



EARLY CHILDHOOD WORKFORCE INDEX 2018

CENTER FOR THE STUDY OF CHILD CARE EMPLOYMENT
INSTITUTE FOR RESEARCH ON LABOR AND EMPLOYMENT
UNIVERSITY OF CALIFORNIA, BERKELEY





Center for the Study of Child Care Employment
Institute for Research on Labor and Employment
University of California, Berkeley

Early Childhood Workforce Index 2018

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About the Center for the Study of Child Care Employment

Established in 1999, the Center for the Study of Child Care Employment (CSCCE) is focused on achieving comprehensive public investments that enable the early childhood workforce to deliver high-quality care and education for all children. To achieve this goal, CSCCE conducts research and policy analysis about the characteristics of those who care for and educate young children and examines policy solutions aimed at improving how our nation *prepares, supports, and rewards these early educators* to ensure young children's optimal development. CSCCE provides research and expert analysis on topics that include compensation and economic insecurity among early educators, early childhood teacher preparation and access to educational opportunities, work environments, and early childhood workforce data sources and systems. CSCCE also works directly with policymakers and a range of national, state, and local organizations to assess policy proposals and provide technical assistance on implementing sound early care and education workforce policy.

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Glossary of Abbreviations

AA	Associate of Arts	MOE	Maintenance of Effort
ACA	Affordable Care Act	NASEM	National Academies of Sciences, Engineering, and Medicine
ACF	Administration for Children and Families (U.S. Department of Health and Human Services)	NIEER	National Institute for Early Education Research
BLS	Bureau of Labor Statistics	NSECE	National Survey of Early Care and Education
CCDBG	Child Care and Development Block Grant (CCDBG)	OCC	Office of Child Care (U.S. Department of Health and Human Services)
CCDF	Child Care and Development Fund	OECD	Organization of Economic Cooperation and Development
CDA	Child Development Associate® credential	OES	Occupational Employment Statistics
CDCTC	Child and Dependent Care Tax Credit	OPRE	Office of Planning, Research and Evaluation (U.S. Department of Health and Human Services)
CHIP	Children's Health Insurance Program	Pre-K	Prekindergarten
CLASP	Center for Law and Social Policy	QRIS	Quality Rating and Improvement Systems
CPI	Consumer Price Index	SEQUAL	Supporting Environmental Quality Underlying Adult Learning
CPS	Current Population Survey	SNAP	Supplemental Nutrition Assistance Program
CSCCE	Center for the Study of Child Care Employment	TANF	Temporary Assistance for Needy Families
DOL	Department of Labor	T.E.A.C.H.	Teacher Education and Compensation Helps
ECE	Early Care and Education		
EITC	Earned Income Tax Credit		
FMLA	Family and Medical Leave Act		
K-3	Kindergarten through 3 rd grade		
K-12	Kindergarten through 12 th grade		

1

EXECUTIVE SUMMARY

 **EARLY EDUCATORS' SKILLS, KNOWLEDGE, AND WELL-BEING** are inseparable from the quality of children's early learning experiences, yet our system of preparing, supporting, and rewarding early educators in the United States remains largely ineffective, inefficient, and inequitable. While a major goal of early childhood services has been to relieve poverty among children, many of these same efforts continue to generate poverty in the early care and education (ECE) workforce, who are predominantly female, ethnically and racially diverse, and often have children of their own. Inadequate levels of public financing and heavy reliance on families to cover the costs of ECE services render professional pay for early educators unattainable.

As stated in [Transforming the Financing of Early Care and Education](#), a consensus report issued by the National Academies of Science, Engineering, and Medicine in 2018: "The deficiencies in the current system are hurtful to all children and families in need of ECE options and the adults who are ECE practitioners and educators — who are themselves often in extreme economic distress."¹ Acknowledging that "for too long the nation has been making do with ECE policies and systems that were known to be broken," the report calls for a new national financing structure for early care and education. The report establishes a broad consensus among researchers, policymakers, and practitioners that ECE for children from birth to kindergarten entry should be funded as a public good, equivalent to K-12; it then provides a national cost model illustrating the steps needed to meet the reforms envisioned by the 2015 report, *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*² and makes additional recommendations to support the workforce and to provide affordable services for parents. With the National Academies' 2018 report, the conversation has finally shifted.

To date, however, most efforts to improve both access and quality have amounted to no more than tinkering around the edges. Most of the recent conversation about reform has focused on “transforming the workforce” by transforming early educators themselves via human capital development (education, training, professional development). This conversation has not focused on the root issue: the need to transform early childhood jobs and finance the wider ECE system in which early educators practice in order to improve access and quality.

In the two years since our first *Index* was released, there have been notable, but uneven, strides in improving the education and training levels of the ECE workforce. As in the past, efforts to link these improvements to policies and resources that address teachers’ economic well-being have been largely optional, selective, and temporary. They have not translated evenly to federal policies or funding priorities across programs, nor have they necessarily prompted state actions.³ Furthermore, the current system reflects gender, class, racial, and cultural inequities that exist across U.S. institutions, and it breeds inequities that directly reflect policy and resource decisions in the early childhood field. The time is long overdue to move from the question of *why* our nation must improve early childhood jobs to a focus on *how* to make it happen.

About the Early Childhood Workforce Index

 **THE 2016 INAUGURAL EDITION OF THE BIENNIAL** *Early Childhood Workforce Index* represented our first effort to establish a baseline description of early childhood employment conditions and policies on a state-by-state basis in order to improve early childhood jobs. This 2018 edition, as well as future editions of the *Index*, will focus on tracking progress and identifying trends in the states over time.

The 2018 *Index* provides an appraisal of current workforce conditions and policies across states⁴ and notes changes since 2016. It is divided into four topical chapters.

1. [About the Early Childhood Workforce](#) provides a national snapshot of characteristics of the early educator workforce across settings and discusses state-level variation.
2. [Earnings and Economic Security](#) provides national and state data on ECE workforce pay in relation to other occupations and presents new analyses of pay inequities across the field.
3. [Early Childhood Workforce Policies](#) assesses state policies in five areas: qualifications and educational supports; work environments; compensation and financial relief strategies; workforce data; and financial resources.
4. [Family and Income Support Policies](#) assesses state policies across occupations in two areas: income supports and health and well-being.

The indicators assessed in our policy-related chapters represent state-level opportunities to enhance the lives of the many children and adults affected by ECE employment conditions. For more information about data sources and *Index* methodology, see [Appendix 1: Data Sources](#).

Based on the indicators, we assign states to one of three groups for each category.

Note on Terminology

In this *Index*, we focus primarily on those who work in teaching and administrative roles serving children prior to kindergarten. We also compare the status of early educators to those teaching older children in order to highlight disparities within the birth-to-age-eight spectrum.

A wide variety of terms are used to refer to the early childhood sector and its workforce depending on the age of children served, the location of the service, auspice and funding streams, job roles, and data sources. We use “early childhood workforce” or “early educators” to encompass all those who work directly with young children for pay in early care and education settings in roles focused on teaching and caregiving. We use more specific labels, such as “Head Start teacher” or “home care provider” when we are referring to a particular type of setting. In some cases, we are limited by the labels used in a particular data source. For example, in *Earnings and Economic Security*, p. 10, we refer to “childcare workers” and “preschool teachers” because we relied on data specific to subcategories of the workforce as defined and labeled by the Standard Occupational Classification of the U.S. Department of Labor.

- ▶ Red represents **stalled**: the state has made limited or no progress.
- ▶ Yellow represents **edging forward**: the state has made partial progress.
- ▶ Green represents **making headway**: the state is taking action and advancing promising policies.

For an overview of the assessment of each state across policy areas, see Table 1.1. In each section, we also spotlight recent research or promising developments that advance new policies or improved conditions.

Highlights of Findings

About the Workforce

Every day, in homes and centers across the country, approximately two million adults, mostly women, are paid to care for and educate⁵ approximately 10 million children between birth and age five.⁶ Regardless of setting or role, this workforce is responsible for safeguarding and facilitating the development and learning of our nation’s youngest children. Yet, across almost all settings in the country, early educators are in economic distress, and available data suggests that this reality falls disproportionately on women of color, who comprise about 40 percent of this workforce, and on those working with the youngest children.⁷ Depending on state populations and early childhood policies, workforce diversity and inequities vary. While some states have current, detailed workforce data that can

What's New in the 2018 Index

This second edition of the biennial *Early Childhood Workforce Index* continues to track the status of the ECE workforce and related state policies in order to understand changes over time. We have added several new analyses and updated our policy indicators and recommendations. Highlights include:

- ▶ Earnings data for preschool/child care center directors;
- ▶ State wage data, presented in the context of cost of living;
- ▶ The role of minimum wage legislation in increasing early educator wages;
- ▶ Analyses of wage and opportunity disparities among groups of early educators based on race/ethnicity and program setting (the age of children served, funding streams); and
- ▶ Revised policy indicators and a new weighted-point framework to allow for more sophisticated assessments of *stalled*, *edging forward*, and *making headway*.

identify evidence of stratification, many states do not routinely collect sufficient data that allow for this type of analysis. To illustrate evidence of inequities, in this edition of the *Index*, we examine national patterns as well as patterns in three states with large populations.

Earnings & Economic Security

In 2018, progress toward better compensation remains limited and uneven across states and among different classifications of early educators. The most recent data compiled in the Occupational Employment Statistics from the U.S. Bureau of Labor Statistics attest to the persistent 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 1.1).

Nationwide, median wages for child care workers *increased* by 7 percent, adjusted for inflation between 2015 and 2017.⁸ Nonetheless, in *all* states in 2017 child care workers earned less than two-thirds of the median wage for all occupations in the state — a common threshold for classifying work as “low wage.”⁹ States that raised their minimum wage between 2015 and 2017 were more likely to show wage increases for child care workers than those that had not. While these increases are not enough to bring early educator pay in line with that of teachers of older children and are challenging to meet without public investment, they are an important step forward as they contribute to an increase in ongoing, dependable raises. During this same period, more than half of states saw a *decrease* in preschool teacher and center director median wages when adjusted for inflation.

Early care and education has largely failed to generate sufficient wages that would allow early educators to meet their basic needs. Several recent state studies point to the sizeable

FIGURE 1.1

Median Hourly Wages by Occupation, 2017

Child Care Worker Employees, All Settings ¹⁰	Self-Employed Home Care Providers ¹¹	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 ¹²	\$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.

numbers of early educators who report food insecurity, worry about housing, and postponement of education and medical treatment.¹³

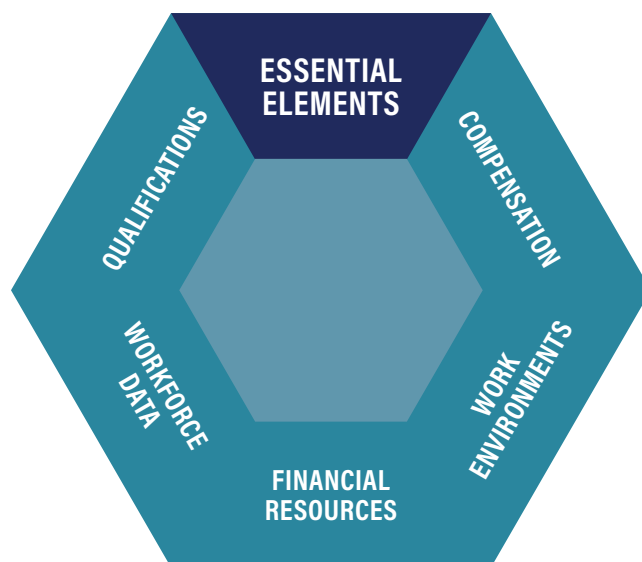
Another consequence of low pay is that the participation of child care worker families and preschool/kindergarten teacher families in public income support programs is more than double the rate for workers across all occupations. Between 2014 and 2016, more than one-half (53 percent) of child care workers, 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).¹⁴ Although not quite as high as for child care workers, use of public income supports by preschool and kindergarten teachers (43 percent) was also substantially higher than for elementary and middle school teachers (21 percent).

