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**EARNINGS
& ECONOMIC
SECURITY**

 **IN 2018, PROGRESS TOWARD BETTER COMPENSATION** remains limited and uneven across states and among different classifications of early educators. Low wages and inconsistent expectations pose risks to the well-being and effectiveness of early educators and undermine our nation’s ability to ensure equitable and high-quality services for all young children. Comparable pay for early educators — those with equivalent qualifications to one another and to educators of older children — is rendered unattainable due to inadequate levels of public financing and heavy reliance on families to cover the costs of ECE services, with consequences for early educator well-being and program quality.

In this chapter, we analyze the most recent national and state wage data compiled by the Occupational Employment Statistics program of the U.S. Bureau of Labor Statistics, including information for early educators and teachers of older children, as well as the broader U.S. employee workforce. We also provide new data analyses from the 2012 National Survey of Early Care and Education that point to earnings disparities across early childhood settings and an uneven playing field faced by current and prospective early educators (see also [About the Workforce, p. 17](#)). To assess economic insecurity among early educators, as in 2016, we again examine utilization of public income supports and Medicaid by members of the early childhood workforce and their families, using data from the Current Population Survey. We also summarize recent state studies that explore the consequences of low pay for educator well-being and practice. New state-level analyses of early educator earnings have also been added to this edition of the *Index*, including an assessment of wages by state (adjusted for the cost of living) and the role recent minimum wage legislation has played in increasing wages.

Data Sources for Earnings & Economic Security

Three major national surveys inform the first two chapters of the *Index*: the National Survey of Early Care and Education,³⁶ the Occupational Employment Statistics survey,³⁷ and the Current Population Survey.³⁸ Each survey has its own strengths and limitations, necessitating use of one or another for specific purposes throughout this chapter.

The **National Survey of Early Care and Education (NSECE)** is a national survey of early care and education settings across the United States. It provides the most detailed, nationally representative information about the ECE workforce by setting and role. Currently, data are only available for 2012, although a follow-up study is planned for 2019, with data likely available in 2020. The NSECE allows for some limited state-level analysis, but the ability to do these analyses varies depending on the sample sizes available for any given research question, and even for the largest states (such as California), basic variables of interest (such as educational attainment by race/ethnicity or by type of program) cannot always be analyzed. In the *Index*, we use the NSECE to describe national and, where possible, state characteristics of the early educator workforce at a level that is far more detailed and relevant to existing variation in the early childhood field compared with what is available in either the Occupational Employment Statistics or Current Population Survey.

The **Occupational Employment Statistics (OES)** is an ongoing survey of business establishments that reports data for all states but only provides basic earnings and total employment information for *employees* in broad early educator occupations, as defined by the Standard Occupational Classification of the Bureau of Labor Statistics: “childcare workers,” “preschool teachers,” and “education administrators: preschool/childcare center,” as well as “kindergarten teacher” and “elementary school teacher” (for definitions of these occupations, see Appendix 1: Data Sources). These data do not include the self-employed and cannot be further broken down by role or setting. In the *Index*, we use the OES to report comparable state data on these occupations across all states and the District of Columbia.

The **Current Population Survey (CPS)** is an ongoing survey of U.S. households that provides somewhat more detailed information for the early educator occupations listed above, as it also uses the Standard Occupational Classification of the Bureau of Labor Statistics (although it should be noted that preschool teachers cannot be distinguished from kindergarten teachers in this dataset). Unlike the OES, the CPS can provide estimates on self-employed as well as employee early educators. However, like the NSECE, the ability to perform state-level analyses using the CPS varies depending on the sample sizes available for any given research question. In the *Index*, we use the CPS to estimate earnings for self-employed early educators and to estimate early educator participation in a variety of public income and health care supports.

FIGURE 3.1

Median Hourly Wages by Occupation, 2017

Child Care Worker Employees, All Settings ³⁹	Self-Employed Home Care Providers ⁴⁰	Preschool Teachers, All Settings	Preschool Teachers in Schools Only	Preschool/Child Care Center Directors, All Settings	Kindergarten Teachers	Elementary Teachers	All Occupations
\$10.72	\$10.35 ⁴¹	\$13.94	\$26.88	\$22.54	\$31.29	\$32.98	\$18.12

Source: Occupational Employment Statistics (OES) Survey, Bureau of Labor Statistics, Department of Labor. Retrieved from <http://stats.bls.gov/oes/>.

Note: All teacher estimates exclude special education teachers. Hourly wages for preschool teachers in schools only, kindergarten teachers, and elementary school teachers were calculated by dividing the annual salary by 40 hours per week, 10 months per year, in order to take into account standard school schedules. All other occupations assume 40 hours per week, 12 months per year.

National Earnings by Occupation

▶ **THE MOST RECENT DATA COMPILED BY THE** Occupational Employment Statistics attest to the low wages of early educators as well as earnings disparities across early childhood settings and in comparison to other teaching jobs and occupations (see Figure 3.1).

Nationwide, child care worker wages saw the most change between 2015 and 2017, with an almost 7-percent increase, adjusted for inflation; yet this is only an increase of \$0.67 to the median hourly wage, from \$10.05 in 2015 (in 2017 dollars) to \$10.72 in 2017, or about \$1,390 on a full-time, full-year schedule (see Figure 3.2).⁴²

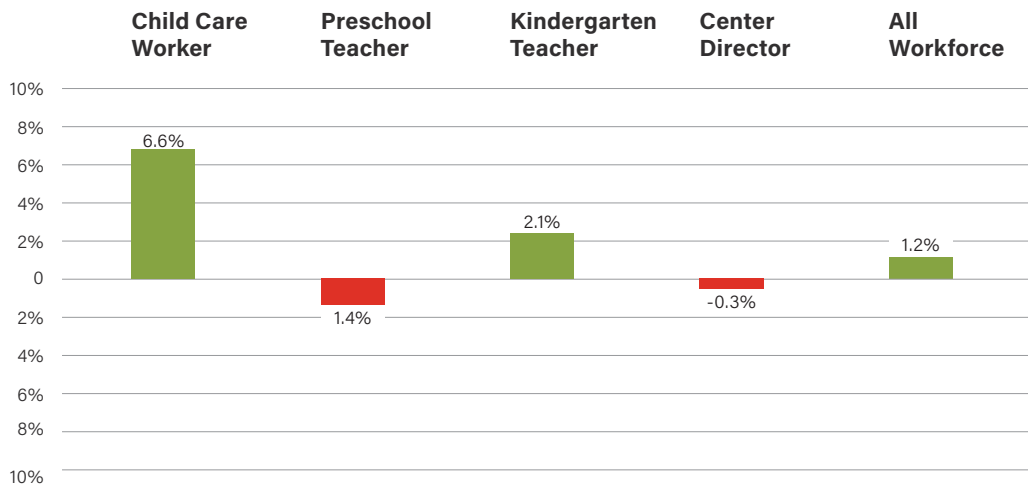
Notwithstanding recent improvements, child care workers remain nearly at the bottom percentile (second), when all occupations are ranked by annual earnings, the same as reported in the 2016 *Index* (see Figure 3.3). Preschool teachers and directors of child care centers or preschools are also subject to low wages, particularly compared with teachers of school-age children.

Disparities in Earnings Among Early Educators

▶ **UBIQUITOUS LOW WAGES OFTEN MASK THE** uneven playing field faced by current and prospective early educators with regard to pay. Relying on the 2012 National Survey of Early Care and Education (NSECE), which provides the most recent national data available for examining detailed differences in earnings, we offer an in-depth look at wage disparity among center-based early educators with equivalent levels of educational attainment, depending on the age of children they teach and the funding and sponsorship of the program in which they are employed.⁴³ Readers should

FIGURE 3.2

Percent Change in National Median Wage by Occupation, 2015-2017



Source: Occupational Employment Statistics (OES) Survey, Bureau of Labor Statistics, Department of Labor. Retrieved from <http://stats.bls.gov/oes/>.

note that the description represents the nation as a whole, and the pattern may differ in a given community or state (see [About the Workforce, p. 17](#)).

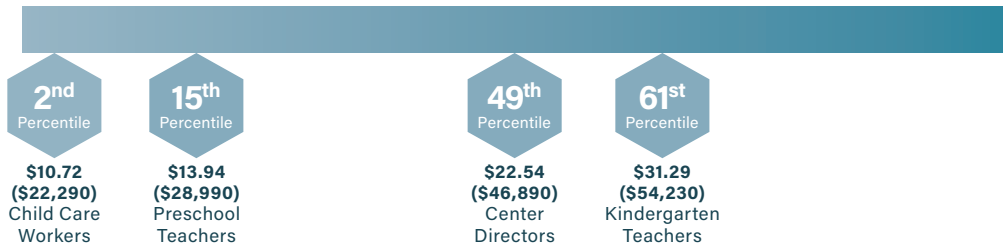
The Younger the Child, the Lower the Pay

As noted in this section (see Figures 3.1 and 3.3), the most pronounced pay differentials for teachers are between those working with children not yet in kindergarten and those in kindergarten and higher grades. However, early educators working with infants and toddlers also face a sizeable wage penalty compared to educators working only with children age three to five, not yet in kindergarten. Although the most sensitive period of children’s brain development occurs during the first three years of life⁴⁴ and teaching the youngest children stands to be of most lasting value, the current pay structure renders jobs working with infants and toddlers the least financially attractive.

At every level of educational attainment, there is a wage penalty for teachers working with infants and toddlers, compared to those working exclusively with children age three to five, with the magnitude of the difference increasing at higher levels of teacher educational attainment, as shown in Figure 3.4. For educators with no degree, the average pay penalty for working with infants and toddlers is \$1.05 less per hour (\$2,184 less annually for a full-time, full-year worker), compared with educators working with preschool-age children, and the average pay penalty for educators holding an associate degree is \$1.26 less per hour (or \$2,621 less per year for a full-time worker). For an early educator working full-time who holds a bachelor’s or higher degree, the wage penalty rises to \$4.03 less per hour (\$8,382 less per year for a full-time worker).⁴⁶

FIGURE 3.3

Selected Occupations Ranked by Annual Earnings, 2017



Source: Occupational Employment Statistics (OES) Survey, Bureau of Labor Statistics, Department of Labor. Retrieved from <http://stats.bls.gov/oes/>.

Note: All teacher estimates exclude special education teachers. Hourly wages for kindergarten and elementary, middle, and secondary school teachers were calculated by dividing the annual salary by 40 hours per week, 10 months per year, in order to take into account standard school schedules. All other occupations assume 40 hours per week, 12 months per year.

Even when controlling for educational attainment, an early educator working with infants and toddlers still earns \$2.00 per hour less than an educator who works only with children age three to five, not yet in kindergarten.⁴⁷ This difference is partially explained by program funding and sponsorship explored in the following section, Less Public Funding, Lower Earnings. Compared to services for children age three to five, not yet in kindergarten, services for infants and toddlers are more likely to rely on parent fees and less likely to receive public funding.⁴⁸

Less Public Funding, Lower Earnings

The 2012 National Survey of Early Care and Education allows us to examine wage disparities among early educators nationally, across four categories of center-based programs based on funding source and sponsorship: school-sponsored public pre-K, community-based public pre-K, Head Start, and other ECE centers.⁴⁹

At different levels of education, the wage gap varies in size by program funding and sponsorship. Teachers with bachelor's or graduate degrees can face a wage gap as high as \$6 an hour depending on their program's funding source and sponsorship,⁵⁰ compared to a maximum average wage gap of \$4 for teachers with an associate degree or no degree.⁵¹

For early educators, the relative earnings advantage of working in a particular program type varies depending on their level of educational attainment (see Figure 3.5).

Among teachers who hold a *bachelor's or higher degree*, those employed in school-sponsored public pre-K can expect to earn more on average than those employed in community-based public pre-K, Head Start, or other ECE centers.

