes**

1. Child care workers in the Current Population Survey Outgoing Rotation Group (CPS ORG) and CPS Annual Social and Economic Supplement (CPS ASEC) are defined using occupation and industry classification systems. Child care workers include

FIGURE H

# Share of median earnings of other child care workers required to pay for center-based 4-year-old care



**Source:** EPI analysis of EPI Family Budget Calculator (Gould, Cooke, and Kimball 2015) and the Bureau of Labor Statistics Occupational Employment Statistics (OES)

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two major occupations: "child care workers" and "preschool and kindergarten teachers." In an attempt to retain only preschool workers from the latter occupational category, we eliminate those in the "preschool and kindergarten teachers" occupation who are also in the "elementary and secondary schools" industry. Admittedly, this is an imperfect match, as some preschool workers are found in that industry and some kindergarten teachers are found in other industries that we retain. The distinction between preschool workers and child care workers is often without merit, and the goal of this paper is to characterize and assess the adequacy of earnings among the broad category of workers who care for young children.

To ensure adequate sample sizes for demographic characterization and wage analysis, we combine three years of data in the CPS ORG, merging 2012 through 2014 data years. In the resulting sample of 4,740 workers, every demographic subgroup retains at least 150 workers. The weighted sample contains 73 percent of workers from the "child care workers" occupation with the

remaining 27 percent from the "preschool and kindergarten teacher" occupations outside of the elementary and secondary schools industry.

- 2. Shierholz (2013) uses the Current Population Survey Annual Social and Economic Supplement.
- 3. Using data merged from 2011 through 2014 to achieve reliable sample sizes, hourly wages are reported at the 10th, 25th, 50th, 75th, and 90th percentiles of the wage distribution. We match our 618 family budget areas with the 625 OES data areas using county-level coding. In some cases—for instance, the Washington, D.C., metropolitan area—EPI has three distinct family budgets for the D.C., Maryland, and Virginia components of the metro area, while the OES data has one. Conversely, for example, there are four distinct rural area wage measures for rural Ohio, whereas EPI has only one family budget for rural Ohio. We keep as much disaggregated data for either the wage or budget side as possible, which add to 859 areas of comparison. There are a few instances of missing wage data: 10 local areas are without corresponding data for child care workers, and 25 local areas are without corresponding data for preschool workers (these areas are shown in light grey on the maps).
- 4. The OES data provided wages for substate areas at several points in the wage distribution: the 10th, 25th, 50th, 75th, and 90th percentiles. To calculate the percent of the worker wage distribution that falls below the local one-person family budget, we linearly interpolate between the two values surrounding the appropriate family budget threshold. For example, in the Anchorage, Alaska, metro area, the one-person family budget threshold of \$33,015 lies between the 25th and 50th percentile of the wage distribution, which are represented by \$30,070 and \$35,260, respectively. Our linear interpolation between these points suggests an estimate of 39 percent of workers fall below. That is, 61 percent of workers have wages above the family budget threshold. For family budget thresholds that lie above the 90th percentile of the wage distribution, we cannot reasonably estimate without stronger distribution assumption. Therefore, we simply characterize those areas as ones where at least 90 percent of workers have earnings below their local family budget threshold or less than 10 percent are above.
- 5. In Worcester, Massachusetts, 47 percent cannot afford their one-person family budget; in rural Nevada, 48 percent cannot.
- 6. In EPI's family budgets, child care costs are statewide averages (CCAA 2014). To compare at a similar level of aggregation, we use OES state-level occupational wage data.
- 7. These programs include the federal Earned Income Tax Credit, Medicaid, SNAP (food stamps), and TANF.

## References

Brandon, Richard, Margaret Burchinal, Fran Kipnis, Robert Weber, Marcy Whitebrook, and Martha Zaslow. 2014. *Proposed Revisions to the Definitions for Early Childhood Workforce in the Standard Occupational Classification*. White paper commissioned by the Administration for Children and Families, U.S. Department of Health and Human Services.

Bureau of Labor Statistics (U.S. Department of Labor). Various years. Occupational Employment Statistics (OES) tables.

Child Care Aware of America's Ranking of State Child Care Center Regulations and Oversight, 2013 Update.

Child Care Aware of America (CCAA). 2014. Parents and the High Cost of Child Care: 2014 Report.

Current Population Survey Annual Social and Economic Supplement microdata. Various years. Survey conducted by the Bureau of the Census for the Bureau of Labor Statistics [machine-readable microdata file]. Washington, D.C.: U.S. Census Bureau. http://www.bls.census.gov/cps\_ftp.html#cpsmarch

Current Population Survey Outgoing Rotation Group microdata. Various years. Survey conducted by the Bureau of the Census for the Bureau of Labor Statistics [machine-readable microdata file]. Washington, D.C.: U.S. Census Bureau. http://www.bls.census.gov/cps\_ftp.html#cpsbasic

Gould, Elise, and Tanyell Cooke. 2015. *High Quality Child Care Is Out of Reach for Working Families*. Economic Policy Institute, Issue Brief #404.

Gould, Elise, Tanyell Cooke, and Will Kimball. 2015. "Family Budget Calculator." Economic Policy Institute.

Gould, Elise, Tanyell Cooke, Alyssa Davis, and Will Kimball. 2015. *Economic Policy Institute 2015 Family Budget Calculator: Technical Documentation*. Economic Policy Institute, Working Paper No. 299.

Mishel, Lawrence, Josh Bivens, Elise Gould, and Heidi Shierholz. 2012. *The State of Working America, 12th Edition*. An Economic Policy Institute book. Ithaca, N.Y.: Cornell University Press.

National Survey of Early Care and Education (NSECE). 2013. Number and Characteristics of Early Care and Education (ECE) Teachers and Caregivers: Initial Findings from the National Survey of Early Care and Education.

Office of the President. 2014. The Economics of Early Childhood Investments.

Shierholz, Heidi. 2013. Low Wages and Scant Benefits Leave Many In-Home Workers Unable to Make Ends Meet. Economic Policy Institute, Briefing Paper No. 369.

Whitebook, Marcy, Deborah Phillips, and Carollee Howes. 2014. Worthy Work, STILL Unlivable Wages: The Early Childhood Workforce 25 Years after the National Child Care Staffing Study. Center for the Study of Child Care Employment, Institute for Research on Labor and Employment, University of California, Berkeley.