Ubiquitous low wages often mask the uneven playing field that current and prospective early educators face.¹⁵

- ▶ At every education level, there is a significant wage penalty for teachers working with infants and toddlers compared to those working exclusively with children age three to five, not yet in kindergarten.
- ▶ 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).
- ▶ Nationally, the wage penalty for early educators working with infants and toddlers disproportionately affects African Americans, 52 percent of whom work with infant/toddlers, compared to 43 percent of all center-based early educators.
- ▶ At every education level, there is also a significant wage penalty based on program funding source and sponsorship. The wage penalty for early educators with a bachelor's or graduate degree can be as high as \$6 an hour, depending on the type of program in which they work.

FIGURE 1.2

Five Essential Elements of Early Childhood Workforce Policy



Early Childhood Workforce Policies

Five essential elements of public policy within early childhood are addressed, state by state:

- ▶ Qualifications and educational supports;
- ▶ Work environments;
- ▶ Compensation and financial relief strategies;
- ▶ Workforce data; and
- ▶ Financial resources.

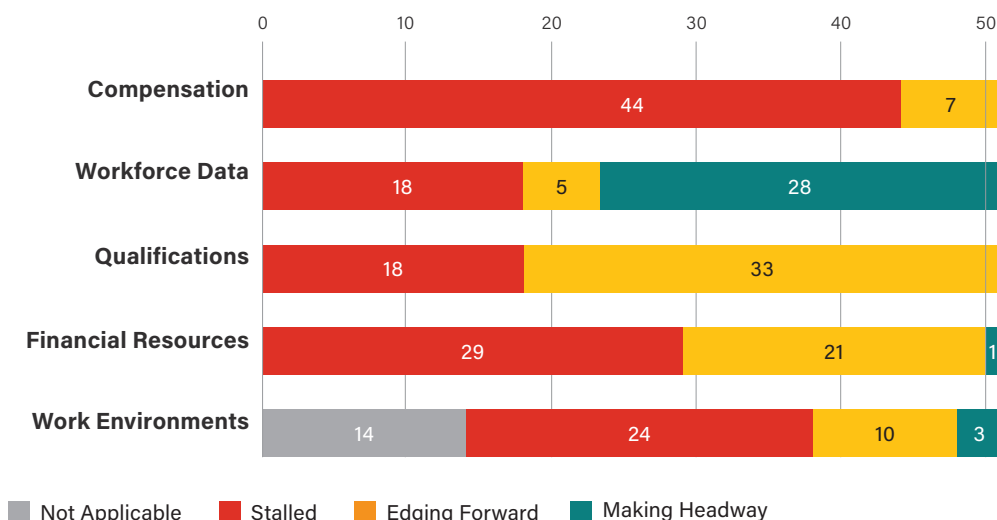
These policy areas are interrelated, and ultimately, it will be necessary to address more than one. Nonetheless, by breaking down this undertaking into five ECE workforce policy areas, states can focus on practical next steps that best reflect an individual state's current context. For each of the five elements, there are policy indicators that help states identify a pathway toward making headway for the early childhood workforce.

When considered in light of the status of earnings and economic security for early educators and the systemic inequities that exist, the appraisal of state ECE workforce policies presented in this section of the *Index* reveals a troubling state of affairs. As in 2016, notwithstanding the many significant efforts underway, the majority of states were appraised as *stalled* or *edging forward* across policy categories related to qualifications, work environments, compensation, and financial resources (see Figure 1.3). Workforce data remains the strongest area of progress, though there is still much room for improvement.

Progress toward an equitable, efficient, and effective early childhood system requires advancing preparation, workplace supports, and compensation of the workforce

FIGURE 1.3

State Assessments for Early Childhood Workforce Policies



Note: The 14 states identified as "not applicable" under the Work Environments category could not be assessed due to a lack of data in the QRIS compendium. Not all of these states lack a QRIS. For more information, see [Work Environments, p. 81](#).

simultaneously. Adequate preparation is necessary for teachers to develop the skills to provide high-quality learning experiences for children, while workplace supports are needed to ensure ongoing reflection, development, and educator well-being. Similarly, appropriate compensation and some measure of economic security are indispensable for attracting and retaining skilled educators.

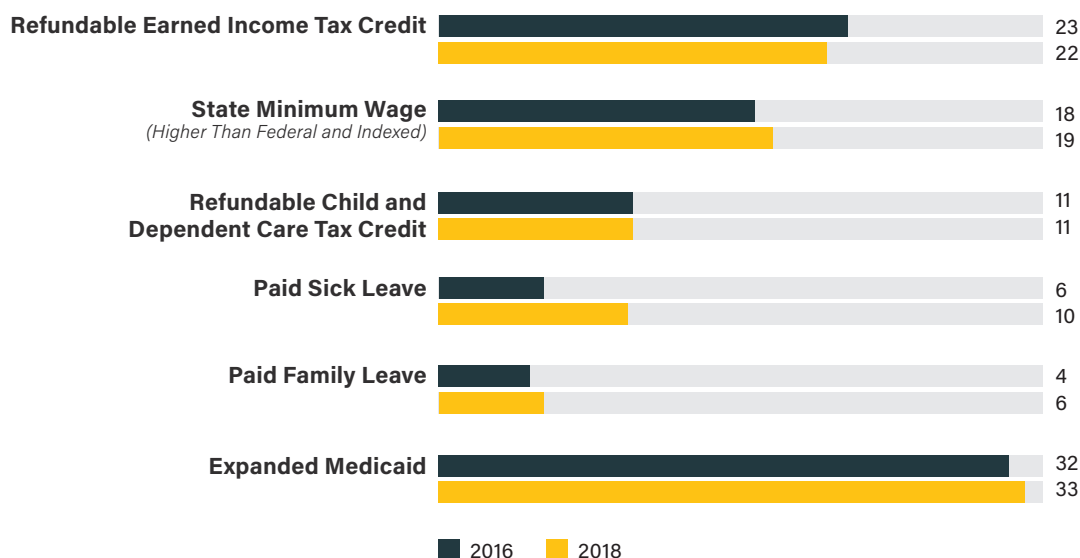
Making progress in each of these three areas additionally requires building solid foundations for pertinent policies by collecting quality, comprehensive workforce data and securing sufficient financial resources. Testing the effectiveness of policies for preparation, support, and reward requires robust data on the early childhood workforce across all settings and ages of children. Additional public funding is required to stimulate the incubation and testing of sustainable policies to resolve compensation and other issues that have gone largely unaddressed. All of these five ingredients are essential — one cannot advance without the others — but quality data and sufficient resources are fundamental.

Family & Income Supports

Economic insecurity, linked to low wages and lack of access to core services and benefits (health care, paid leave), is rampant for many families and workers in the United States, not only those who work in the early childhood field. And just as within the early childhood field, this burden falls disproportionately on women, especially women of color.

FIGURE 1.4

Number of States Meeting Family & Income Support Indicators, 2016-2018



Note: Medicaid eligibility was expanded in Virginia on June 7, 2018, and is not reflected in these figures.

A dearth of supports to ease the pressure on working families threatens the well-being of adults and children in every state. At the national level, public policies and services to support workers across occupations are currently non-existent (for example, paid family leave) or limited in their assistance (e.g., health care subsidies), compared to other industrialized nations, where worker protections and social policies like paid leave and cash-based assistance are typically available more widely. Since 2016, there have been efforts at the federal level to further roll back supports already in place. The (unsuccessful) attempt to repeal the Affordable Care Act and a shift toward allowing work requirements for Medicaid eligibility are some of the most prominent examples.

State advocates and policymakers are positioned to challenge existing efforts to reduce already minimal supports for workers and to actively implement supports beyond what is provided or allowed at the federal level. As demonstrated in the 2016 *Index*, some states have adopted or expanded programs such as tax credits, minimum wage legislation, and paid leave programs, in order to alleviate the effects of low earnings and poor job quality. Designed to benefit workers and their families across occupations, rather than the members of one field in particular, these support policies play a key role in shaping job quality and working conditions in the United States.

Since 2016, there has been some state progress in supports for workers and families, particularly with more states implementing paid sick and family leave. In general, however, the number of states with key supports for income and health and well-being has changed little since 2016 (see Figure 1.4).

Making Headway: Principles & Policy Recommendations to Guide State Actions to Improve Early Childhood Jobs

 **AT THE CENTER FOR THE STUDY OF CHILD CARE EMPLOYMENT (CSCCE),** we are committed to advancing a public system of early care and education that is equitable for children, their families, and early educators. The ECE system in the United States is not immune to structural inequalities based on gender, class, race, and language that are woven throughout our nation's institutions and culture. While early care and education has the potential to interrupt the consequences of these inequities, the system's current organization and financing reinforces disparities in earnings and opportunity among educators, poses multiple obstacles to the efforts of all educators to nurture children's optimal development and learning, and implies risks to their own well-being.

We approach our research and analysis with a sense of urgency to support the well-being of the current ECE workforce and to inform system change for the incoming and future workforce. We employ five guiding principles to assess the process and impact of our own work, as well as reforms and proposals put forth by others. Each of the principles provides a lens through which to assess current policies and practices as well as emerging initiatives (see Figure 1.5).

Amplify educators' voices, inform decision making: The vast majority of early educators are not currently represented by a professional organization or union on the job, and their voices are missing at tables where decisions are made about policies that directly impact their practice and well-being. As states advance reforms, consideration of whose voices are being heard and how to establish a process to include those who are absent in decision making is critical to building support for meaningful reform.

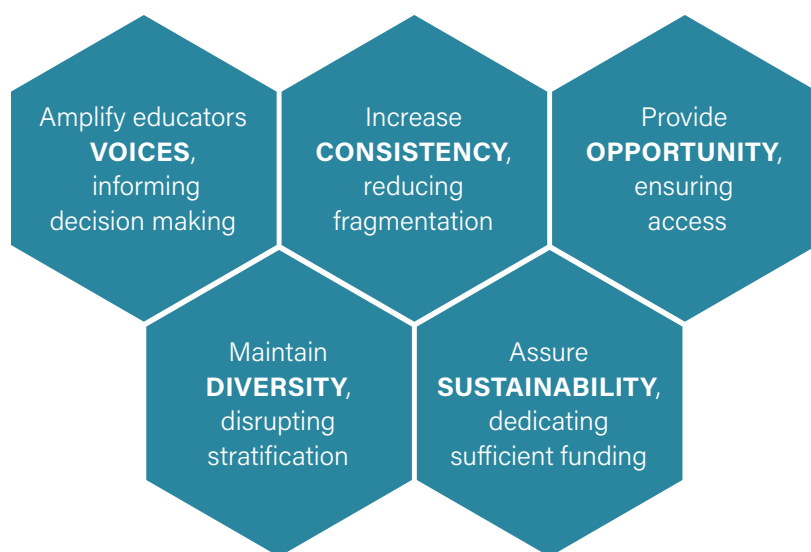
Provide opportunity, ensure access: Barriers reside *within* systems, not with the individuals who encounter them. When barriers to education are removed and resources provided, the current workforce has demonstrated success in meeting higher qualifications. As states raise expectations for educators, it is necessary to ensure that dedicated and sufficient resources are made available in order for all educators to have the opportunity to advance their skills and knowledge and pursue education.