FIGURE 3.4

Mean Hourly Wage & Predicted Wage Penalty by Age of Children & Educational Attainment, 2012

	Infant/Toddler	Age 3-5 Only	Predicted Wage Penalty by Age
Bachelor's or Graduate Degree	\$13.83	\$17.86	-\$4.03 per hour
Associate Degree	\$11.85	\$13.11	-\$1.26 per hour
No College Degree	\$9.68	\$10.73	-\$1.05 per hour

Source: CSCCE calculation using NSECE (2012) data.

Among teachers with *no degree*, school-sponsored public pre-K pays higher wages compared to all other categories of programs, and wages are also higher in Head Start compared to community-based public pre-k or other ECE centers.

Among teachers who hold an *associate degree*, Head Start offers the greatest wage advantage, on average, followed by school-sponsored public pre-K. Teachers with an associate degree who are employed in community-based public pre-K or other ECE centers earn the lowest wages.

These variations in wages by program sponsorship and funding across educational levels can represent thousands of dollars in earnings on an annual basis to individual educators

Home-Based Provider Earnings

As is the case with center-based providers, numerous factors influence the earnings of home-based providers. These include the number, ages, and family income levels of the children served. The availability and reimbursement rates of public subsidies also influence the pay for providers serving children living in low-income families.

Detailed national and state-by-state earnings data by educational level and funding source for home-based providers are not available. The 2012 National Survey of Early Care and Education, which provides this information for center-based teaching staff, reports only estimates of home-based provider annual household income (see [About the Early Childhood Workforce, p. 61](#)) and the portion of household income that derives from their work with children.

The Infant-Toddler Teacher Pay Penalty

The 2012 National Survey of Early Care and Education⁴⁵ shows that, overall, 86 percent of center-based teaching staff working with infants and toddlers earned less than \$15 an hour, compared to 67 percent of those working with only preschool-age children (three- to five-year-olds). More than one-half (60 percent) of those working with infants and toddlers earned less than \$10.10 per hour, compared to 36 percent of those working only with older children. Wage levels vary by state cost of living. In New York, for example, 91 percent of those working with infants and toddlers earned less than \$15, compared to 58 percent in California (for further information on early educator wages by state, adjusted for cost of living, using 2017 Occupational Employment Statistics data, see [Earnings by State](#), p. 43).

struggling to support themselves and their families. As such, they serve as a powerful incentive for early educators to change jobs in order to improve their economic status and remain in the field, contributing to high turnover in the field and poorer learning environments for children. It should be noted, however, that the majority of jobs are those with the lowest wages. In 2012, according to the NSECE survey, 6 percent of all early educators were employed in school-sponsored public pre-K, 21 percent in community-based public pre-K, 14 percent in Head Start, and 59 percent in other ECE centers. Seventy percent of jobs serving infants and toddlers were in other ECE centers, which paid, on average, the lowest wages to those with no degree and those with a bachelor's or higher degree.

Education Raises Pay, but Inequitably

Early educators receive a wage bump for increasing their education, whether they advance from no degree to an associate degree or from an associate to a bachelor's or higher degree. The largest wage bump accrues to those who earn at least a bachelor's degree. Unfortunately, a bachelor's degree in early childhood education has the dubious distinction of having the lowest lifetime earnings projection of all college majors.⁵² Even so, educational attainment nonetheless serves as a major pathway to improve pay for those who work with children birth to age five, not yet in kindergarten.

Nationally, the wage penalty for early educators working with infants and toddlers disproportionately affects African American teachers, 52 percent of whom work with infant/toddlers, compared to 43 percent of all center-based early educators.

FIGURE 3.5

Mean Hourly Wages by Program Funding/Sponsorship & Educational Attainment, 2012

	School-Sponsored	Head Start	Community-Based Public Pre-K	Other ECE
All Education Levels, % of ECE Workforce	6%	14%	21%	59%
Bachelor's or Graduate Degree	\$21.93	\$16.31	\$17.50	\$15.59
Associate Degree	\$13.79	\$14.70	\$10.61	\$12.21
No College Degree	\$13.61	\$10.83	\$10.01	\$9.91

Source: CSCCE calculation using NSECE (2012) data.

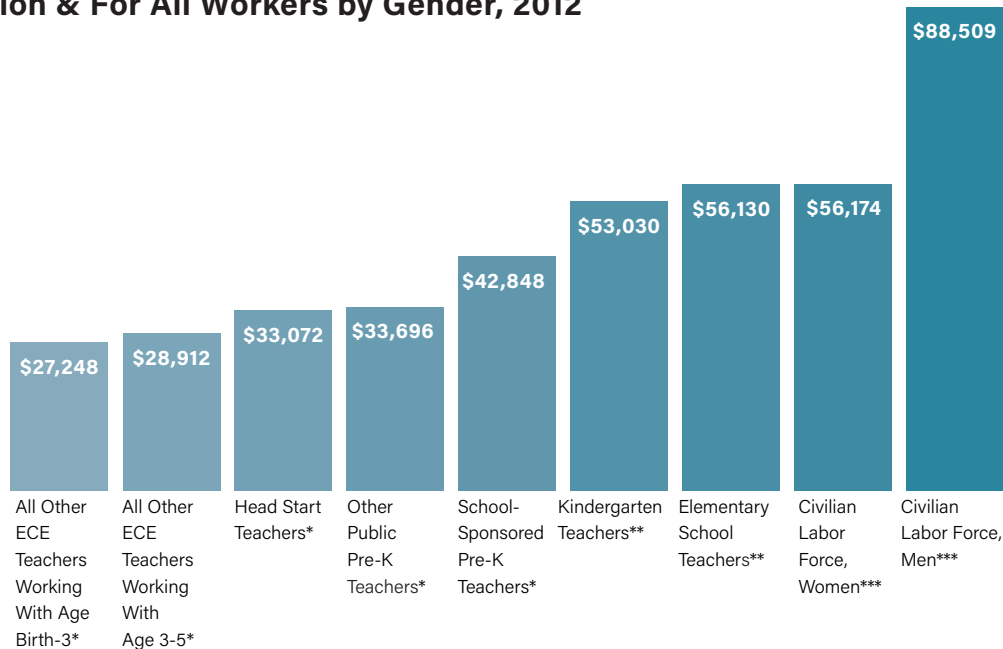
The college premium⁵³ typically refers to the percent by which hourly wages of four-year college graduates exceed those of high school graduates and is useful for comparing the relative wage bump for earning a college degree among groups of workers. In line with this approach,⁵⁴ we first compare the size of the wage premium for center-based early educators with no degree to those with a four-year degree or higher. However, within the ECE sector, there is also somewhat of a wage premium for a two-year associate degree. Our second analysis compares the size of the wage bump among early educators for advancing from no degree to an associate degree, followed by a comparison of the wage bump for advancing from an associate to a bachelor's degree or higher. At each level of educational attainment, the size of the wage bump among early educators varies by program funding and sponsorship. At different levels of educational attainment, however, different program types offer the largest bump and highest average wage, as described below.

Gender & Race Inequities in the Labor Force

Inequities persist not only in ECE, but in the labor force more generally. At every level of education, women earn less than men, and workers of color earn less than their white counterparts. In addition, women receive a smaller bump in wages than men when advancing in educational attainment.⁵⁵ The low earnings and constrained wage bump for advancing education for early educators — a workforce comprised almost exclusively of women, of which 40 percent are women of color — is reinforced by gender and racial pay inequities in the U.S. labor market as a whole (see [About the Workforce](#), p.17 and Figure 3.6).

FIGURE 3.6

Mean Annual Salary of Teachers With at Least a Bachelor's Degree by Occupation & For All Workers by Gender, 2012



* National Survey of Early Care and Education Project Team. (2013). Number and characteristics of early care and education (ECE) teachers and caregivers: Initial findings, National Survey of Early Care and Education (NSECE). OPRE Report # 2013-38. Washington, DC: Office of Planning, Research and Evaluation. Administration for Children and Families, U.S. Department of Health and Human Services. Tables 12 and 19. Retrieved from www.acf.hhs.gov/sites/default/files/opre/nsece_wf_brief_102913_0.pdf. Annual wages calculated by multiplying the hourly mean wage by a year-round, full-time hours figure of 2,080 hours.

** Occupational Employment Statistics Survey, Bureau of Labor Statistics, Department of Labor: <http://bls.gov/news.release/ocwage.htm>.

*** Current Population Survey (CPS), United States Census Bureau. Civilian labor force information was only for males and females over 25 years old.

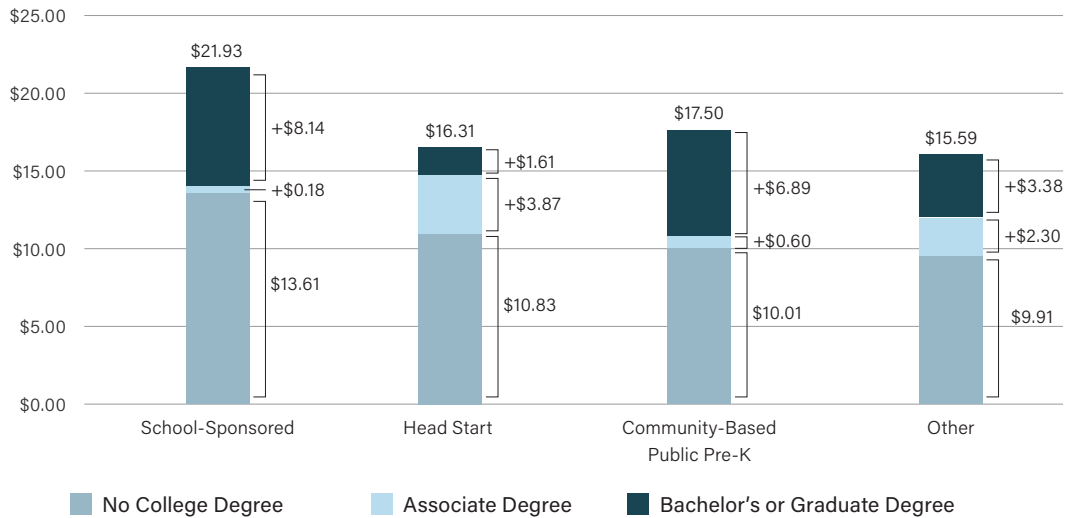
Note: Teachers in school settings typically work a 10-month year.

The Wage Bump When Advancing From No Degree to a Bachelor's Degree

- ▶ An educator working in school-sponsored pre-K with no degree who completes a four-year degree can expect their earnings, on average, to increase by \$8.24 an hour, or approximately \$17,000 per year.
- ▶ An educator in Head Start with no degree who completes a four-year degree, however, can expect less than one-half that amount (\$3.74 an hour, or approximately \$7,780 per year).
- ▶ The above disparity in higher wages accorded a four-year degree disproportionately affects African American and Hispanic early educators, who constitute 17 and 14 percent of the center-based workforce respectively, but 28 and 21 percent of those employed in Head Start.
- ▶ The wage bump for educators employed in community-based public pre-K with no degree who earn a bachelor's or higher degree is \$7.33 per hour, compared with \$5.19 for those employed in other ECE centers.

FIGURE 3.7

Mean Hourly Wage Increase for Associate & Bachelor's or Graduate Degree by Program Funding/Sponsorship



Source: CSCCE calculation using NSECE (2012) data.