Maintain diversity, disrupt stratification: Although the early educator workforce is racially and linguistically diverse, that diversity is not distributed equitably across positions within the field. Women of color occupy a disproportionate share of the lowest paying jobs in the field and are underrepresented in leadership roles. As states advance workforce reforms, development of intentional strategies and mechanisms to ameliorate racial and ethnic stratification will be critical to ensuring that diversity translates to equity going forward.

Increase consistency, reduce fragmentation: Greater consistency in program standards and funding is a cornerstone of a more equitable system, but current policies and proposed reforms often address only certain sectors of ECE. As states advance reforms, it is important to assess whether changes are inclusive of all early educators or, on the

FIGURE 1.5

Core Principles to Improve Early Childhood Educator Jobs



contrary, may unintentionally increase fragmentation and inequities and/or create greater complexity for programs and other service providers.

Assure sustainability, dedicate sufficient funding: Addressing the deficiencies of the current system requires a new financing structure for ECE. As stakeholders seek to improve services for children of all ages, they must break the silence on the financial costs involved in this process and promote understanding among policymakers about the gap between current funding and the additional resources required. Small ad hoc increases to public funding are not a solution. Transformative vision, and the financial resources to implement that vision, are critical to building a system that delivers on the promise of early education for all children and families.

Policy Recommendations

Transforming early childhood jobs requires transforming wider early childhood policies and infrastructure and embracing early care and education as a public good. A starting point is to ensure that our definition of quality includes appropriate compensation and supportive work environments. We must also be willing to talk about the level of public investment required to provide early educators with what they need in order to enable children to succeed, while simultaneously relieving the financial burdens shouldered by families.

For each of the five essential categories of early childhood policy included in the *Index*, we offer specific recommendations to inform state strategies, in line with our core principles.

Qualifications & Educational Supports

- ▶ Align qualification requirements with national recommendations, establish minimum requirements that reflect foundational knowledge for *all* early childhood teaching staff and program leaders, and require a bachelor's degree with ECE specialization for lead teachers and center directors, in line with what is required for teachers of older children.
- ▶ As new qualifications are enacted, simultaneously generate timelines to meet new requirements and resources to support acquisition of any education, training, and certification that may be required.
- ▶ Ensure that all members of the current workforce have opportunities and supports to acquire education and training. These supports should begin with entry-level foundational knowledge and align with a pathway based on degree and competency requirements to support attainment of associate and bachelor's degrees.
- ▶ Develop targeted opportunities and supports for members of minority racial and ethnic groups and individuals who speak English as a second language. This strategy will disrupt systemic barriers to educational attainment that extend beyond their status as early educators.

Work Environment Standards

- ▶ Develop workplace standards, such as guidance on appropriate levels of paid planning time, which are necessary for educators to engage in professional practice to support children's development and learning and to alleviate conditions that cause educator stress.
 - ▶ Use existing models, such as the [International Labor Organization Policy Guidelines](#) and the Model Work Standards for [Centers](#) and [Homes](#).
 - ▶ Engage teachers and providers as influential voices in this process.
- ▶ Revise QRIS rating criteria and other state guidelines or requirements (licensing, competencies) accordingly.
- ▶ Identify how work environment issues (and eventually standards) can be implemented in training and higher education for both teachers and ECE leadership.
- ▶ Provide financial resources and other assistance to enable programs and providers to implement standards in a reasonable period of time and sustain compliance with these standards over time.
- ▶ Regularly collect data from early educators to assess how they experience work environment standards.
- ▶ Assess worker protections and possible remedies (e.g., California's whistleblowing law) available to ECE staff to ensure enforcement of work environment standards.

Compensation & Financial Relief Strategies

- ▶ Articulate long- and short-term goals for increasing annual earnings of early educators as distinct from financial relief and educational support.
- ▶ Establish compensation standards for starting and ongoing wages, benefits, and non-contact time for professional responsibilities, including:
 - ▶ Pay scales for all teaching and auxiliary roles and education levels, using living wage/self-sufficiency standards as a minimum; and
 - ▶ For lead teachers with bachelor's degrees, regardless of setting, the compensation standard should be at least parity with K-3 teachers.
- ▶ Ensure adequate public funding is available to meet articulated compensation standards.

-
- ▶ Frame advocacy messages to clarify that financial relief initiatives are an interim strategy, not a long-term solution to achieve appropriate wages and benefits.
 - ▶ Elevate compensation as an essential component of state workforce strategies and educate policymakers and the public at large about the importance of better pay in ensuring a skilled and stable early educator workforce.

Workforce Data

- ▶ Develop and strengthen existing workforce data collection through the steps that follow.
 - ▶ Commit to and develop a plan to enact policies requiring participation in state workforce data systems by all members of the ECE workforce employed in licensed child care settings and in settings receiving public subsidies.
 - ▶ Identify potential federal (e.g., CCDF), state, and local funding sources and design advocacy strategies to secure funds for workforce data collection, management, and analysis. Prioritize workforce data system development and improvement in state CCDF plans.
 - ▶ Ensure that workforce data collection and analysis are part of early childhood governance structures and support the integration of workforce data systems with broader early childhood data, such as licensing databases, resource and referral databases, quality rating and improvement systems, early childhood health data, and K-12 data.
 - ▶ Encourage federal leaders to resolve long-standing problems in federally funded datasets and actively support implementation of the National Academies' recommendation for more cohesive workforce data collection.

Financial Resources

- ▶ Estimate the cost of advancing preparation, workplace supports, and compensation of the workforce in line with other *Early Childhood Workforce Index* recommendations for reform.
- ▶ Determine the extent of the cost gap between existing resources and what is required to accomplish reforms.
- ▶ Articulate a phase-in plan to meet reforms, identify costs associated with each phase, and commit to securing dedicated, sustainable funds to realize reforms.
- ▶ Develop an educational campaign to assist policymakers and the public in understanding what building an equitable system will cost and the benefits of this investment.

The call for greater public investment in the educational infrastructure extends beyond early care and education. In 2018, our nation has witnessed many teachers of older children across the country leverage the power of their collective voice to reverse state budget decisions that have undermined their professional status, well-being, and ability to meet children's needs. This collective action, in concert with parental support, is garnering needed public recognition of their service and the importance of greater public financing. The case for changing how our nation invests in education and values its teachers is incontrovertible as a matter of justice to the entire teaching workforce, their own families, and the children of the families they serve.

States making headway demonstrate that the potential to make progress in ECE is within our grasp. It is our intention and hope that the appraisal offered in this and future

editions of the *Index* will strengthen those efforts making headway, stimulate the incubation and testing of sustainable policies and revenue sources, and spur greater advocacy and action. To ensure that a generation from now we no longer echo a decades-long call to action will require the joining of a chorus of voices — leaders in the ECE field, economic justice advocates, K-12 colleagues, parents, and early educators themselves — to realize a system that is equitable, efficient, and effective for children, their families, and educators.

TABLE 1.1

Overview of All Policy Assessments by State

	ECE Policies					Family & Income Supports	
	Compensation	Workforce Data	Qualifications	Financial Resources	Work Environments	Income Supports	Health & Well-Being
Alabama	Stalled	Stalled	Edging Forward	Edging Forward	---	Stalled	Stalled
Alaska	Stalled	Making Headway	Edging Forward	Edging Forward	Edging Forward	Stalled	Stalled
Arizona	Stalled	Edging Forward	Edging Forward	Stalled	Stalled	Stalled	Edging Forward
Arkansas	Stalled	Making Headway	Stalled	Edging Forward	Stalled	Stalled	Stalled
California	Stalled	Stalled	Stalled	Stalled	---	Edging Forward	Making Headway
Colorado	Stalled	Making Headway	Edging Forward	Edging Forward	Edging Forward	Making Headway	Stalled
Connecticut	Stalled	Stalled	Edging Forward	Edging Forward	---	Stalled	Edging Forward
Delaware	Edging Forward	Edging Forward	Edging Forward	Stalled	Edging Forward	Stalled	Stalled
District of Columbia	Edging Forward	Making Headway	Edging Forward	Stalled	---	Edging Forward	Making headway
Florida	Stalled	Making Headway	Edging Forward	Stalled	---	Stalled	Stalled
Georgia	Edging Forward	Making Headway	Edging Forward	Edging Forward	Stalled	Stalled	Stalled
Hawaii	Stalled	Stalled	Edging Forward	Stalled	---	Stalled	Stalled
Idaho	Stalled	Making Headway	Edging Forward	Stalled	Stalled	Stalled	Stalled
Illinois	Stalled	Making Headway	Edging Forward	Stalled	Stalled	Stalled	Stalled
Indiana	Stalled	Making Headway	Edging Forward	Edging Forward	Stalled	Stalled	Stalled
Iowa	Stalled	Making Headway	Edging Forward	Stalled	Stalled	Edging Forward	Stalled
Kansas	Stalled	Making Headway	Edging Forward	Stalled	---	Stalled	Stalled
Kentucky	Stalled	Making Headway	Edging Forward	Edging Forward	Stalled	Stalled	Stalled
Louisiana	Stalled	Making Headway	Stalled	Stalled	---	Edging Forward	Stalled
Maine	Stalled	Stalled	Stalled	Edging Forward	Edging Forward	Making Headway	Stalled
Maryland	Stalled	Making Headway	Edging Forward	Stalled	Stalled	Stalled	Edging Forward
Massachusetts	Stalled	Making Headway	Stalled	Stalled	Making Headway	Stalled	Edging Forward
Michigan	Stalled	Stalled	Edging Forward	Stalled	Edging Forward	Edging Forward	Stalled
Minnesota	Stalled	Stalled	Edging Forward	Stalled	Stalled	Making Headway	Stalled
Mississippi	Stalled	Stalled	Stalled	Edging Forward	---	Stalled	Stalled
Missouri	Stalled	Stalled	Edging Forward	Stalled	---	Stalled	Stalled

TABLE 1.1

Overview of All Policy Assessments by State *(continued)*

	ECE Policies					Family & Income Supports	
	Compensation	Workforce Data	Qualifications	Financial Resources	Work Environments	Income Supports	Health & Well-Being
Montana	Stalled	Stalled	Stalled	Stalled	Stalled	Stalled	Stalled
Nebraska	Edging Forward	Making Headway	Edging Forward	Stalled	Edging Forward	Edging Forward	Stalled
Nevada	Stalled	Making Headway	Edging Forward	Stalled	Stalled	Stalled	Stalled
New Hampshire	Stalled	Stalled	Stalled	Edging Forward	Stalled	Stalled	Stalled
New Jersey	Stalled	Stalled	Stalled	Edging Forward	Stalled	Edging Forward	Making Headway
New Mexico	Edging Forward	Stalled	Edging Forward	Stalled	Stalled	Edging Forward	Stalled
New York	Stalled	Stalled	Stalled	Stalled	Making Headway	Making Headway	Edging Forward
North Carolina	Edging Forward	Making Headway	Edging Forward	Edging Forward	Stalled	Stalled	Stalled
North Dakota	Stalled	Stalled	Stalled	Stalled	Stalled	Stalled	Stalled
Ohio	Stalled	Edging Forward	Edging Forward	Edging Forward	Edging Forward	Stalled	Stalled
Oklahoma	Stalled	Making Headway	Stalled	Edging Forward	Stalled	Stalled	Stalled
Oregon	Stalled	Making Headway	Stalled	Edging Forward	Stalled	Edging Forward	Edging Forward
Pennsylvania	Stalled	Making Headway	Edging Forward	Stalled	Edging Forward	Stalled	Stalled
Rhode Island	Stalled	Making Headway	Edging Forward	Edging Forward	Stalled	Stalled	Making Headway
South Carolina	Stalled	Edging Forward	Stalled	Stalled	Stalled	Stalled	Stalled
South Dakota	Stalled	Stalled	Stalled	Stalled	---	Stalled	Stalled
Tennessee	Stalled	Stalled	Edging Forward	Edging Forward	Stalled	Stalled	Stalled
Texas	Stalled	Making Headway	Edging Forward	Stalled	Stalled	Stalled	Stalled
Utah	Stalled	Stalled	Edging Forward	Stalled	---	Stalled	Stalled
Vermont	Edging Forward	Making Headway	Edging Forward	Edging Forward	Making Headway	Making Headway	Edging Forward
Virginia	Stalled	Making Headway	Stalled	Stalled	Stalled	Stalled	Stalled
Washington	Stalled	Making Headway	Edging Forward	Making Headway	Edging Forward	Stalled	Making Headway
West Virginia	Stalled	Edging Forward	Stalled	Edging Forward	---	Stalled	Stalled
Wisconsin	Stalled	Making Headway	Edging Forward	Stalled	Edging Forward	Stalled	Stalled
Wyoming	Stalled	Making Headway	Stalled	Edging Forward	---	Stalled	Stalled