Note: Figure corrected 7/3/18

The Wage Bump When Advancing From No Degree to an Associate Degree and From an Associate to a Bachelor's or Higher Degree

- ▶ An educator who advances from no degree to an associate degree will receive, on average, the highest bump in earnings from Head Start (\$3.87 per hour), compared with other settings (see Figure 3.7).
- ▶ An educator in public pre-K, whether school-sponsored or community-based, who advances from an associate degree to a bachelor's or higher degree can expect a larger wage bump than Head Start or other ECE centers. As a result, the financial incentive to work in Head Start for those with associate degrees disappears with the attainment of a four-year degree.
- ▶ The wage bump for advancing from an associate to a bachelor's degree is not statistically different in school-sponsored or community-based public pre-K. However, due to the relatively lower earnings in community-based public pre-K employment, school-sponsored public pre-K offers a wage advantage for educators who advance at this level (see Figure 3.7)
- ▶ Even those early educators receiving the largest bump for a bachelor's or higher degree earn, on average, approximately \$10,000 less per year than kindergarten teachers (see Figure 3.2).

The relatively small size of the wage bump for educational attainment, in conjunction with overall low pay, makes it difficult to recruit and retain college graduates and other pro-

Financing Professional Learning & Educational Advancement

Transforming the Financing of Early Care and Education, a 2018 consensus study issued by the National Academies of Science, Engineering, and Medicine, notes the “misalignment of compensation and educational advancement” in the current early care and education system. The report recommends that “...the ECE workforce should be provided with financial assistance to increase practitioners, knowledge, and competencies and to achieve required qualifications through higher education programs, credentialing programs, and other forms of professional learning.”⁵⁸

spective teachers to early education jobs, particularly given that the majority of college graduates in general have student loan debt.⁵⁶ Even with the somewhat higher pay earned by teachers of older children (see Figure 3.6), there remains a critical teacher shortage.⁵⁷ It should not be surprising that the relatively small wage increase for a four-year college degree in early education as compared to other occupations drives many incumbent early educators out of the field in search of jobs that offer a higher return on their educational investment. Furthermore, the insufficient and inequitable wage bump translates to unequal opportunity for the incumbent workforce seeking to further their education, with far-reaching implications for their immediate and long-term economic security. In combination, these dynamics create a shaky foundation upon which to build the skilled and stable workforce required to ensure high-quality early care and education for all young children in the years before kindergarten.

Economic Security & Well-Being

▶ **EMPLOYMENT IN EARLY CARE AND EDUCATION** has largely failed to generate sufficient wages that would allow early educators to meet their basic needs (see Table 3.3). Poor compensation poses a risk to the well-being of early educators, with consequences extending to their own families and to the children whose parents have entrusted them to their care.⁵⁹ High levels of economic insecurity for so many in the early childhood workforce — as evidenced by the utilization of public supports and economic worry detailed below — must be understood against the backdrop of the expectations we now hold for those who teach and care for young children. While the jobs remain low paying, the work of teaching young children is highly skilled.

Utilization of Federal Income Supports & Medicaid

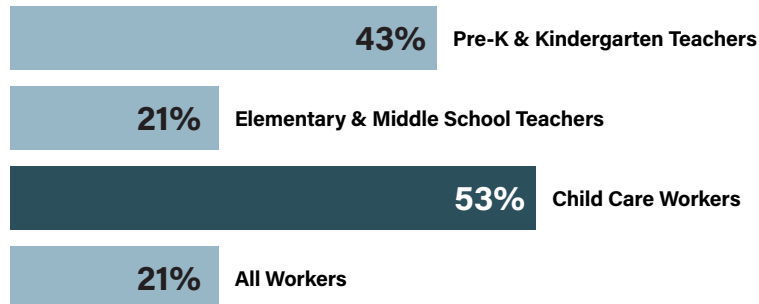
In the United States, economic distress is not restricted to those living below the poverty level, but affects many adults, including some who are employed full time. Early educators are disproportionately affected. Based on the American Community Survey, the Current Population Survey, and program administrative data, between 2014 and 2016 more than one-half (53 percent) of child care workers, compared to 21 percent of the U.S. workforce as a whole, were part of families enrolled in at least one of four public support and health care programs: the Federal Earned Income Tax Credit (EITC); Medicaid and the Children’s Health Insurance Program (CHIP); Supplemental Nutrition Assistance Program (SNAP), also known as “food stamps”; and Temporary Assistance for Needy Families (TANF).⁶⁰ Use of public income supports by child care workers and their families was also higher than for preschool and kindergarten teachers⁶¹ (43 percent) and substantially higher than for elementary and middle school teachers (21 percent) (see Figure 3.8).

The 53 percent of child care worker families enrolled in at least one of four public support programs represents a 7-percent increase in participation, compared with the analysis reported in the 2016 *Index*. This increase is largely due to an increase in enrollment in Medicaid as a result of the Affordable Care Act, which provided support to states to expand Medicaid eligibility (see [Family and Income Supports, p. 128](#), for a list of states that expanded Medicaid coverage). In contrast, child care worker family enrollment in the EITC, TANF, and SNAP were essentially unchanged (see Appendix Table 3.2).

Nearly two-thirds (60 percent) of child care workers whose families participated in public support and health care programs worked full time, and roughly one in eight (12 percent) held a bachelor’s degree. Nearly one-quarter (24 percent) of these families were single parents with children, and nearly one-third (29 percent) were married couples with children. Reflecting the systemic inequities discussed above, participation rates were higher among the families of black, Hispanic, and multiracial child care workers, compared to those who are white or Asian.⁶²

FIGURE 3.8

Household Participation Rates in Public Support and Health Care Programs by Selected Occupations & For All Workers (Annual Averages, 2014-2016)



Source: UC Berkeley Labor Center calculations using the American Community Survey 2014-2016, the Current Population Survey (CPS) from 2015 to March 2017, and program administrative data.

Economic Insecurity & Its Consequences for Educator Well-Being & Program Quality

Poor compensation comes at a price to educators' well-being and, in turn, to their families and the children entrusted to their care. Economic insecurity and the stress it fuels can undermine educators' capacity to remain focused and present and to engage in the intentional interactions that facilitate young children's learning and development.⁶³ Until recently, scant attention has been paid to how living on the economic edge negatively impacts educators' financial security, health, and practice.⁶⁴ Several recently conducted state and local studies are drawing attention to the pervasive economic insecurity affecting the dedicated and hard-working educators upon whom our nation depends.

Arkansas

When a 2017 Arkansas study surveyed more than 1,200 early educators, nearly three in five (58 percent) reported having trouble paying for basic needs, like as rent, utilities, medical expenses, and/or transportation, in the previous year. Four out of 10 teachers (40 percent) reported being food insecure, defined by running out of food due to insufficient money and cutting meal sizes or skipping meals to make food stretch. Educators caring for infants and toddlers were significantly more at risk for food insecurity (50 percent) than those caring for children in other age groups.⁶⁵

"I provide so much, but I don't get in return what I need for my family, for my two kids."

—PRESCHOOL TEACHER, ALAMEDA COUNTY, CALIFORNIA⁶⁶

Colorado

In a 2017 Colorado study of more than 2,300 lead teachers, 1,100 assistant teachers, and nearly 500 family child care providers, a sizable portion of those surveyed reported having had to use savings, borrow money from family or friends, or use credit to pay for basic necessities. In the previous year, 43 percent of teaching staff and 52 percent of family child care providers reported postponing medical treatment because of the cost, and 32 percent of teachers and 20 percent of family child care providers reported postponing their education for the same reason.⁶⁷


Alameda County, California

A 2016 study conducted by CSCCE in Alameda County, California, examined the relationship between economic worry and program quality.⁶⁸ Approximately 338 center-based teaching staff employed predominantly in publicly funded programs, including Head Start/Early Head Start and state-contracted preschool programs, were surveyed. Three out of four teaching staff surveyed had at least an associate degree, with more than 40 percent holding a bachelor's degree or higher. The majority were women of color, and one-half were parents, with 22 percent reported living with at least one child under age five. Of note, the self-sufficiency standard for a family of three in the county — defined as the amount needed to meet basic living costs without the help of public or private assistance — was approximately \$54,000 in 2016-17,⁶⁹ yet the *highest average wage* for an early educator with a bachelor's degree at this time was approximately \$45,450.⁷⁰

Three-quarters of teaching staff expressed worry about having enough money to pay monthly bills, and 70 percent worried about paying their housing costs or routine health care costs for themselves or their families. Slightly more than one-half of teaching staff (54 percent) expressed worry about having enough food for their families, and 56 worried about transportation costs to and from work.

Staff expressing significantly *less* economic worry and overall higher levels of adult well-being worked in programs rated higher on the CLASS Instructional Support domain.⁷¹ When CLASS Instructional Support ratings are higher, teaching staff are more likely to promote children's higher-order thinking skills, provide feedback, and use advanced language, which stimulates conversation and expands understanding and learning.

State Earnings by Occupation

 **THERE ARE FEW SOURCES OF CROSS-STATE WAGE DATA** for the early childhood workforce. ECE workforce data from state surveys and registries is not currently harmonized or comparable across all states (see [Workforce Data, p. 108](#)). Accordingly, we use Occupational Employment Statistics data from the U.S. Bureau of Labor Statistics to report the median hourly wage for the ECE workforce across states for the most recent year available (2017). This data source includes three main categories for the ECE workforce: "childcare workers," "preschool teachers," and "education administrators: preschool/childcare center/program."⁷² Since the OES only includes employees, not the self-employed, home-based provider/owners are excluded, although their staff are included, most likely in the "child care worker" category.

For each state, we report the median wage per ECE occupation and in comparison to other occupations in the state.⁷³ We report both actual hourly wages as well as wages adjusted for cost of living, in order to compare across states. We also compare wage changes within each state since publication of the 2016 *Index* (2015-2017). Due to the nature of the data, we cannot account for program-level differences by setting or funding stream or for individual-level differences, such as educational attainment.

In the following section, OES data about child care worker, preschool teacher, and center director wages in all 50 states point to economic insecurity for early educators as a feature of the landscape throughout the country. Presented alongside the earnings gap with other teaching jobs and occupations, changes in wages since the 2016 *Index*, and in relation to the cost of living in states, these cross-state wage data underscore the persistent and urgent need to alleviate the financial burden by raising wages for early educators, of whom we demand so much but continue to offer so little.

2017 Median Hourly Wages by Occupation

Child care workers make up the majority of the ECE workforce in most states (see Appendix Table 3.1), and across states, median wages for child care workers are lower than those in other early childhood occupations as well as overall median wages for all occupations; yet state context matters, and wages by occupation can vary substantially, depending on the state (see Figure 3.9). In 2017, median hourly wages for child care workers ranged from \$8.84 in Mississippi to \$14.33 in the District of Columbia, but in nearly half of the states (24), the median wage for child care workers was less than \$10 per hour (see Table 3.2 for data for all states).