2

**ABOUT THE
EARLY
CHILDHOOD
WORKFORCE**



EVERY DAY, IN HOMES AND CENTERS ACROSS THE COUNTRY, approximately two million adults, mostly women, are paid to care for and educate¹⁶ approximately 10 million children between birth and age five.¹⁷ Regardless of setting or role, this workforce is responsible for safeguarding and facilitating the development and learning of our nation's youngest children. Yet, across almost all settings in the country, early educators are in economic distress, and extant data suggest that this financial insecurity falls disproportionately on women of color, who comprise about 40 percent of this workforce, and on those working with infants and/or toddlers.^{18,19} Concerned stakeholders seek comprehensive, reliable, and current data to better understand these circumstances in order to inform sound policy and investments. Nonetheless, painting a detailed portrait of those who are paid to provide early care and education and outlining the differences among the members of this workforce remains an exceedingly difficult endeavor.

For the ECE workforce, there is no equivalent at the national level to the federally supported K-12 School and Staffing Survey (SASS), a series of regularly updated questionnaires that provide data about the K-12 workforce and the public, private, and charter schools in which they work.²⁰ The 2012 National Survey of Early Care and Education (NSECE) is the most recent comprehensive source of national data that differentiate the early childhood workforce by job role and setting.²¹ The NSECE gathers information about approximately one million teaching staff employed in center-based programs, including programs sponsored by public school districts or funded with Head Start dollars. The NSECE also contains information about approximately one million paid home-based providers.

The 2016 *Index* included a national snapshot of these 2 million early educators represented in the NSECE with regard to age, race and ethnicity, educational background, and income. While this snapshot is a useful introduction to the workforce, it is critical to further examine differences among those working with children of varied ages and in different settings and to identify specific needs and circumstances experienced by particular groups of early educators.

Defining the ECE Workforce

Sixty-five percent of children under the age of six in the United States have all available parents in the labor force, and most of these children spend time in the care of someone other than a parent.²² But unlike elementary education, where all children are guaranteed access to a public-school setting, early care and education has yet to be recognized and supported as a public good. Thus, the cost burden of services is borne primarily by families who must make choices that are constrained by what they have access to or what they can afford.

Children may routinely be cared for in regulated center- or home-based programs, by individual providers like other family members, neighbors or nannies, or in a combination of these arrangements. The majority of children from birth through age five, but not yet in kindergarten, who participate in some form of early care and education attend a regulated program. Nearly 50 percent (6.98 million) of these children attend a center-based program.^{23,24} Another 20 percent of these children receive services from a paid home-based provider, though a lack of data and differing state regulations make it difficult to determine which of these are individual arrangements and which are group settings. The remaining 30 percent of children from birth through age five receive care from an unpaid provider, often referred to as a family, friend, or neighbor (FFN) provider.

Discussions about the workforce are complicated because terms like “child care provider” have historically been applied to anyone providing care and education to young children, from parents and grandparents to those working in preschool settings, without regard to distinctions between familial relationships and intentional programming in formal, structured settings. Furthermore, the varied options used by families, coupled with the disparate regulations set by states regarding qualifications for service providers and boundaries of what constitutes licensed and/or group early care and education makes it difficult to answer questions such as: Who comprises the early educator workforce? What are the characteristics of members of the workforce? When considering qualification requirements and other workforce policies, to whom do these policies apply?

Yet, for the purposes of policymaking, these distinctions are important. It is unreasonable, for example, to suggest that a parent or grandparent be required to hold a bachelor’s degree to care for a child — just as we would not suggest the parent of a second-grader have a teaching credential. But when that child is in a formal group setting for a portion of their day, as with public school teachers, it is reasonable to expect that their teacher be well-versed in the science of early learning and development and capable of implementing

research-based practices to facilitate the development and learning of each individual child in their charge.

In this report, when we speak to policies, programs, and financing for the early childhood workforce, we align our boundaries of the workforce with those articulated by the International Labor Office and the United Nations Educational, Scientific and Cultural Organization (UNESCO) International Standard Classification of Education (ISCED) and define early educators as those:

- Working in programs that “are usually school-based or otherwise institutionalized for a group of children (for example, center-, community-, or home-based), excluding purely private family-based arrangements that may be purposeful but are not organized in a program (for example, care and informal learning provided by parents, relatives, friends, or domestic workers)” and
- Who are “responsible for learning, education, and care activities of young children.”²⁵

Diversity, Equity, & Stratification

▶ **THE ECE SYSTEM IN THE UNITED STATES** is not immune to issues of structural inequality based on gender, class, linguistic and cultural diversity, and race that are woven throughout our nation’s institutions and culture. It is critical to acknowledge that the racial, ethnic, and linguistic diversity of the workforce has not translated into equity with regard to access to education or job roles. In addition, despite what the science reveals about the complexity of nurturing the development and learning of young children, perceptions persist that the younger the child, the less skilled the work. Combined, these barriers and perceptions have translated into multiple points of stratification with real consequences for the opportunities and earnings of the workforce. As policymakers, advocates, and other stakeholders seek to improve ECE workforce policies and investments as a whole, it is imperative that such inequities be identified, particularly at the state and local level, to inform strategies to break down systemic barriers, disrupt stratification, and maintain or expand the diversity of the workforce.

While the ECE sector suffers from a workforce data deficit that hampers our ability to fully illuminate inequities and stratification,²⁶ the NSECE does provide the ability to examine some points of stratification at the national level, as well as the state level for a small number of states with large populations, for a single point in time (2012). To shine a spotlight on points of stratification that require attention, we identify areas of differentiation among the workforce from a national perspective and provide illustrations of how these vary across states.

The NSECE distinguishes between listed and unlisted home-based providers. The “listed” providers are defined as individuals appearing on state or national lists of early care and education services, such as licensed, regulated, license-exempt, or registered home-based providers. “Unlisted paid” individuals receive payment for the care of at least one child but do not appear on state or national lists. According to the NSECE methodology, listed paid providers constitute approximately 10 percent of the home-based provider population. However, it is somewhat difficult to assess the difference between listed and unlisted paid providers because states not only define family child care differently, but have varied criteria determining which providers are required to be regulated or licensed and which are exempt.

Unless otherwise noted, the following data snapshots reflect CSCCE analysis of the 2012 National Survey of Early Care and Education. Percentages may not add to 100 due to rounding.²⁷

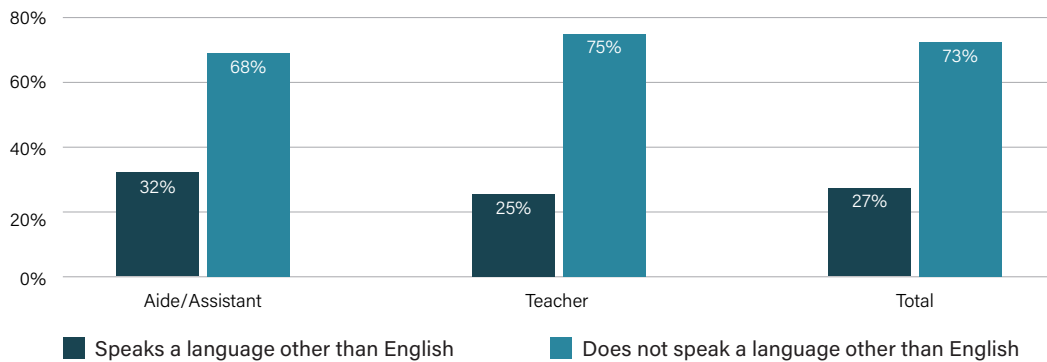
It is important to examine state and local data when considering early childhood workforce policy. As examples, we highlight certain aspects of the workforce employed in California, Illinois, and New York. These states were selected because NSECE state sample sizes were large enough to allow for public reporting across several variables.

Languages Spoken

▶ **NATIONALLY, THE CENTER-BASED EARLY** childhood workforce appears to be more linguistically diverse than the U.S. adult population as a whole.²⁸ Within the ECE workforce, assistant teachers are more likely than teachers to report the ability to speak a language other than English. Linguistic diversity varies by state and is reflected in the proportion of the center-based early childhood workforce that speaks a language other than English. However, across states, assistant teachers are more likely than teachers to speak a language other than English. Comparable data on the home-based population are not available.

FIGURE 2.1

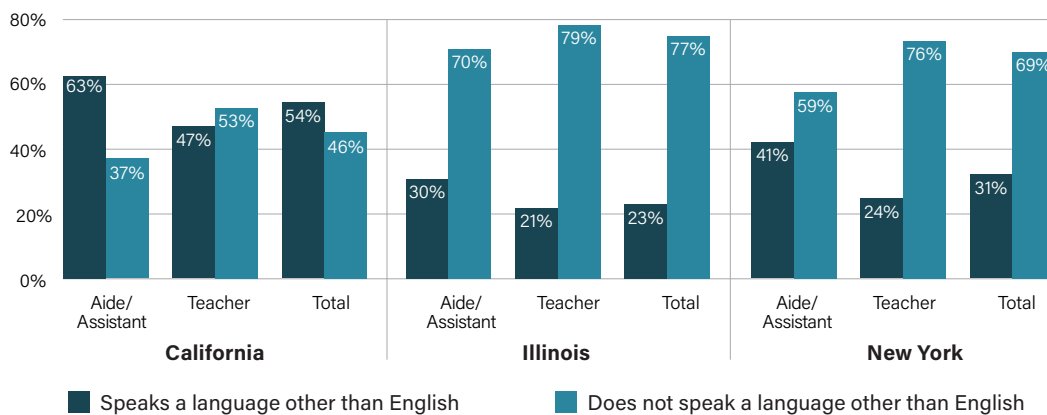
Languages Spoken by Center-Based Staff by Job Role: National



Note: The NSECE asked center-based teaching staff, "Do you speak a language other than English?"; thus, from the available data, we cannot distinguish those who speak English and another language from those who only speak a language other than English.

FIGURE 2.2

Languages Spoken by Center-Based Staff by Job Role: State Examples

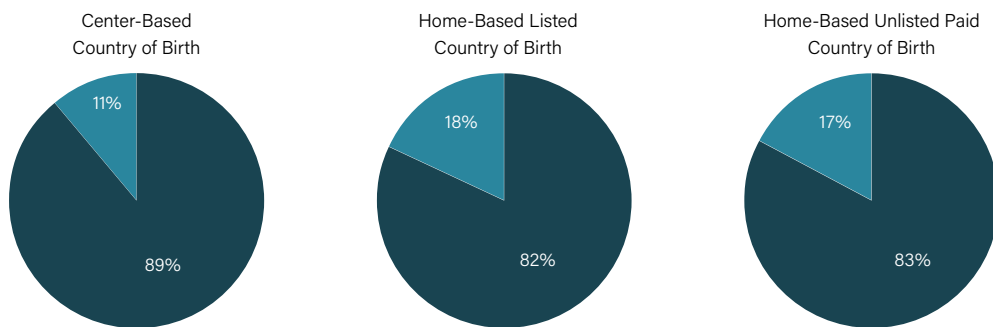


Country of Birth

▶ **ACROSS ECE SETTINGS, THE PERCENTAGE OF EARLY EDUCATORS** who are immigrants to the United States roughly mirrors that of the total U.S. adult population (16 percent)²⁹ but is higher than the K-12 teaching workforce (8 percent).³⁰ Nationally, compared with center-based settings, the listed and unlisted home-based workforce most closely resemble each other; however, this pattern varies by state. More nuanced data are needed to understand the diversity among immigrants, to clarify how this diversity varies at the state and local levels, and to identify challenges that immigrants may face in engaging in workforce development. Such information can be helpful for considering resources (e.g., language supports and foreign transcript evaluation) that may be necessary to engage with and support early educators who are immigrants.³¹

FIGURE 2.3

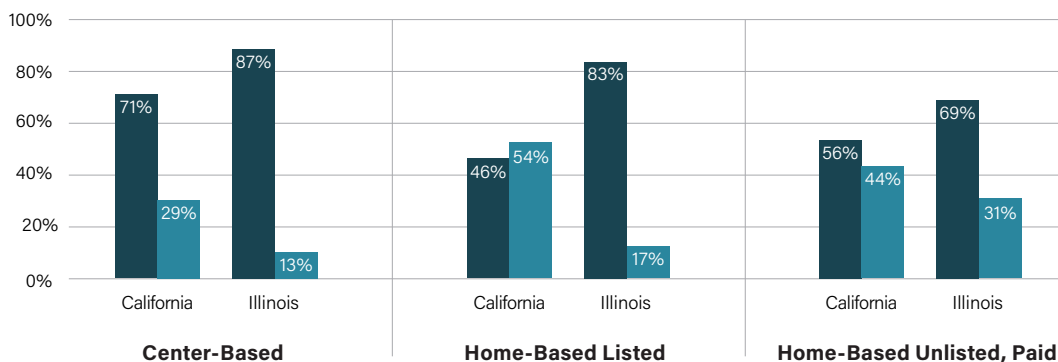
Country of Birth by Setting: National



Note: The 258 different country options other than the United States listed in the NSECE have been collapsed in order to compare national with state-level data.

FIGURE 2.4

Country of Birth by Setting: State Examples



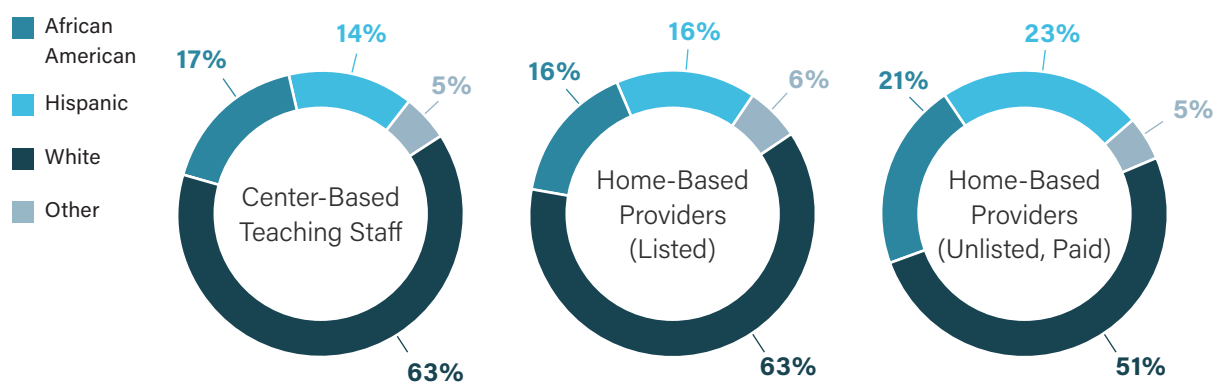
Note: The 258 different country options other than the United States listed in the NSECE have been collapsed due to limited state-level sample sizes.

Race/Ethnicity

▶ **AS RECORDED IN THE 2016 INDEX, THE NATIONAL** racial and ethnic composition of the early childhood workforce varies depending on setting. The majority of the early childhood workforce across settings identify as white. Among the center and home-based population, about 40 percent are people of color, as are nearly half of home-based unlisted providers. This composition stands in stark contrast to the K-12 teaching workforce, in which more than 80 percent of teachers are white.³²

FIGURE 2.5

Race/Ethnicity by Setting: National



Job Roles & Race/Ethnicity

At the national level, Hispanic workers are underrepresented in the role of teacher and overrepresented in aide/assistant teacher roles, while African American and white/Caucasian early educators closely match the ECE workforce as a whole. However, the ability to distinguish patterns of stratification at the state and local levels is important, as this stratification may differ from national averages. In New York, for example, both Hispanic and African American early educators are overrepresented in aide/assistant teacher roles, compared to their population in the ECE workforce, and white/Caucasian workers are underrepresented as aides/assistant teachers.

FIGURE 2.6

Job Role of Center-Based Staff by Race/Ethnicity: National

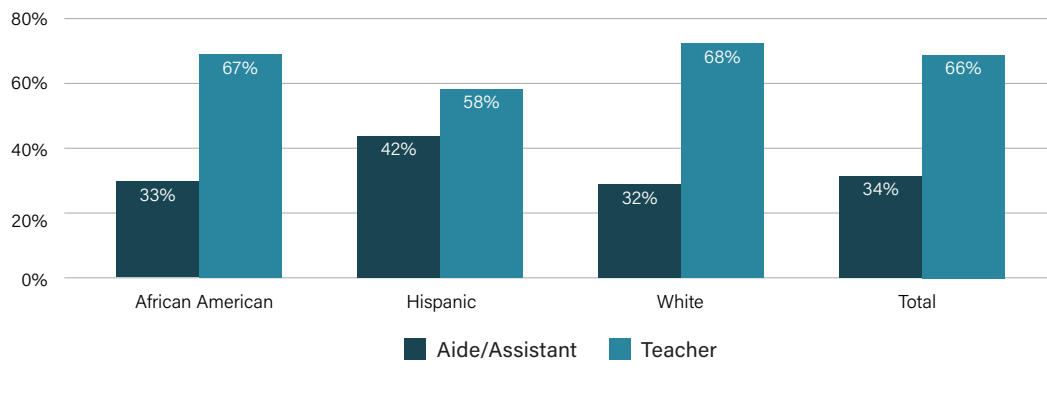
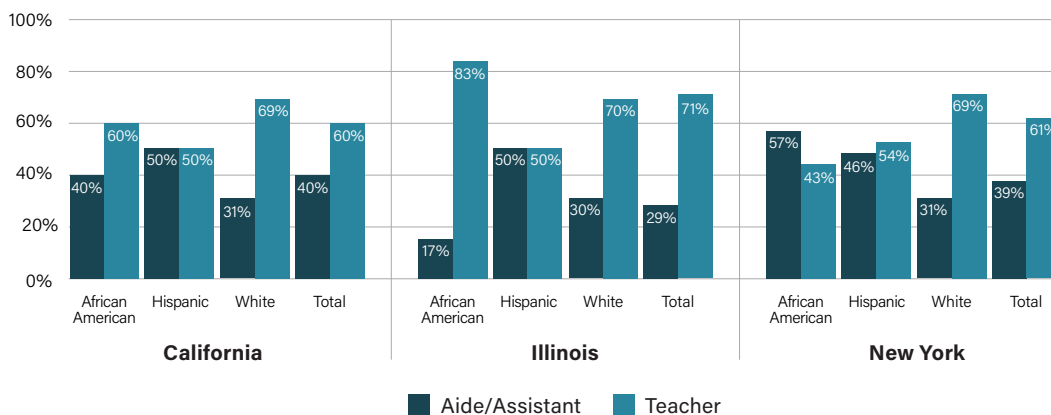


FIGURE 2.7

Job Role of Center-Based Staff by Race/Ethnicity: State Examples

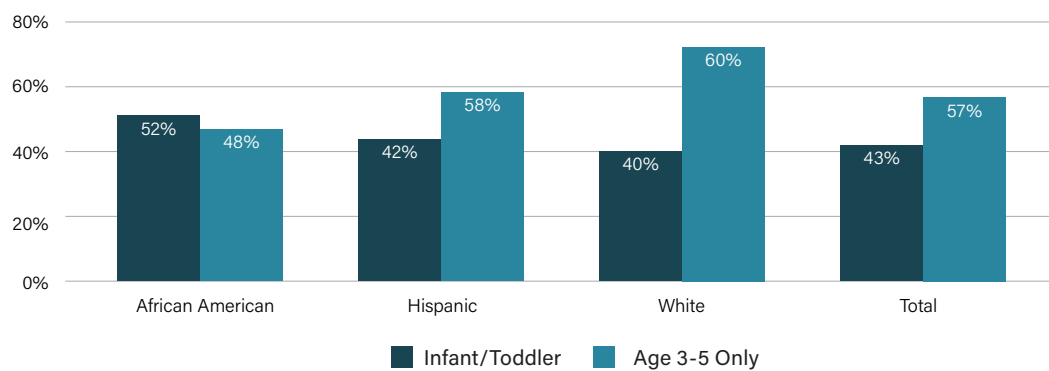


Age of Children Served & Race/Ethnicity of Educators

Understanding the age of children with whom early educators work is important, since we have documented that the younger the child, the lower the pay (see [Earnings, p. 29](#)). Nationally, African American early educators are disproportionately represented among the ECE workforce who teach infants and/or toddlers, while Hispanic and white/Caucasian early educators closely match the overall breakdown of the ECE workforce as a whole. However, this pattern of stratification by age of children taught looks different across states. In New York, for example, African Americans are overrepresented among those who teach only preschool-age children, while Hispanics are more likely to teach infants and/or toddlers, compared to teachers from other racial/ethnic groups.

FIGURE 2.8

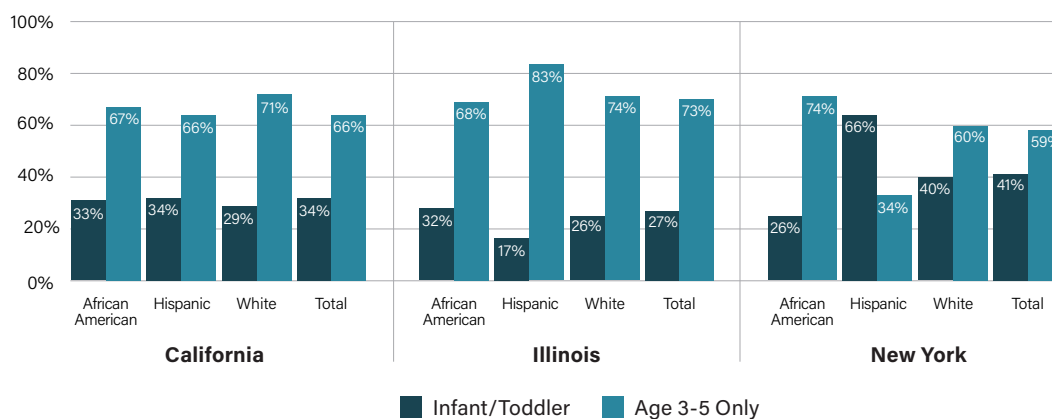
Age of Children Served by Race/Ethnicity of Center-Based Staff: National



Note: Early educators in the "Infant/Toddler" category either work exclusively with infants and/or toddlers, or with both infants and/or toddlers as well as preschool-age children. Those in the "Age 3-5 Only" category work exclusively with preschool-age children.