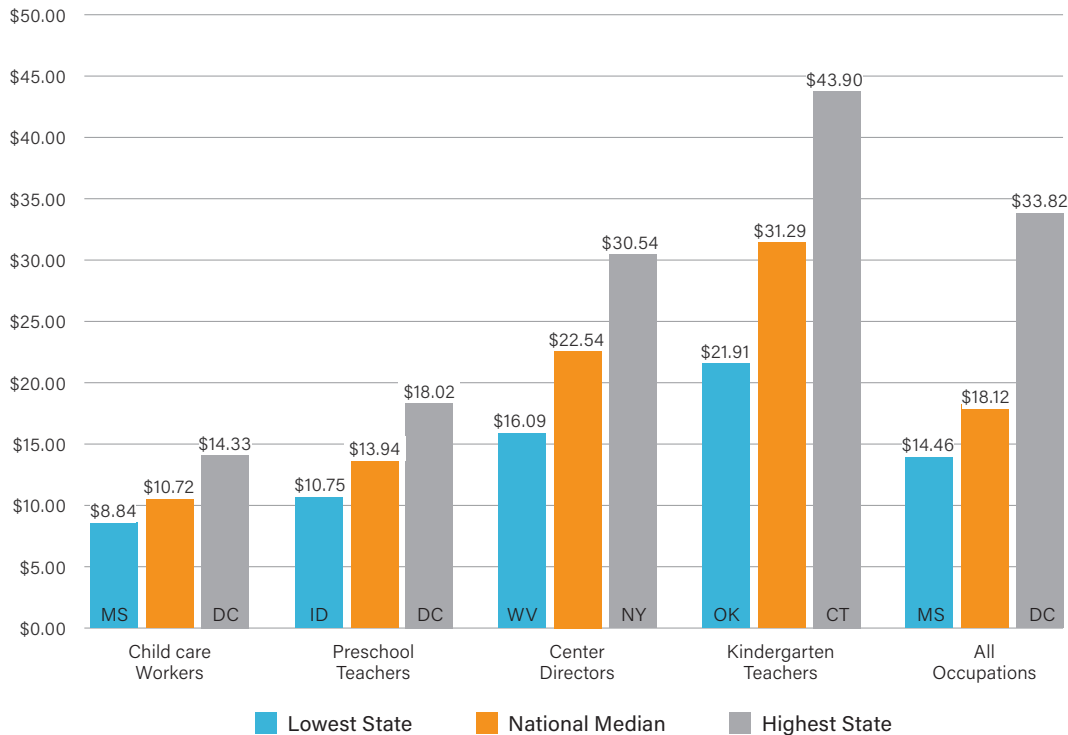
In *all* states, child care workers earned less than two-thirds of the median wage for all occupations in the state — a common threshold classifying work as “low wage” (see Table 3.2).⁷⁴ Not surprisingly, in only five states does the median child care worker wage meet the threshold for a living wage for a single adult (see Table 3.3).⁷⁵ The median child care worker wage does not meet the living wage threshold for a single adult with one child in *any* state.

Preschool teachers — across settings, not only those in publicly funded pre-K, where earnings are higher — fare only somewhat better and usually make up a smaller proportion of the ECE workforce across states. Preschool teacher hourly wages ranged from \$10.75 in Idaho to \$18.02 in the District of Columbia in 2017 (see Figure 3.9). In only two states (Louisiana and Nebraska),⁷⁶ the median wage for preschool teachers equaled or exceeded the state median wage for all occupations, but Louisiana has one of the lowest median wages across occupations in the nation, and Nebraska has the lowest proportion of preschool teachers making up the ECE workforce (11 percent) of all other states. In four states (Alaska, the District of Columbia, Iowa, and Wisconsin), preschool teachers would be considered “low wage,” earning less than two-thirds of the median wage for all occupations in the state (see Table 3.2).

Hourly wages for both child care workers and preschool teachers are lower than for kindergarten teachers, which ranged from \$21.91 in Oklahoma to \$43.90 in Connecticut (see Figure 3.9 and see also Appendix Table 3.3 for all states). Preschool/child care center directors’ hourly wages also varied substantially by state, ranging from \$16.09 in West

FIGURE 3.9

Median Wages by Occupation & in Lowest/Highest Earning States, Not Adjusted for Cost of Living



Source: Occupational Employment Statistics (OES) Survey, Bureau of Labor Statistics, Department of Labor. Retrieved from <http://stats.bls.gov/oes/>.

Note: All teacher estimates exclude special education teachers. Hourly wages for kindergarten teachers and elementary school teachers were calculated by dividing the annual salary by 40 hours per week, 10 months per year, in order to take into account standard school schedules. All other occupations assume 40 hours per week, 12 months per year.

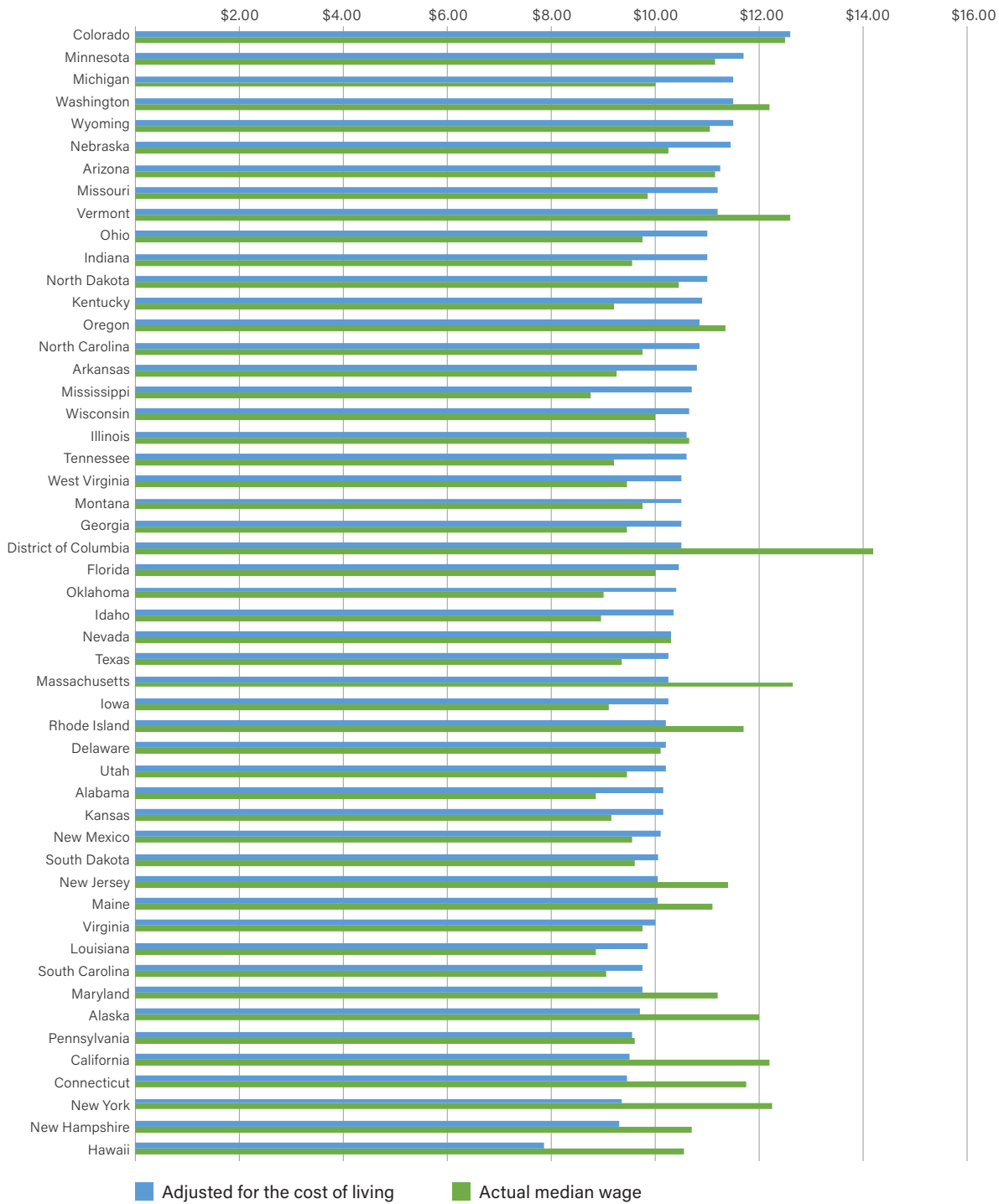
Virginia to \$30.54 in New York. In all states but two (Iowa and North Dakota), center directors earned more than the overall median wage in the state (see Table 3.2).

2017 Median Hourly Wages by Occupation, Adjusted for Cost of Living

Median wages alone don't tell us very much about early educator well-being across states because the cost of living can be very different from state to state. In a state with a low cost of living, \$10 has more purchasing power than in a state with a high cost of living. Adjusting median wages to account for the cost of living in each state reveals a very different picture in terms of which states have the highest and median wages for early childhood occupations. For child care workers, Colorado leads [...continued on page 49]

FIGURE 3.10

Child Care Worker Median Wage vs. Median Wage Adjusted for Cost of Living in Each State, 2017



Source: Occupational Employment Statistics (OES) Survey, Bureau of Labor Statistics, Department of Labor. Retrieved from <http://stats.bls.gov/oes/>.
 Note: Cost of living adjustment was performed using the Council for Community and Economic Research 2017 Cost of Living Index. Retrieved from <http://coli.org/>.

TABLE 3.1

Median Wage vs. Median Wage Adjusted for Cost of Living in Highest and Lowest States by Occupation, 2017

Child Care Workers					
Actual Median Wage			Adjusted for Cost of Living		
1	District of Columbia	\$14.33	1	Colorado	\$12.71
2	Massachusetts	\$12.74	2	Minnesota	\$11.83
3	Vermont	\$12.71	3	Michigan	\$11.62
4	Colorado	\$12.60	4	Washington	\$11.62
5	New York	\$12.38	5	Wyoming	\$11.60
47	Oklahoma	\$9.10	47	California	\$9.58
48	Idaho	\$9.04	48	Connecticut	\$9.56
49	Louisiana	\$8.95	49	New York	\$9.46
50	Alabama	\$8.93	50	New Hampshire	\$9.37
51	Mississippi	\$8.84	51	Hawaii	\$7.94

Preschool Teachers					
Actual Median Wage			Adjusted for Cost of Living		
1	District of Columbia	\$18.02	1	Nebraska	\$19.43
2	Hawaii	\$17.94	2	Louisiana	\$18.95
3	Nebraska	\$17.37	3	Kentucky	\$18.35
4	Louisiana	\$17.07	4	Arkansas	\$16.67
5	New York	\$16.64	5	Michigan	\$16.06
47	Wisconsin	\$11.64	47	Florida	\$12.23
48	Iowa	\$11.12	48	Alaska	\$12.11
49	South Carolina	\$11.08	49	Nevada	\$12.02
50	Alabama	\$10.98	50	New Hampshire	\$11.94
51	Idaho	\$10.75	51	South Carolina	\$11.93

TABLE 3.1

Median Wage vs. Median Wage Adjusted for Cost of Living in Highest and Lowest States by Occupation, 2017 *(continued)*

Preschool/Child Care Center Director						
Actual Median Wage			Adjusted for Cost of Living			
1	New York	\$30.54		1	South Dakota	\$28.02
2	Alaska	\$28.86		2	Minnesota	\$25.56
3	Rhode Island	\$27.21		3	Virginia	\$25.38
4	Massachusetts	\$27.11		4	Nebraska	\$25.18
5	South Dakota	\$26.70		5	Michigan	\$25.09
47	Mississippi	\$16.56		47	Arizona	\$18.25
48	South Carolina	\$16.46		48	West Virginia	\$17.94
49	Alabama	\$16.36		49	South Carolina	\$17.72
50	West Virginia	\$16.09		50	Hawaii	\$17.38

Note: DC not available

Kindergarten Teachers						
Actual Median Wage			Adjusted for Cost of Living			
1	Connecticut	\$43.90		1	Virginia	\$37.90
2	Massachusetts	\$41.24		2	Oregon	\$37.13
3	New York	\$41.19		3	Michigan	\$36.91
4	Alaska	\$40.48		4	Kentucky	\$36.86
5	Oregon	\$38.80		5	Nebraska	\$36.31
47	Arizona	\$24.83		47	Oklahoma	\$25.33
48	Mississippi	\$24.83		48	Arizona	\$25.10
49	Utah	\$23.23		49	Utah	\$25.04
50	South Dakota	\$22.84		50	South Dakota	\$23.97
51	Oklahoma	\$21.91		51	Hawaii	\$19.55

Source: Occupational Employment Statistics (OES) Survey, Bureau of Labor Statistics, Department of Labor. Retrieved from <http://stats.bls.gov/oes/>.