FIGURE 2.9

Age of Children Served by Race/Ethnicity of Center-Based Staff: State Examples



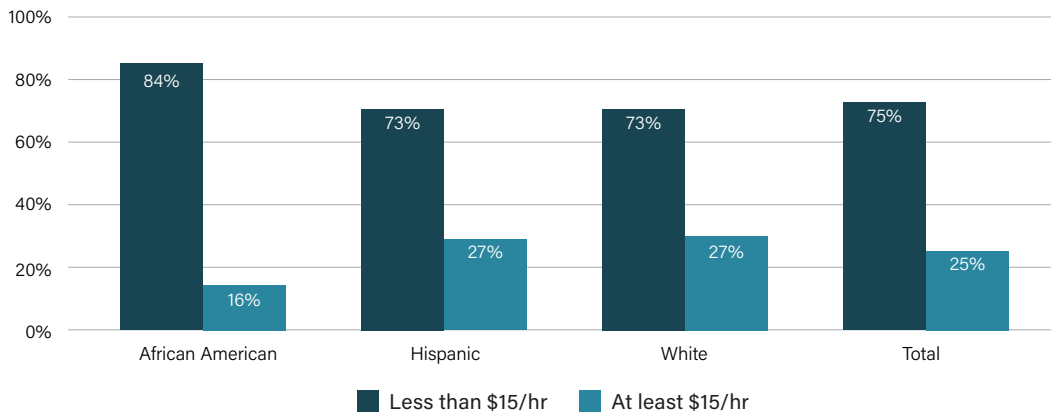
Income & Race/Ethnicity

Across almost all ECE settings in the country, early educators are in economic distress due to the persistently low wages they earn (see [Earnings, p. 29](#)). This reality falls disproportionately on early educators of color, in part because they are also more likely to work as assistants and to work with the youngest children, but also because the racial inequities that are woven through U.S. culture are also present in early care and education.

In particular, center-based African American early educators are more likely to earn less than \$15 per hour than all other racial/ethnic groups in the early education workforce nationwide. Even after controlling for educational attainment, African American workers still earn lower wages than white workers (\$0.78 less per hour, or \$1,622.40 less per year, for a full-time, full-year worker).^{33,34} State and local data to contextualize wage levels and gaps are critical in order to confront and disrupt patterns of stratification. In the three state examples below, the overall racial/ethnic patterns remain consistent, but the percentage of early educators earning below \$15 an hour in California is substantially lower than the national average; this finding likely reflects the higher cost of living and, therefore, higher wages in the state.

FIGURE 2.10

Wages of Center-Based Staff by Race/Ethnicity: National

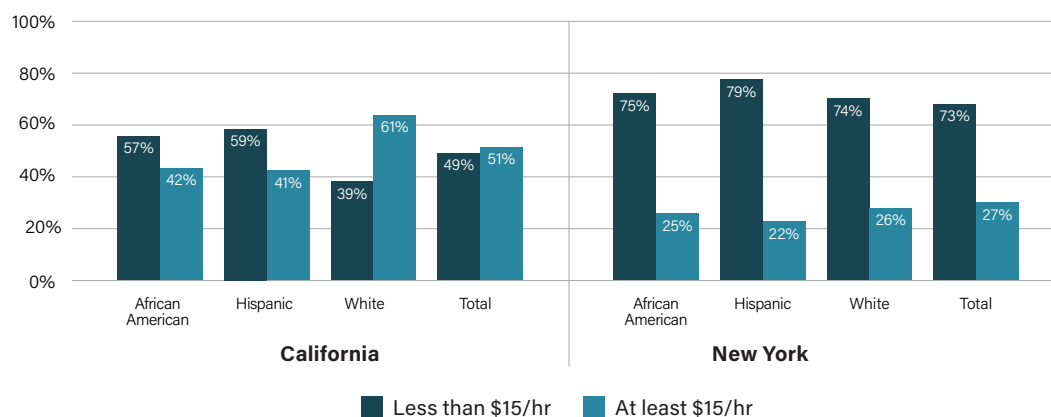


Among listed home-based providers, across racial and ethnic groups, more than half (59 percent) lived in households with incomes that were less than the national median income of \$50,502 in 2011; for African Americans, this figure was 75 percent.³⁵

These data snapshots illustrate multiple ways in which the workforce is diverse, as well as inequities that are prevalent, though varied, across states. While some states have current, detailed workforce data that can identify evidence of stratification, many states do not routinely collect sufficient data that allow for this type of analysis (see [Workforce Data, p. 108](#)). Given that national data reflect the country as a whole and, furthermore, are not routinely collected, this information is insufficient to inform state and local policy and planning. Likewise, the inability to identify the many ways in which inequities emerge limits the ability of advocates and policymakers to design intentional strategies for change and monitor progress over time. In the remainder of this report, we draw attention to disparities woven throughout the early care and education system.

FIGURE 2.11

Wages of Center-Based Staff by Race/Ethnicity: State Examples



3

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

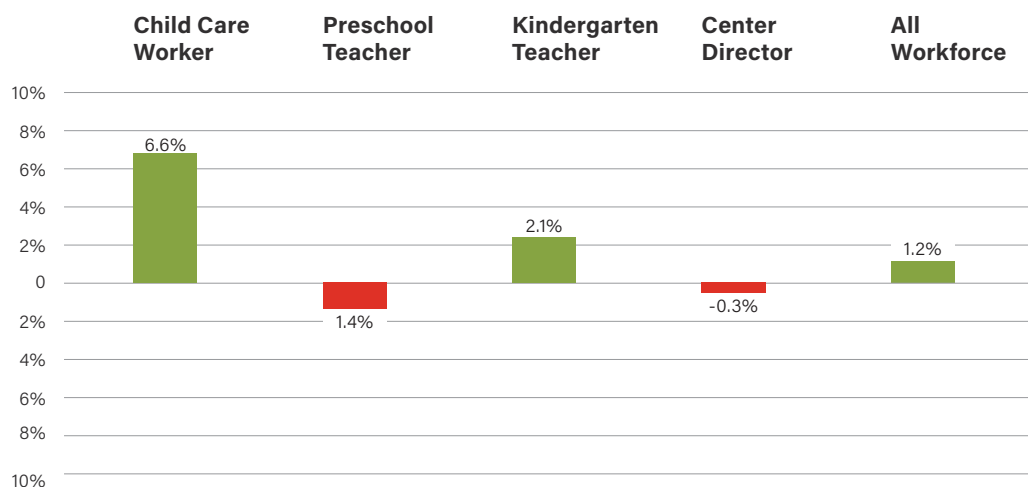
Notwithstanding recent improvements, child care workers remain nearly at the bottom percentile (second), when all occupations are ranked by annual earnings, the same as reported in the 2016 *Index* (see Figure 3.3). Preschool teachers and directors of child care centers or preschools are also subject 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](#)).

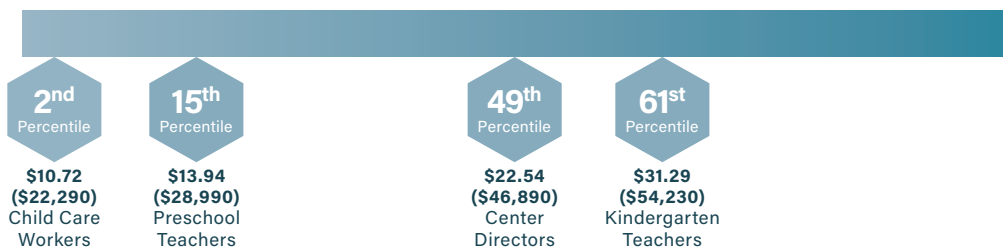
The Younger the Child, the Lower the Pay

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.

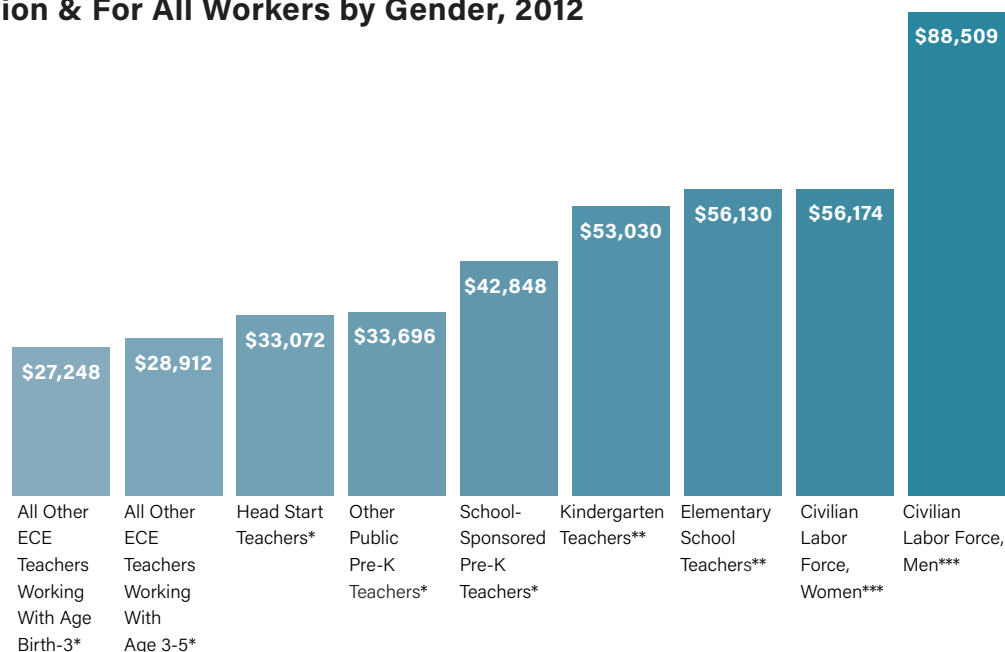
The college premium⁵³ typically refers to the percent by which hourly wages of four-year college graduates exceed those of high school graduates and is useful for comparing the relative wage bump for earning a college degree among groups of workers. In line with this approach,⁵⁴ we first compare the 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.

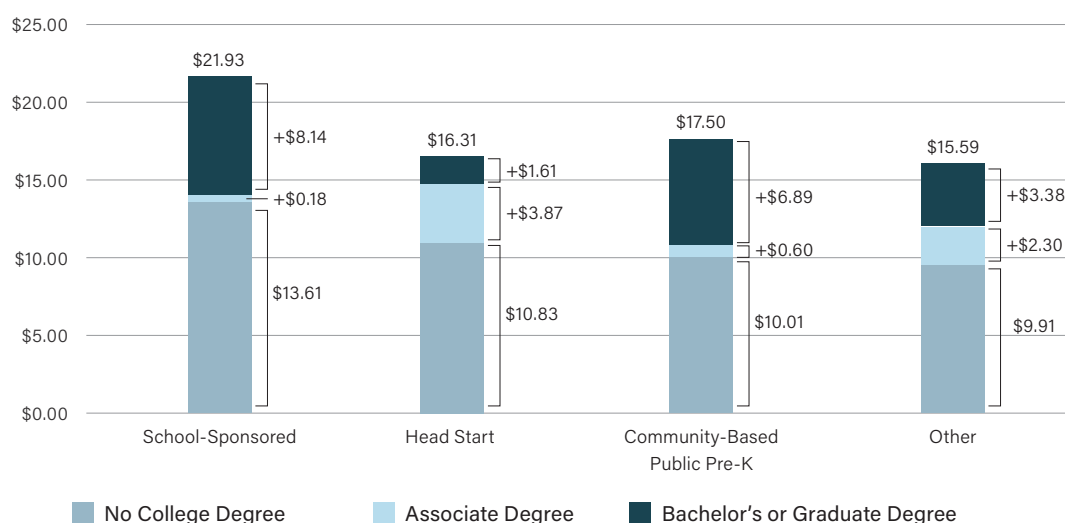
Note: Teachers in school settings typically work a 10-month year.