Note: Cost of living adjustment was performed using the Council for Community and Economic Research 2017 Cost of Living Index. Retrieved from <http://coli.org/>.

the way with an adjusted \$12.71, and Hawaii is lowest with an adjusted \$7.94 (as an illustration, see Figure 3.10). Similarly, for preschool teachers, Nebraska enters the lead with an adjusted \$19.43, and South Carolina falls last with an adjusted \$11.93 (see Table 3.1, for all occupations). When kindergarten teacher wages are adjusted for the cost of living, Virginia leads with an adjusted \$37.90 hourly wage, and Hawaii is last with an adjusted \$19.55. For directors, South Dakota comes in first with a \$28.02 hourly wage, and Hawaii is again last with a \$17.38 hourly wage.

Trends in Average Hourly Wages by Occupation: 2015–2017

Child Care Workers: Trends in Hourly Wages

The period between 2010–2015 saw little progress and much regression for child care worker earnings: only 13 states had small real (adjusted for inflation) increases in the wages of child care workers, and in most states, earnings decreased.⁷⁷ Over the past two years (2015–2017), however, the situation has improved: 33 states saw increases in child care worker wages after adjusting for inflation. In some cases, the increase was substantial: the District of Columbia and Rhode Island had increases of more than 20 percent, and a further four states had increases of between 10 and 15 percent (Arizona, Hawaii, North Dakota, Vermont) (see Figure 3.4). Nevertheless, these increases translate into small raises due to the low wages of child care workers. Nationwide, child care worker wages increased almost 7 percent, adjusted for inflation, yet this is only an increase of \$0.67 per hour, from \$10.05 in 2015 (in 2017 dollars) to \$10.72 in 2017 (see Figure 3.3).⁷⁸

Child Care Worker Wages: Impact of Minimum Wage Legislation

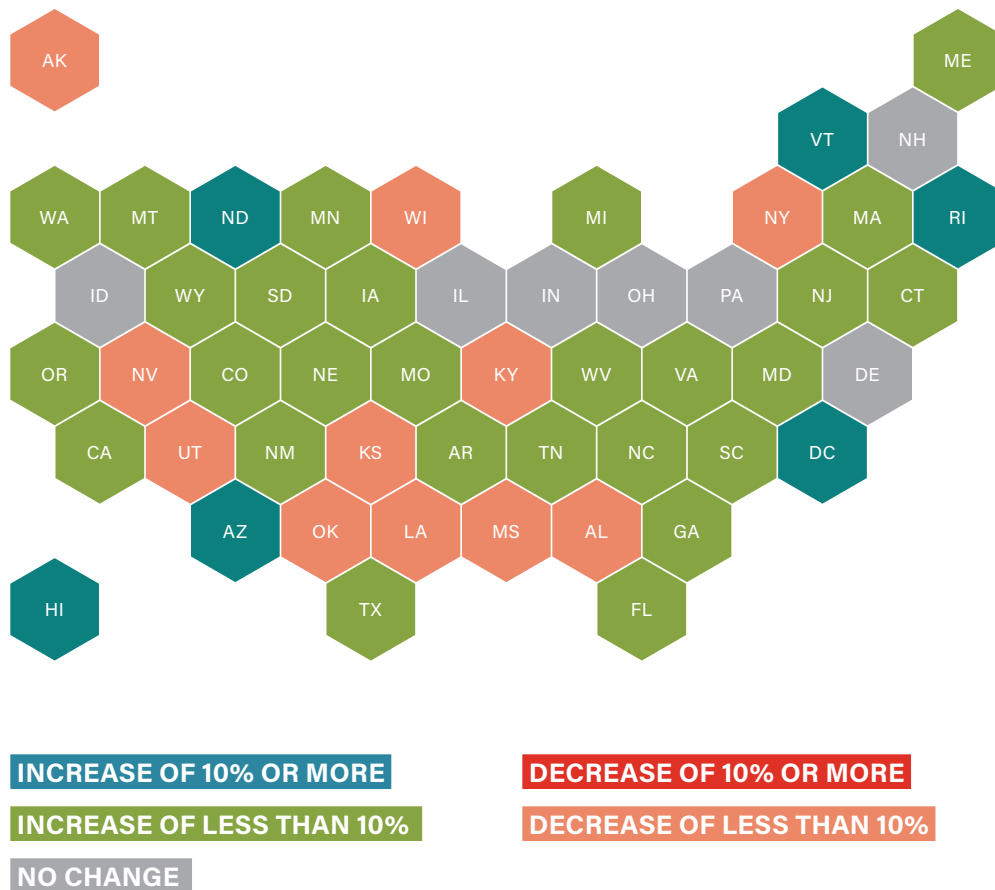
While many variables affect wages in a particular location, there is some evidence that recent minimum wage changes have contributed to this increase in child care worker wages (see Figure 3.12). Of the 33 states with inflation-adjusted increases in child care worker wages between May 2015 and May 2017, 23 states (70 percent) also had increases in the minimum wage implemented during this time (see Table 3.4 for an overview of minimum wage changes). Together, these 23 states with statewide minimum wage increases represent more than half of the national child care worker population, based on the employee population represented in OES data. Only three states with statewide minimum wage increases during May 2015 to May 2017 did not see an inflation-adjusted increase in child care worker wages: Alaska, New York, and Ohio.

On average, states with no minimum wage increase during this time period saw an increase of less than 1 percent in child care worker wages, compared with an average 6-percent increase among states that did have a minimum wage increase during this time period. Although other factors may have also played a role in these wage increases for early educators, additional evidence from the broader labor market suggests that wage increases for low-wage workers have been strongest in minimum-wage states in recent years.⁷⁹

Eleven states had minimum wage increases of \$1 per hour or more (or an additional \$2,080 per year for full-time work), and eight states had increases of \$1.50 per hour or more (or an additional \$3,120 per year of full-time work). While these increases are not enough to bring early educator pay in line with that of teachers of older children, they

FIGURE 3.11

State Map of Percent Change in Child Care Worker Median Wage, 2015-2017



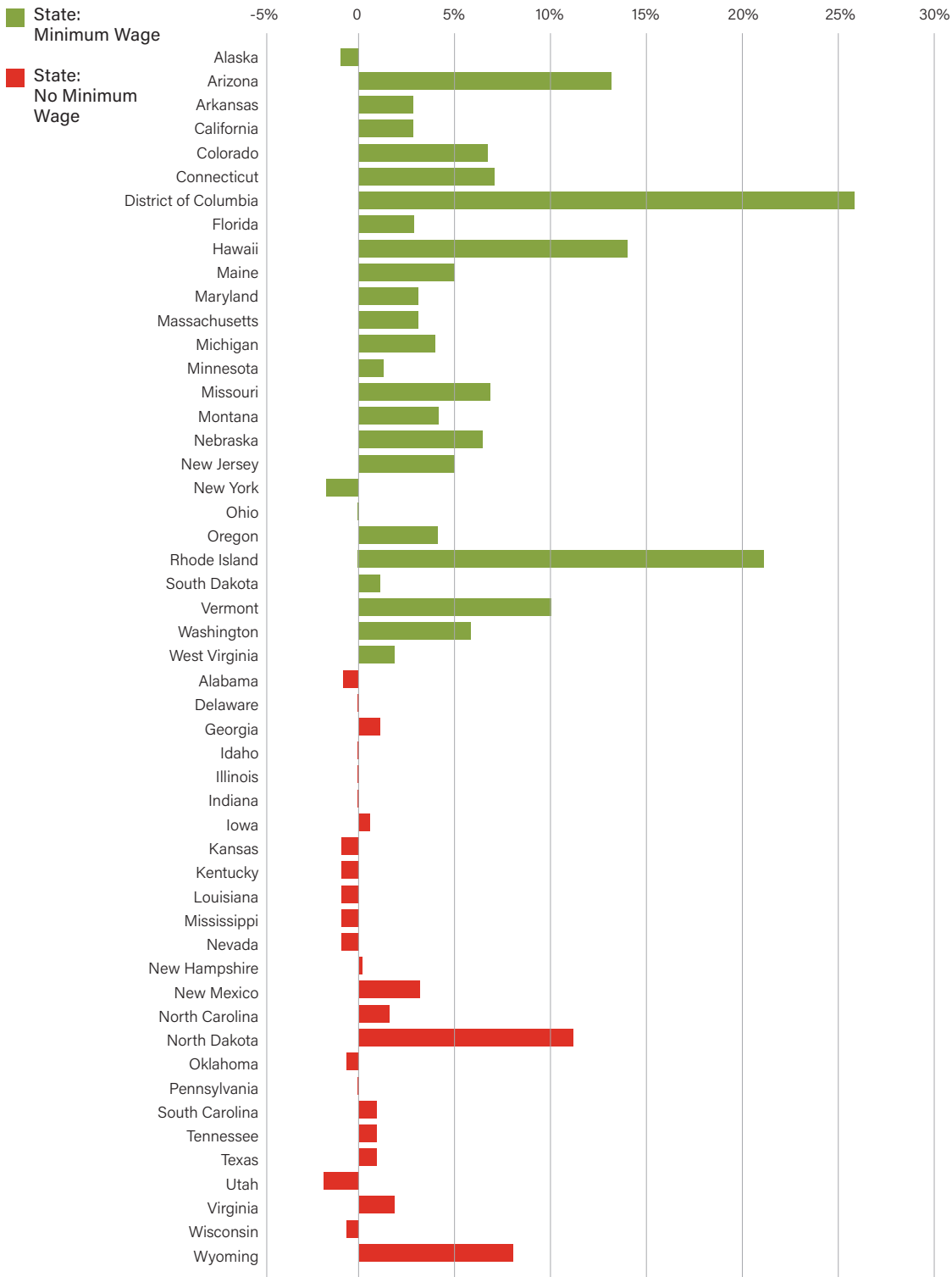
are an important step forward. These are ongoing, dependable raises and, in many cases, are larger amounts than what is provided via ECE-specific financial relief measures, such as stipends or tax credits (see [Compensation and Financial Relief Strategies, p. 93](#)). However, it can be a challenge for funding-strapped providers to meet the costs of these increased wages without raising prices for parents, which is why it is imperative that increased public funding accompanies mandated wage increases (see [Family and Income Supports, p. 128](#)).

Several states, such as California, have also had local minimum wage increases in addition to their statewide minimum wage increases.⁸⁰ Often, these local ordinances occur in populous cities or counties and, therefore, might have more of an impact on the state-level median wage than their small geographical area might suggest.

Further minimum wage increases have taken effect since May 2017 that are not reflected in these data, such as July 2017 increases in the District of *[...continued on page 52]*

FIGURE 3.12

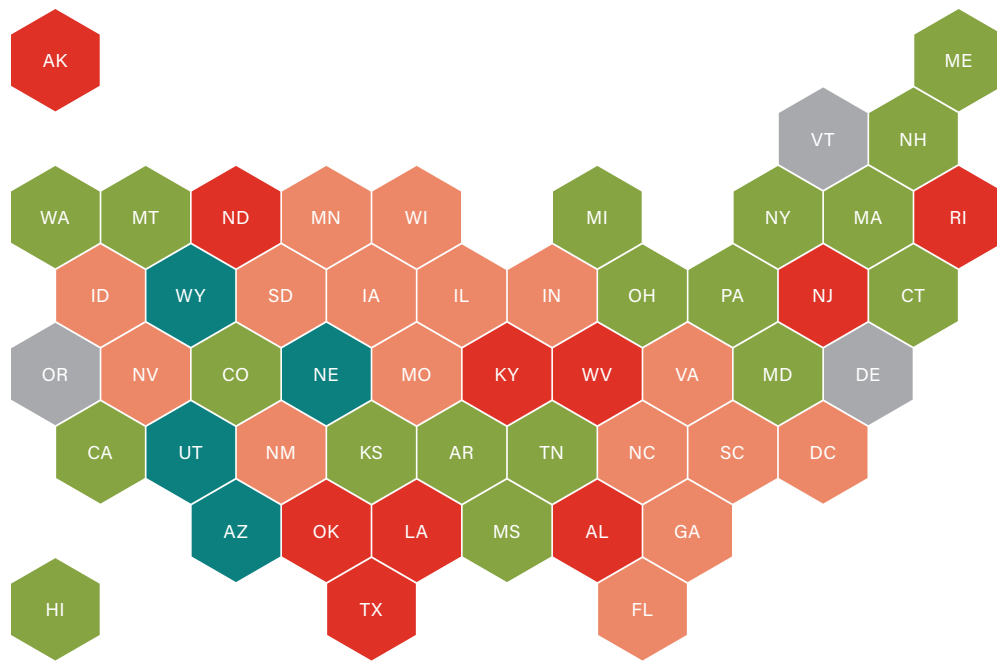
States With Minimum Wage Increases & Percentage Change in Child Care Worker Median Wage, 2015-2017



Note: Figure 3.12 corrected 7/3/2018

FIGURE 3.13

State Map of Percent Change in Preschool Teacher Median Wage, 2015-2017



INCREASE OF 10% OR MORE

DECREASE OF 10% OR MORE

INCREASE OF LESS THAN 10%

DECREASE OF LESS THAN 10%

NO CHANGE

Columbia, Oregon, and Maryland; December 2017 increases in New York; and several additional increases at the beginning of 2018, suggesting that further increases should be seen in child care worker wages in future data years (see Table 3.5 for minimum wage increases that have occurred since the period of analysis).

Preschool Teachers: Trends in Hourly Wages

In contrast to child care worker wages, the wages of preschool teachers increased across a majority of states between 2010-2015,⁸¹ but between 2015-2017, more than half of states saw a *decrease* in preschool teacher wages when adjusted for inflation. In several cases, these decreases were substantial: in 10 states (Alabama, Alaska, Louisiana, Kentucky, New Jersey, North Dakota, Oklahoma, Rhode Island, Texas, and West Virginia), wages decreased by at least 10 percent. Only in one state (Arizona) was there an increase of 15 percent or more, but preschool teacher wages in Arizona are low: at \$13.42 in 2017, the median wage is still just under the national median preschool teacher wage of \$13.94.

TABLE 3.2 Median Wages by Occupation & State, 2017

State	Median Hourly Wage				Child Care Worker Median Wage as % of State Median	Preschool Teacher Median Wage as % of State Median	Center Director Median Wage as % of State Median
	Child Care Worker	Preschool Teacher	Center Director	All Occupations			
NATIONAL	\$10.72	\$13.94	\$22.54	\$18.12	59%	77%	124%
Alabama	\$8.93	\$10.98	\$16.36	\$15.77	57%	70%	104%
Alaska	\$11.99	\$14.82	\$28.86	\$22.86	52%	65%	126%
Arizona	\$11.24	\$13.42	\$18.05	\$17.44	64%	77%	103%
Arkansas	\$9.32	\$14.25	\$19.94	\$14.82	63%	96%	135%
California	\$12.29	\$16.19	\$23.91	\$19.70	62%	82%	121%
Colorado	\$12.60	\$13.88	\$22.73	\$19.66	64%	71%	116%
Connecticut	\$11.87	\$16.58	\$24.71	\$22.05	54%	75%	112%
Delaware	\$10.21	\$12.54	\$24.44	\$18.68	55%	67%	131%
District of Columbia	\$14.33	\$18.02	Not available	\$33.82	42%	53%	Not available
Florida	\$10.09	\$11.70	\$22.89	\$16.07	63%	73%	142%
Georgia	\$9.53	\$13.42	\$19.07	\$16.85	57%	80%	113%
Hawaii	\$10.64	\$17.94	\$23.29	\$20.02	53%	90%	116%
Idaho	\$9.04	\$10.75	\$17.96	\$15.99	57%	67%	112%
Illinois	\$10.77	\$13.64	\$24.02	\$18.69	58%	73%	129%
Indiana	\$9.62	\$11.65	\$18.99	\$16.63	58%	70%	114%
Iowa	\$9.20	\$11.12	\$17.05	\$17.27	53%	64%	99%
Kansas	\$9.25	\$12.94	\$19.50	\$16.90	55%	77%	115%
Kentucky	\$9.28	\$15.49	\$20.81	\$16.25	57%	95%	128%
Louisiana	\$8.95	\$17.07	\$19.20	\$15.62	57%	109%	123%
Maine	\$11.18	\$14.92	\$22.59	\$17.41	64%	86%	130%
Maryland	\$11.29	\$14.16	\$22.25	\$21.08	54%	67%	106%
Massachusetts	\$12.74	\$15.71	\$27.11	\$22.81	56%	69%	119%
Michigan	\$10.09	\$13.94	\$21.78	\$17.62	57%	79%	124%
Minnesota	\$11.27	\$14.93	\$24.36	\$19.84	57%	75%	123%
Mississippi	\$8.84	\$13.14	\$16.56	\$14.46	61%	91%	115%

TABLE 3.2 Median Wages by Occupation & State, 2017 *(continued)*

State	Median Hourly Wage				Child Care Worker Median Wage as % of State Median	Preschool Teacher Median Wage as % of State Median	Center Director Median Wage as % of State Median
	Child Care Worker	Preschool Teacher	Center Director	All Occupations			
Missouri	\$9.96	\$12.03	\$20.69	\$16.85	59%	71%	123%
Montana	\$9.84	\$13.90	\$18.30	\$16.27	60%	85%	112%
Nebraska	\$10.33	\$17.37	\$22.51	\$17.37	59%	100%	130%
Nevada	\$10.39	\$12.01	\$21.47	\$16.79	62%	72%	128%
New Hampshire	\$10.79	\$13.75	\$21.56	\$18.70	58%	74%	115%
New Jersey	\$11.51	\$15.57	\$26.27	\$20.43	56%	76%	129%
New Mexico	\$9.66	\$12.89	\$19.87	\$16.08	60%	80%	124%
New York	\$12.38	\$16.64	\$30.54	\$21.00	59%	79%	145%
North Carolina	\$9.86	\$12.44	\$20.97	\$16.71	59%	74%	125%
North Dakota	\$10.56	\$13.58	\$18.96	\$19.25	55%	71%	98%
Ohio	\$9.86	\$11.80	\$18.60	\$17.55	56%	67%	106%
Oklahoma	\$9.10	\$13.86	\$18.04	\$16.17	56%	86%	112%
Oregon	\$11.45	\$13.70	\$22.12	\$18.67	61%	73%	118%
Pennsylvania	\$9.71	\$12.99	\$20.82	\$18.05	54%	72%	115%
Rhode Island	\$11.82	\$14.57	\$27.21	\$19.45	61%	75%	140%
South Carolina	\$9.15	\$11.08	\$16.46	\$15.76	58%	70%	104%
South Dakota	\$9.68	\$13.84	\$26.70	\$15.55	62%	89%	172%
Tennessee	\$9.28	\$12.30	\$20.54	\$16.28	57%	76%	126%
Texas	\$9.46	\$13.10	\$20.57	\$17.39	54%	75%	118%
Utah	\$9.55	\$12.78	\$18.44	\$17.14	56%	75%	108%
Vermont	\$12.71	\$14.57	\$22.14	\$18.57	68%	78%	119%
Virginia	\$9.82	\$15.59	\$24.90	\$19.13	51%	81%	130%
Washington	\$12.32	\$14.69	\$22.17	\$21.36	58%	69%	104%
West Virginia	\$9.52	\$12.67	\$16.09	\$15.16	63%	84%	106%
Wisconsin	\$10.03	\$11.64	\$19.53	\$17.81	56%	65%	110%
Wyoming	\$11.14	\$14.33	\$23.75	\$18.81	59%	76%	126%

Source: Occupational Employment Statistics (OES) Survey, Bureau of Labor Statistics, Department of Labor. Retrieved from <http://stats.bls.gov/oes/>.

TABLE 3.3 Child Care Worker Wages Compared to Living Wage by State, 2017

	Median Hourly Wage	Living Wage for 1 Adult	Median Wage as % of Living Wage for 1 Adult	Living Wage for 1 Adult & 1 Child	Median wage as % of Living Wage for 1 Adult & 1 Child
Alabama	\$8.93	\$11.14	80%	\$22.23	40%
Alaska	\$11.99	\$12.48	96%	\$27.34	44%
Arizona	\$11.24	\$11.22	100%	\$24.43	46%
Arkansas	\$9.32	\$10.38	90%	\$21.71	43%
California	\$12.29	\$14.01	88%	\$29.68	41%
Colorado	\$12.60	\$12.47	101%	\$27.23	46%
Connecticut	\$11.87	\$12.88	92%	\$28.78	41%
Delaware	\$10.21	\$12.44	82%	\$26.11	39%
District of Columbia	\$14.33	\$17.11	84%	\$30.11	48%
Florida	\$10.09	\$11.75	86%	\$25.11	40%
Georgia	\$9.53	\$11.93	80%	\$24.00	40%
Hawaii	\$10.64	\$15.39	69%	\$27.18	39%
Idaho	\$9.04	\$10.64	85%	\$23.57	38%
Illinois	\$10.77	\$12.50	86%	\$26.22	41%
Indiana	\$9.62	\$10.70	90%	\$22.66	42%
Iowa	\$9.20	\$10.53	87%	\$23.23	40%
Kansas	\$9.25	\$10.69	87%	\$23.29	40%
Kentucky	\$9.28	\$10.49	88%	\$22.66	41%
Louisiana	\$8.95	\$10.91	82%	\$23.43	38%
Maine	\$11.18	\$11.60	96%	\$24.21	46%
Maryland	\$11.29	\$14.62	77%	\$29.41	38%
Massachusetts	\$12.74	\$13.39	95%	\$29.38	43%
Michigan	\$10.09	\$10.87	93%	\$23.12	44%
Minnesota	\$11.27	\$11.53	98%	\$25.62	44%
Mississippi	\$8.84	\$10.86	81%	\$21.29	42%
Missouri	\$9.96	\$10.76	93%	\$23.45	42%

TABLE 3.3 Child Care Worker Wages Compared to Living Wage by State, 2017
(continued)

	Median Hourly Wage	Living Wage for 1 Adult	Median Wage as % of Living Wage for 1 Adult	Living Wage for 1 Adult & 1 Child	Median wage as % of Living Wage for 1 Adult & 1 Child
Montana	\$9.84	\$10.95	90%	\$24.28	41%
Nebraska	\$10.33	\$10.60	97%	\$23.64	44%
Nevada	\$10.39	\$10.94	95%	\$24.59	42%
New Hampshire	\$10.79	\$12.01	90%	\$25.67	42%
New Jersey	\$11.51	\$13.72	84%	\$28.56	40%
New Mexico	\$9.66	\$10.98	88%	\$24.63	39%
New York	\$12.38	\$14.42	86%	\$29.71	42%
North Carolina	\$9.86	\$11.36	87%	\$23.80	41%
North Dakota	\$10.56	\$10.89	97%	\$23.33	45%
Ohio	\$9.86	\$10.47	94%	\$22.61	44%
Oklahoma	\$9.10	\$10.52	87%	\$22.98	40%
Oregon	\$11.45	\$12.48	92%	\$25.49	45%
Pennsylvania	\$9.71	\$11.11	87%	\$23.55	41%
Rhode Island	\$11.82	\$12.10	98%	\$26.18	45%
South Carolina	\$9.15	\$11.17	82%	\$22.63	40%
South Dakota	\$9.68	\$10.03	97%	\$21.77	44%
Tennessee	\$9.28	\$10.44	89%	\$21.92	42%
Texas	\$9.46	\$11.03	86%	\$23.23	41%
Utah	\$9.55	\$11.22	85%	\$23.63	40%
Vermont	\$12.71	\$12.32	103%	\$25.92	49%
Virginia	\$9.82	\$13.86	71%	\$27.98	35%
Washington	\$12.32	\$12.28	100%	\$26.53	46%
West Virginia	\$9.52	\$10.68	89%	\$22.06	43%
Wisconsin	\$10.03	\$11.03	91%	\$24.57	41%
Wyoming	\$11.14	\$10.63	105%	\$23.63	47%

Source: Median wage: Occupational Employment Statistics (OES) Survey, Bureau of Labor Statistics, Department of Labor. Retrieved from <http://stats.bls.gov/oes/>. Living wage: Massachusetts Institute of Technology (MIT) Living Wage Calculator: <http://livingwage.mit.edu/>.