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

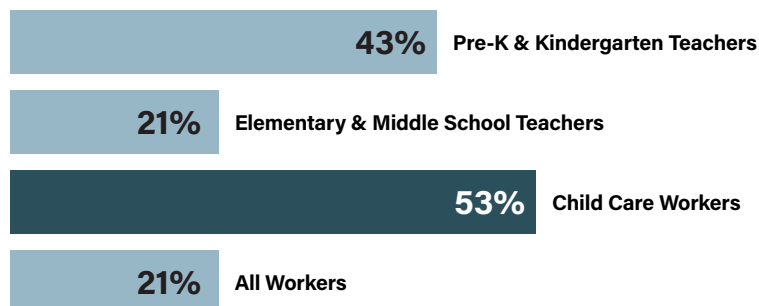
In the United States, economic distress is not restricted to those living below the poverty level, but affects many adults, including some who are employed full time. Early educators are disproportionately affected. Based on the American Community Survey, the Current Population Survey, and program administrative 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).

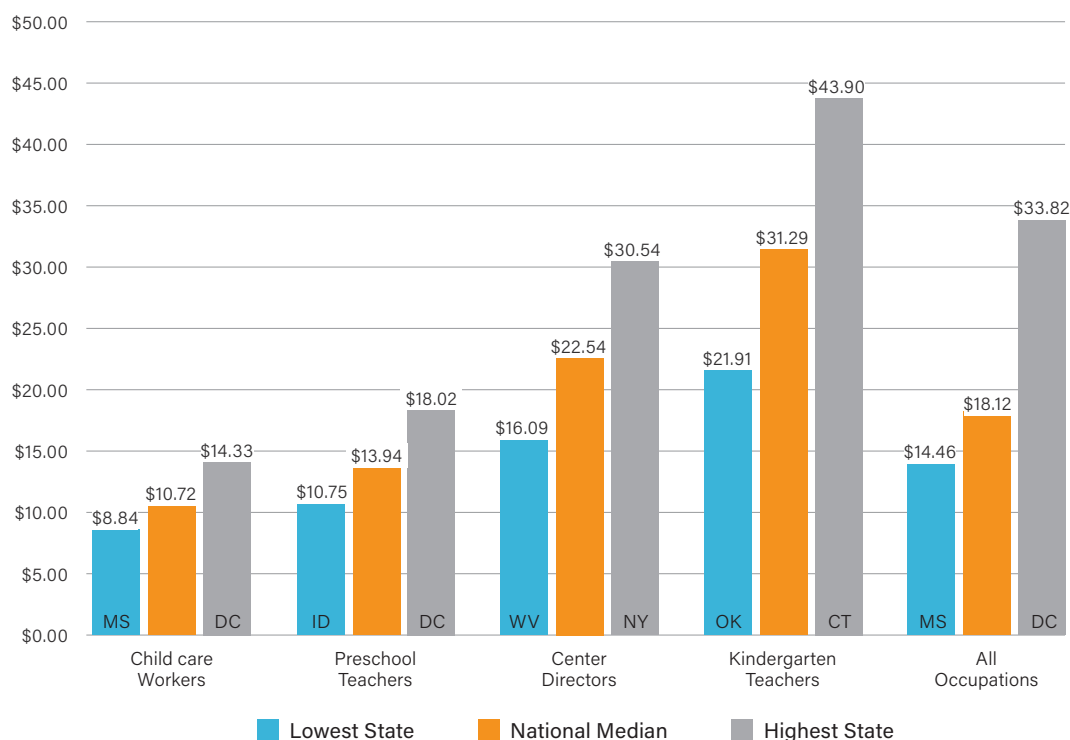
In *all* states, child care workers earned less than two-thirds of the median wage for all occupations in the state — a common threshold classifying work as “low wage” (see Table 3.2).⁷⁴ Not surprisingly, in only five states does the median child care worker wage meet the threshold for a living wage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

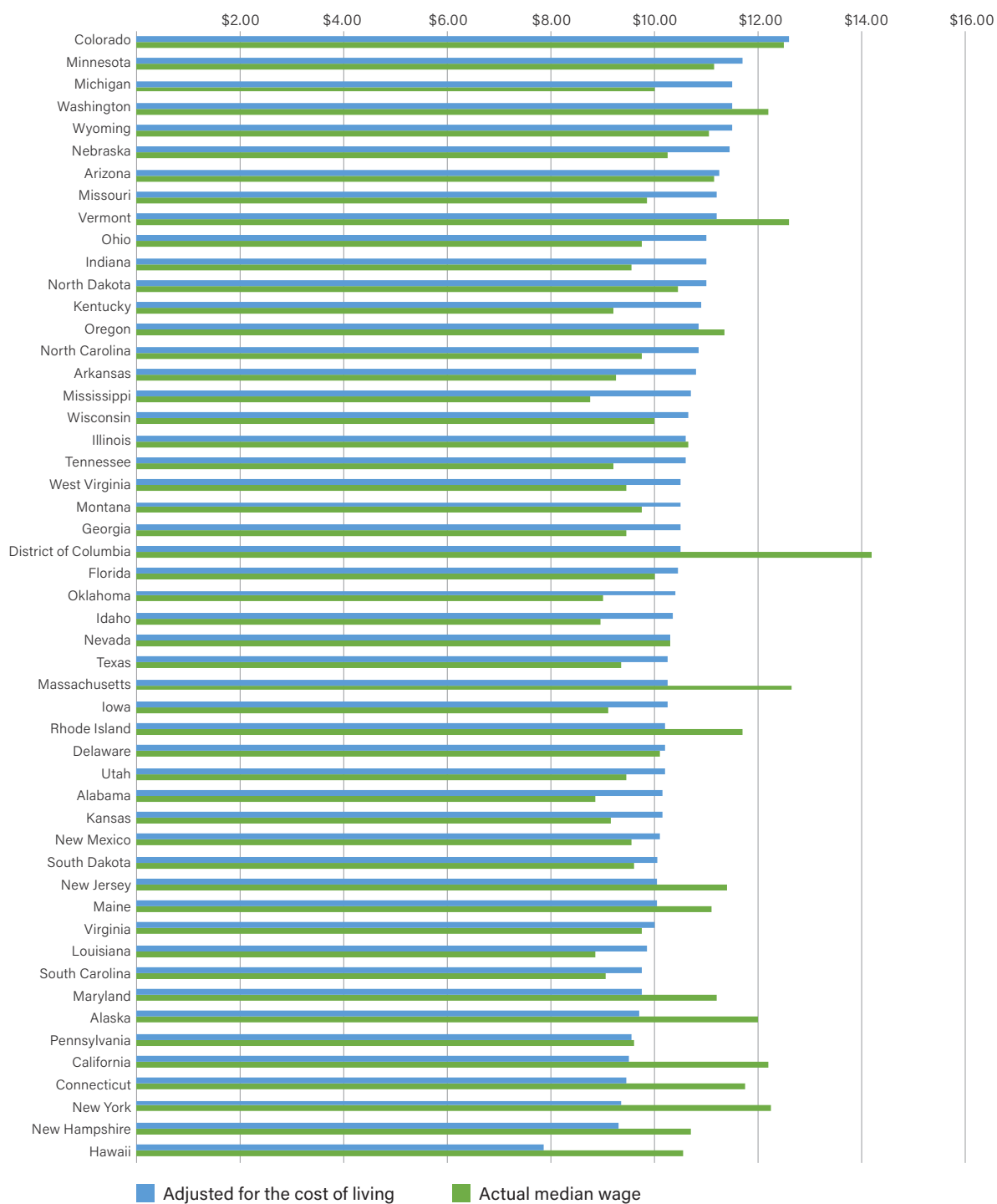
Virginia to \$30.54 in New York. In all states but two (Iowa and North Dakota), center directors earned more than the overall median wage in the state (see Table 3.2).

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

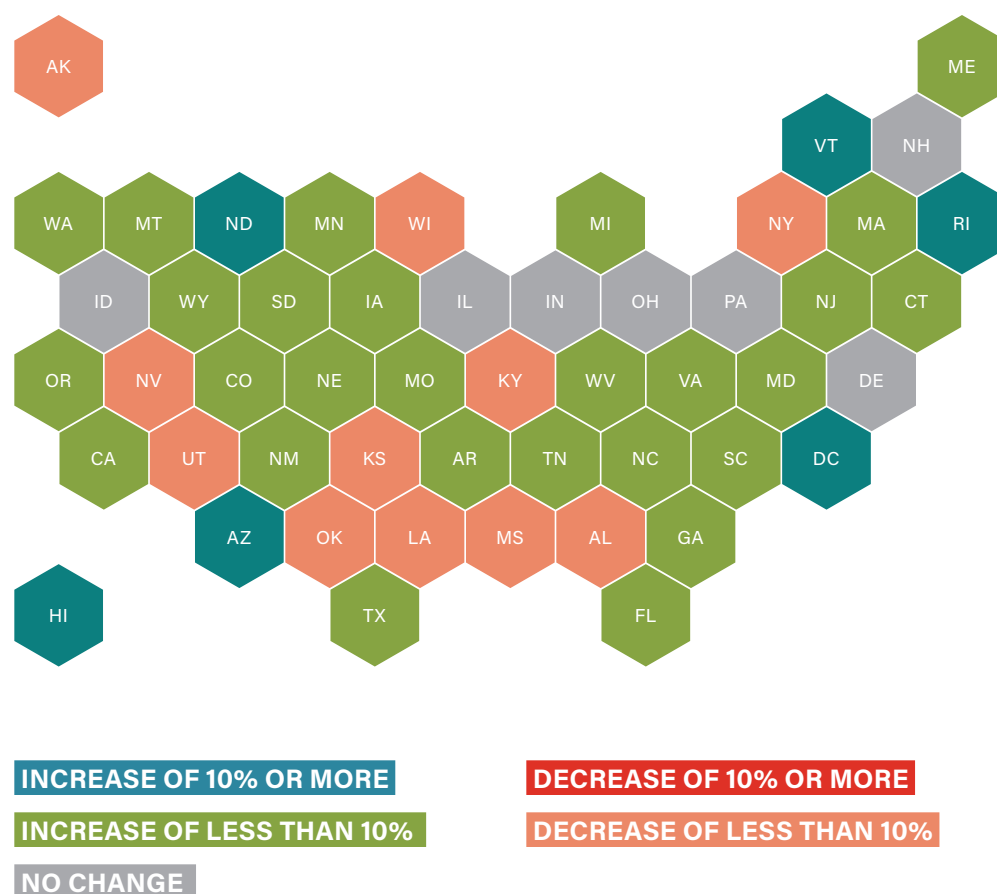
While many variables affect wages in a particular location, there is some evidence that recent minimum wage changes have contributed to this increase in child care worker wages (see Figure 3.12). Of the 33 states with inflation-adjusted increases in child care worker wages between May 2015 and May 2017, 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