TABLE 3.4 Minimum Wage Increases by State, Effective May 2015-2017

State	Statewide Minimum Wage Increase	Minimum Wage, as of May 2015	Minimum Wage, as of May 2017	Total Minimum Wage Increase	Local Minimum Wage Increases
Alabama	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Alaska	Jan 2016 (\$1.00); Jan 2017 (\$0.05)	\$8.75	\$9.80	\$1.05	Not applicable
Arizona	Jan 2017 (\$1.95)	\$8.05	\$10.00	\$1.95	Not applicable
Arkansas	Jan 2016 (\$0.50); Jan 2017 (\$0.50)	\$7.50	\$8.50	\$1.00	Not applicable
California	Jan 2016 (\$1.00); Jan 2017 (\$0.50 for large employers)	\$9.00	\$10.50	\$1.50	July 2016: San Francisco, Los Angeles; 2017: many cities, some substantial (\$1.00-\$2.00 increases)
Colorado	Jan 2017 (\$0.99)	\$8.31	\$9.30	\$0.99	Not applicable
Connecticut	Jan 2016 (\$0.45); Jan 2017 (\$0.50)	\$9.15	\$10.10	\$0.95	Not applicable
Delaware	Not applicable	\$8.25	\$8.25	\$0.00	Not applicable
District of Columbia	July 2015 (\$1.00); July 2016 (\$1.00)	\$9.50	\$11.50	\$2.00	Not applicable
Florida	Jan 2017 (\$0.05)	\$8.05	\$8.10	\$0.05	Not applicable
Georgia	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Hawaii	Jan 2016 (\$0.75); Jan 2017 (\$0.75)	\$7.75	\$9.25	\$1.50	Not applicable
Idaho	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Illinois	Not applicable	\$8.25	\$8.25	\$0.00	July 2015: Chicago (\$1.75); July 2016: Chicago (\$0.50)
Indiana	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Iowa	Not applicable	\$7.25	\$7.25	\$0.00	Note: 2017 increases for Johnson, Linn, and Wapello counties preempted by state legislature.
Kansas	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Kentucky	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Louisiana	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Maine	Jan 2017 (\$1.50)	\$7.50	\$9.00	\$1.50	2017: Portland (\$0.58), Bangor (\$0.75)
Maryland	Jan 2016 (\$0.25); July 2016 (\$0.50)	\$8.00	\$8.75	\$0.75	Oct 2015: Prince George's County (\$1.15); Oct 2016: Prince George's County (\$1.20)
Massachusetts	Jan 2016 (\$1.00); Jan 2017 (\$1.00)	\$9.00	\$11.00	\$2.00	Not applicable
Michigan	Jan 2016 (\$0.35); Jan 2017 (\$0.40)	\$8.15	\$8.90	\$0.75	Not applicable
Minnesota	Aug 2015 (\$1.00); Aug 2016 (\$0.50)	\$8.00	\$9.50	\$1.50	Not applicable
Mississippi	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Missouri	Jan 2017 (\$0.05)	\$7.65	\$7.70	\$0.05	Not applicable
Montana	Jan 2017 (\$0.10)	\$8.05	\$8.15	\$0.10	Not applicable
Nebraska	Jan 2016 (\$1.00)	\$8.00	\$9.00	\$1.00	Not applicable
Nevada	Not applicable	\$8.25	\$8.25	\$0.00	Not applicable

TABLE 3.4 Minimum Wage Increases by State, Effective May 2015-2017
(continued)

State	Statewide Minimum Wage Increase	Minimum Wage, as of May 2015	Minimum Wage, as of May 2017	Total Minimum Wage Increase	Local Minimum Wage Increases
New Hampshire	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
New Jersey	Jan 2017 (\$0.06)	\$8.38	\$8.44	\$0.06	Not applicable
New Mexico	Not applicable	\$7.50	\$7.50	\$0.00	2017: Albuquerque (\$0.05), Bernalillo County (\$0.05), and Las Cruces (\$0.80)
New York	Jan 2016 (\$0.25); Dec 2016 (\$0.70)	\$8.75	\$9.70	\$0.95	Dec 31, 2016: New York City (\$1.50 for small employers, \$2.00 for large)
North Carolina	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
North Dakota	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Ohio	Jan 2017 (\$0.05)	\$8.10	\$8.15	\$0.05	Not applicable
Oklahoma	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Oregon	July 2016 (\$0.50)	\$9.75	\$10.25	\$0.50	Not applicable
Pennsylvania	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Rhode Island	Jan 2016 (\$0.60)	\$9.00	\$9.60	\$0.60	Not applicable
South Carolina	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
South Dakota	Jan 2017 (\$0.10)	\$8.55	\$8.65	\$0.10	Not applicable
Tennessee	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Texas	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Utah	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Vermont	Jan 2016 (\$0.45); Jan 2017 (\$0.40)	\$9.15	\$10.00	\$0.85	Not applicable
Virginia	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Washington	Jan 2017 (\$1.53)	\$9.47	\$11.00	\$1.53	2016: Seattle (\$0.50-1.00 for small employers, \$1.50-2.00 for large); 2017: Seattle (\$0.50-1.00 for small employers, \$1.00-2.00 for large); Tacoma: (\$0.75)
West Virginia	Jan 2016 (\$0.75)	\$8.00	\$8.75	\$0.75	Not applicable
Wisconsin	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable
Wyoming	Not applicable	\$7.25	\$7.25	\$0.00	Not applicable

Sources: Berry, D. (2017). Minnesota Minimum-Wage Report, 2016. Minnesota Department of Labor & Industry. Retrieved from <http://www.dli.mn.gov/RS/PDF/16minwage.pdf>; City of Chicago Office of the Mayor (2018). City of Chicago Minimum Wage. Retrieved from https://www.cityofchicago.org/city/en/depts/mayor/supp_info/minimum-wage.html; Economic Policy Institute (2018). Minimum Wage Tracker. Retrieved from <https://www.epi.org/minimum-wage-tracker/>; National Employment Law Project (2016). 25 States & Localities Approved Minimum Wage Increases in 2016, More Than Any Year Since Fight for \$15 Began. Retrieved from <http://www.nelp.org/content/uploads/PR-Minimum-Wage-Increases-New-Year-2016-2017.pdf>; Fernholz, T. (2015). Where in the US the minimum wage will rise on Jan. 1—and why it matters. Quartz. Retrieved from <https://qz.com/582009/2016-is-the-year-of-the-us-minimum-wage-increase/>; Government of the District of Columbia (n.d.) District of Columbia Minimum Wage Poster. Retrieved from https://does.dc.gov/sites/default/files/dc/sites/does/page_content/attachments/Minimum%20Wage%20Poster.pdf; Seattle Office of Labor Standards (n.d.) Seattle's Minimum Wage. Retrieved from <https://www.seattle.gov/Documents/Departments/LaborStandards/OLS-MW-multiyearChart.pdf>; Stein, P. (2015). Starting today, the D.C. minimum wage jumps to \$10.50. The Washington Post. Retrieved from <https://www.washingtonpost.com/news/local/wp/2015/07/01/starting-today-the-d-c-minimum-wage-jumps-to-10-50/>; UC Berkeley Labor Center (2018). Inventory of US City and County Minimum Wage Ordinances. Retrieved from <http://laborcenter.berkeley.edu/minimum-wage-living-wage-resources/inventory-of-us-city-and-county-minimum-wage-ordinances/>.

Note: Some states do not set a minimum wage or have minimum wage legislation that has not kept pace with the federal minimum wage, and in those cases, the federal minimum wage of \$7.25 per hour applies.

TABLE 3.5 Increases to State Minimum Wages Occurring After May 2017 Through 2018

State	Minimum Wage Increases	State	Minimum Wage Increases
Alabama	Not applicable	Montana	Jan 1, 2018 (\$0.15)
Alaska	Jan 1, 2018 (\$0.04)	Nebraska	Not applicable
Arizona	Jan 1, 2018 (\$0.50)	Nevada	Not applicable
Arkansas	Not applicable	New Hampshire	Not applicable
California	Jan 1, 2018 (\$0.50)	New Jersey	Jan 1, 2018 (\$0.16)
Colorado	Jan 1, 2018 (\$0.90)	New Mexico	Not applicable
Connecticut	Not applicable	New York	Dec 31 2018 (\$0.70)
Delaware	Not applicable	North Carolina	Not applicable
District of Columbia	July 1, 2017 (\$1.00), July 1, 2018 (\$0.75)	North Dakota	Not applicable
Florida	Jan 1, 2018 (\$0.15)	Ohio	Jan 1, 2018 (\$0.15)
Georgia	Not applicable	Oklahoma	Not applicable
Hawaii	Jan 1, 2018 (\$0.75)	Oregon	July 1, 2017 (\$0.50)
Idaho	Not applicable	Pennsylvania	Not applicable
Illinois	Not applicable	Rhode Island	Jan 1, 2018 (\$0.50)
Indiana	Not applicable	South Carolina	Not applicable
Iowa	Not applicable	South Dakota	Not applicable
Kansas	Not applicable	Tennessee	Not applicable
Kentucky	Not applicable	Texas	Not applicable
Louisiana	Not applicable	Utah	Not applicable
Maine	Jan 1, 2018 (\$1.00)	Vermont	Jan 1, 2018 (\$0.50)
Maryland	July 1, 2017 (\$0.50)	Virginia	Not applicable
Massachusetts	Not applicable	Washington	Jan 1, 2018 (\$0.50)
Michigan	Jan 1, 2018 (\$0.35)	West Virginia	Not applicable
Minnesota	Jan 1, 2018 (\$0.15)	Wisconsin	Not applicable
Mississippi	Not applicable	Wyoming	Not applicable
Missouri	Jan 1, 2018 (\$0.15)		

Sources: Economic Policy Institute (2018). Minimum Wage Tracker. Retrieved from <https://www.epi.org/minimum-wage-tracker/>.

Endnotes

3. Earnings & Economic Security

- 36 National Early Care and Education Survey Project Team (2015). *National Survey of Early Care and Education (NSECE), 2010-2015*. Retrieved from <http://www.acf.hhs.gov/programs/opre/research/project/national-survey-of-early-care-and-education-nsece-2010-2014>.
- 37 Bureau of Labor Statistics, U.S. Department of Labor (2015). *Occupational Employment Statistics*. Retrieved from www.bls.gov/oes/.
- 38 U.S. Census Bureau and the U.S. Bureau of Labor Statistics. *Current Population Survey*. Retrieved from <http://www.census.gov/programs-surveys/cps.html>.
- 39 Earnings for assistants employed in home-based settings are included in these overall child care numbers.
- 40 The Occupational Employment Statistics data does not include self-employed workers. This estimate was derived from the March 2012-2017 Current Population Survey Annual Social and Economic Supplement (CPS ASEC).
- 41 The Census Bureau distinguishes between two types of self-employed home child care providers: those who are unincorporated and those who are incorporated. The overwhelming majority (95 percent) of home-based providers are unincorporated, with average hourly earnings of \$10.01. Incorporated providers report higher earnings (\$16.94 per hour) but comprise only 5 percent of all self-employed home child care providers. These updated figures point to somewhat lower earnings for home-based providers than was reported in the 2016 *Index* (\$12.44 median hourly wage for all self-employed home providers). Further data on the earnings of home-based providers from additional sources would help to illuminate typical pay for these workers and how it fluctuates over time.
- 42 Figures for 2015 were adjusted for inflation using the CPI Inflation Calculator of the Bureau of Labor Statistics. See Appendix Table 3.3 for actual and adjusted amounts for 2015. Median wages across all occupations increased by 1 percent over the same time period nationwide.
- 43 CSCCE analysis of the NSECE Workforce Provider Survey. Differences in wages among early educators by age of child served, program funding and sponsorship, and demographic characteristics of educators were examined. Unless otherwise indicated, reported differences in wages are statistically significant at $p < .05$.
- 44 Thompson, R., & Nelson, C. (2001). Developmental Science and the Media. *Early Brain Development. American Psychologist* 56 (1): 5-15. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/11242988>.
- 45 National Early Care and Education Survey Project Team (2015). *National Survey of Early Care and Education (NSECE), 2010-2015*. Retrieved from <http://www.acf.hhs.gov/programs/opre/research/project/national-survey-of-early-care-and-education-nsece-2010-2014>.
- 46 Annual wages were calculated by multiplying the hourly wage by 40 hours per week, 12 months per year.
- 47 $F(3,4349)=393.67, p < .001$.
- 48 National Academies of Sciences, Engineering, and Medicine (2018). *Transforming the Financing of Early Care and Education*. Washington, DC: The National Academies Press. Retrieved from <https://doi.org/10.17226/24984>.
- 49 These program types correspond to the NSECE auspices based on program funding source and sponsorship. The labels for each program type have been edited for clarity as follows: "school-sponsored public pre-K" refers to NSECE's *school-sponsored*; "community-based public" refers to NSECE's *public pre-K-funded, not school-sponsored or Head Start-funded*; "Head Start" refers to NSECE's *Head Start funded, not school-sponsored*; and "other ECE centers" refers to NSECE's *all other ECE*.
- 50 $F(3,1533)=27.23, p < .001$.
- 51 $F(3,809)=17.63, p < .001$.
- 52 Hershbein, B., & Kearney, M.S. (2014). *Major Decisions: What Graduates Earn Over Their Lifetimes*. Washington, DC: The Hamilton Project, Brookings Institution. Retrieved from http://www.hamiltonproject.org/papers/major_decisions_what_graduates_earn_over_their_lifetimes/.
- 53 Gould, E. (2018). *The State of American Wages*. Economic Policy Institute. Retrieved from: <https://www.epi.org/files/pdf/141575.pdf>.
- 54 Due to the available 2012 NSECE data, this analysis compares early educators with no degrees (comprised of those who were high school graduates and those who had completed some college courses) and early educators with a bachelor's or higher degree.
- 55 Gould, 2018; Gould, E., Scheider, J., & Geier, K. (2016). What is the gender pay gap and is it real? Economic Policy Institute. Retrieved from: <https://www.epi.org/publication/what-is-the-gender-pay-gap-and-is-it-real/>.
- 56 The Institute for College Access and Success (2014). *Quick Facts about Student Debt*. Retrieved from https://ticas.org/sites/default/files/pub_files/Debt_Facts_and_Sources.pdf.
- 57 Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2016). *Solving the Teacher Shortage: How to Attract and Retain Excellent Educators*. Palo Alto, CA: Learning Policy Institute. Retrieved from https://learningpolicyinstitute.org/sites/default/files/product-files/Solving_Teacher_Shortage_Attract_Retain_Educators_REPORT.pdf.
- 58 NASEM, 2018.

- 59 Jeon, L., Buettner, C.K., & Snyder, A.R. (2014). Pathways from teacher depression and child-care quality to child behavioral problems. *Journal of Consulting and Clinical Psychology, 82*, 225-235; Whitaker, R.C., Becker, B.D., Herman, A.N., & Gooze, R.A. (2013). The physical and mental health of Head Start staff: The Pennsylvania Head Start Staff Wellness Survey, 2012. *Preventing Chronic Disease, 10*(181); Groeneveld, M.G., Vermeer, H.J., van IJzendoorn, M.H., & Linting, M. (2012b). Caregivers' cortisol levels and perceived stress in home-based and center-based childcare. *Early Childhood Research Quarterly, 27*(1), 166-175. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0885200611000378>; De Schipper, E., Riksen-Walraven, J., Geurts, S., & De Weerth, C. (2009). Cortisol levels of caregivers in child care centers as related to the quality of their caregiving. *Early Childhood Research Quarterly, 24*(1), 55-63; Hamre, B., & Pianta, R. (2004). Self-reported depression in nonfamilial caregivers: Prevalence and associations with caregiver behavior in child care settings. *Early Childhood Research Quarterly, 19*(2).
- 60 This analysis was performed by the UC Berkeley Labor Center using the Current Population Survey. The sample was composed of child care workers, as defined by the U.S. Bureau of Labor Statistics, and any members of their immediate families (i.e., spouses and children). The sample was restricted to child care workers in four industries — schools, child day care services, religious organizations, and private households — to arrive at an estimated population of 842,000 child care workers. Nearly 30 percent of these workers reported that they were self-employed. As a final restriction, workers only marginally attached to the labor force were excluded; the analysis included only those child care workers who worked “year round,” defined as working at least 10 hours per week and at least 27 weeks per year. Slightly more than 63 percent — 536,000 of these 842,000 U.S. child care workers — met these criteria each year between 2014 and 2016.
- 61 It is not possible to disaggregate the occupational category “preschool and kindergarten teachers” using data from the Current Population Survey.
- 62 Hispanic and multiracial child care worker families together comprise 50 percent of child care workers living in families who participate in these programs, yet only 40 percent of the child care worker population. In contrast, white child care workers comprise 57 percent of the child care worker population, but only 47 percent of all child care workers living in families participating in public support programs. Participation rates among Asian child care workers are equal to their proportion of the child care worker population.
- 63 Institute of Medicine (IOM) & National Research Council (NRC) (2015). *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*. Washington, DC: The National Academies Press. Retrieved from <https://www.nap.edu/catalog/19401/transforming-the-workforce-for-children-birth-through-age-8-a>.
- 64 Economic Insecurity Among Early Childhood Teachers. In M. Whitebook, D. Phillips, & C. Howes. *Worthy Work, STILL Unlivable Wages: The Early Childhood Workforce 25 Years 25 years after the National Child Care Staffing Study* (pp. 41-54). Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- 65 McKelvey, L., Forsman, A., & Morrison-Ward, J. (2018). *Arkansas Workforce Study: Instructional Staff in Child Care & Early Childhood Education*. Retrieved from https://familymedicine.uams.edu/wp-content/uploads/sites/57/2018/04/Staff-Workforce-Study-Report_FINAL.pdf.
- 66 Teacher comment from Alameda County Emerging Leaders for Racial Equity Project, Fall 2017. The project is supported by the Alameda County Office of Education and the Alameda County Early Care and Education Program.
- 67 Schaack, D., & Le, V. (2017). *At the Heart of the Matter: The Compensation of Colorado's Early Educator Workforce*. Research to Practice Brief 3. Colorado Early Childhood Workforce Survey 2017. Retrieved from http://earlymilestones.org/wp-content/uploads/2017/09/Brief_3_CO_EC_Workforce_Survey.pdf.
- 68 Whitebook, M., King, E., Philipp, G., & Sakai, L. (2016). *Teachers' Voices: Work Environment Conditions That Impact Teacher Practice and Program Quality*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- 69 United Way of the Bay Area (2017). *Snapshot of Poverty: Alameda County*. Retrieved from <https://uwba.org/wp-content/uploads/2017/10/Alameda-Snapshot.pdf>.
- 70 Austin, L.J.E., Sakai, L., & Dhamija, D. (2016). *2016 Alameda County Early Care and Education Workforce Study*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley.
- 71 The Classroom Assessment Scoring System (CLASS) is an observational assessment designed to measure classroom quality in three domains: Emotional Support; Classroom Organization; and Instructional Support.
- 72 The U.S. Bureau of Labor Statistics (BLS), which collects data on all occupations in the United States, defines “childcare workers” as those who “attend to children at schools, businesses, private households, and childcare institutions” and “perform a variety of tasks, such as dressing, feeding bathing, and overseeing play.” “Preschool teachers” are defined as those who “instruct preschool children in activities designed to promote social, physical, and intellectual growth needed for primary school in [a] preschool, day care center, or other child development facility.” According to these definitions, preschool teachers are a more narrowly defined group of early educators working in school- or center-based facilities (not homes) with children before kindergarten, usually three- to four-year-olds. The child care workers category is more of a catch-all term for people who are not classified as preschool teachers but who care for and educate children in home- and center-based settings. Child care workers may work with infants and toddlers, three- and four-year-olds, and/or school-age children. Neither of these categories include the self-employed, nor do they include directors or other leadership, who are included in the “education administrators: preschool/childcare center/program” category, defined as those who “plan, direct, or coordinate the academic and nonacademic activities of preschool and childcare centers or programs.” These definitions do not adequately reflect distinctions in settings and roles among early educators, and as a result, there have been calls to revise the classifications. For more information, see: Workgroup on the Early Childhood Workforce and Professional Development (2016). Proposed Revisions to the Definitions for the 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 (OPRE Report 2016-45). Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. Retrieved from https://www.acf.hhs.gov/sites/default/files/opre/soc_white_paper_june_2014_518_508.pdf.
- 73 For teachers in school settings, such as kindergarten and elementary school teachers, we have calculated hourly wages from reported annual earnings by assuming a 10-month, rather than a 12-month year, to better reflect typical teacher work hours, see Bureau of Labor Statistics, U.S. Department of Labor (2018). *Occupational Outlook Handbook, Kindergarten and Elementary School Teachers*. Retrieved from <https://www.bls.gov/ooh/education-training-and-library/>

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- [kindergarten-and-elementary-school-teachers.htm](#). Many public school teachers work hours beyond what is stipulated in their contracts (in the evenings, over the summer), as do many early educators. Because we do not have data on how many hours per week and how many weeks per year early educators and teachers of school-age children actually work, we had to make assumptions based on typical differences in the ECE and K-12 sectors.
- 74 Organization of Economic Cooperation and Development (OECD) (2015). "Wage levels" (indicator). Retrieved from: http://www.oecd-ilibrary.org/employment/wage-levels/indicator/english_0a1c27bc-en.
- 75 A living wage is a wage calculated to meet estimated cost of living in a community or region based on typical expenses, see the Massachusetts Institute of Technology (MIT) Living Wage Calculator for more information on living wages by state: <http://livingwage.mit.edu/>.
- 76 This is not a result of early educator tax credits in those states. Tax credits are reported as income, not as wages.
- 77 Whitebook, McLean, & Austin, 2016.
- 78 Figures for 2015 were adjusted for inflation using the CPI Inflation Calculator of the Bureau of Labor Statistics. See Appendix Table 3.3 for actual and adjusted amounts for 2015. Median wages across all occupations increased by 1 percent over the same time period nationwide.
- 79 Gould, E. (2018). *Between 2013 and 2017, Wage Growth at the Bottom Was Strongest in States With Minimum Wage Increases*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/between-2013-and-2017-wage-growth-at-the-bottom-was-strongest-in-states-with-minimum-wage-increases/>.
- 80 For the latest information on local minimum wage ordinances, see UC Berkeley Labor Center (2018). *Inventory of US City and County Minimum Wage Ordinances*. Retrieved from <http://laborcenter.berkeley.edu/minimum-wage-living-wage-resources/inventory-of-us-city-and-county-minimum-wage-ordinances/>.
- 81 Whitebook, McLean, & Austin, 2016.



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