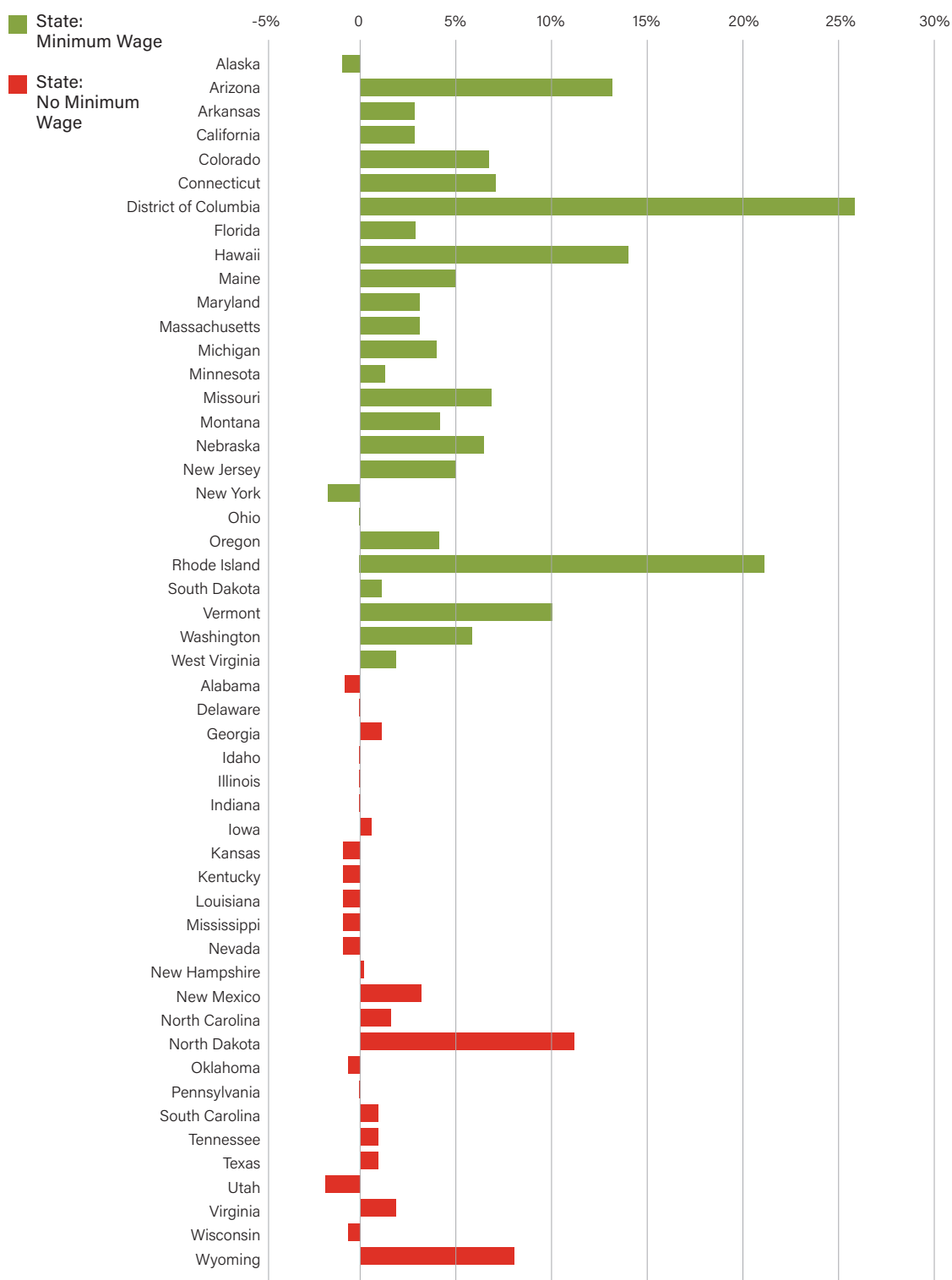
are an important step forward. These are ongoing, dependable raises and, in many cases, are larger amounts than what is provided via ECE-specific financial relief measures, such as stipends or tax credits (see [Compensation and Financial Relief Strategies, p. 93](#)). However, it can be a challenge for 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

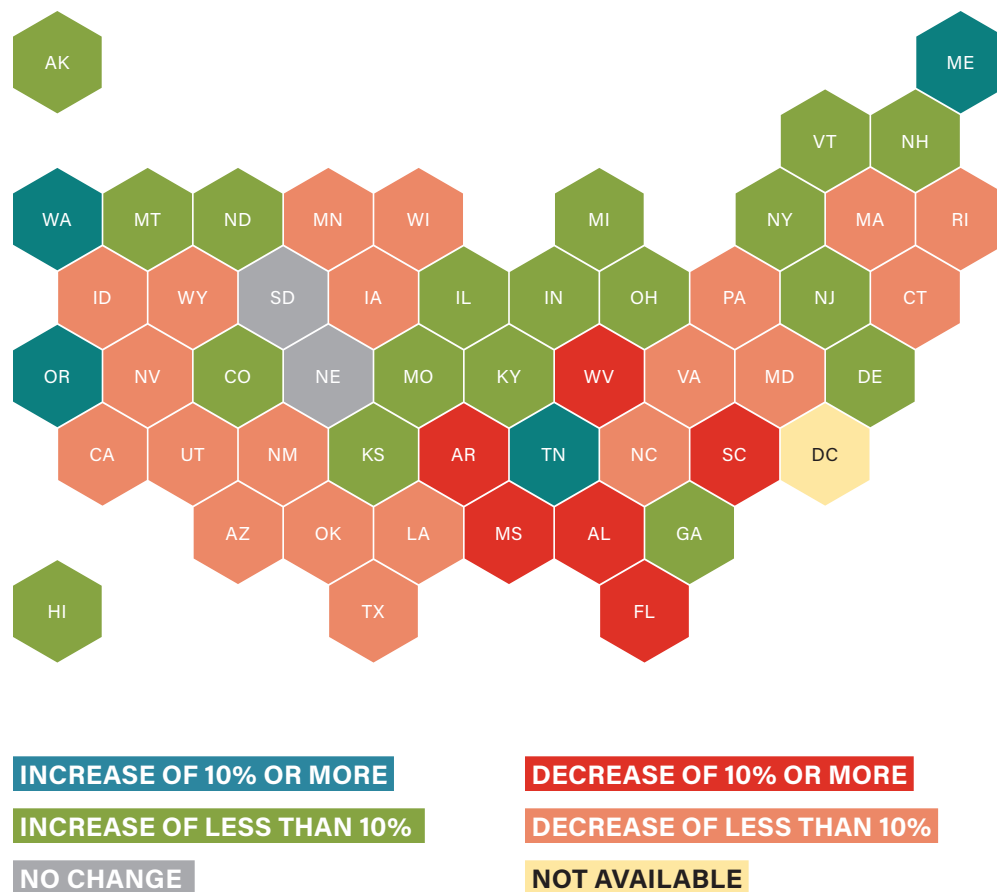


Note: Figure 3.12 corrected 7/3/2018

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

FIGURE 3.14

State Map of Percent Change in Center Director Median Wage, 2015-2017



The reasons for this decrease are unclear and may be due to shifts in the dataset from year to year rather than because of an underlying economic or policy change. There does not seem to be a relationship to cuts in pre-K spending, for example.

Center Directors: Trends in Hourly Wages

Wages for center directors decreased when adjusted for inflation in more than half of states between 2015-2017. In six cases, these decreases were substantial: wages decreased by 10 percent or more in Alabama, Arkansas, Florida, Mississippi, South Carolina, and West Virginia. Only in two states (Maine and Oregon) was there an increase of 15 percent or more.

Further details on changes in wages for early educators as well as kindergarten and elementary school teachers are available in Appendix Tables 3.4, 3.5, and 3.6.

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/>.

4

**EARLY
CHILDHOOD
WORKFORCE
POLICIES**



HIGH-QUALITY EARLY CARE AND EDUCATION depends on teachers who are skilled at nurturing children's curiosity and learning, yet our system of preparing, supporting, and rewarding early educators in the United States poses multiple obstacles to teachers' efforts to foster children's optimal development and learning, as well as risks to their own well-being. Many of these conditions have endured for decades, despite a much-altered landscape in which developmental scientists, economists, and business and labor leaders have widely recognized the importance of early care and education in shaping children's development, promoting the health of families, and building a strong economy.

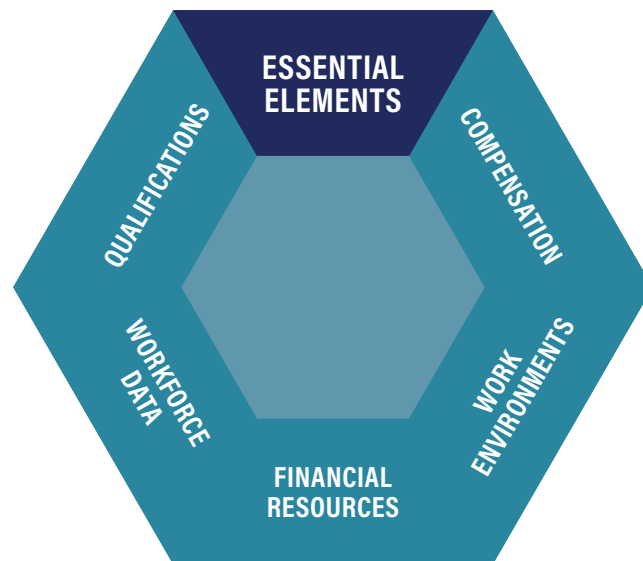
The case for changing the status quo is incontrovertible, and across the states, conversations are underway on how to recruit educators and strengthen initial teacher preparation, how to retain new and veteran educators and provide them with ongoing learning experiences, and how to organize work environments to ensure that all teachers can best address the needs of a diverse child population whose early learning experiences may take place in a school, child care center, or home.⁸² In many communities, these conversations are translating into advocacy efforts to change policy, given the persistent opportunity gap between children living in poverty and their more-advantaged peers and the poor academic performance of U.S. students on international achievement tests.

A mix of market forces and government policies currently influences early childhood services, but federal and state governments together determine the level of public resources available for services and how they are delivered to providers (see [Financial Resources, p. 120](#)). In particular, states play an active role in shaping the conditions of early childhood employment and determining who is qualified to work with young children in various settings. Exceptions are Early Head Start, Head Start, and Department of Defense child care programs whose rules are established by the federal government.

To a large extent, state policy decisions drive the current uneven levels of qualifications for educators across settings and program types and for children of different ages. State reimbursement policies contribute to the status quo of inadequate compensation for early educators, as well as the absence of policies related to professional workplace benefits and paid time for planning and professional development, supports common to teachers of older children.

FIGURE 4.1

Making Headway: 5 Essential Elements of Early Childhood Workforce Policy



However, government policies can also play a powerful role in *reshaping* early childhood jobs, including qualifications, earnings, and work environments for the current and future ECE workforce. States can enact policies that will lead to more effective and efficient services, a system that provides higher quality services and more equitable treatment of educators and, consequently, more equitable services for children and families. In some states, policymakers, advocates, and business and philanthropic leaders are actively engaged in seeking solutions to the long-standing and pervasive problems working against the consolidation of a highly skilled and stable early educator workforce.

Designed to provide states with a baseline appraisal of ECE workforce policies that could help spur progress, the *Early Childhood Workforce Index* identifies the current status of state-level early childhood workforce policies in five categories:

1. Qualifications and educational supports;
2. Work environments;
3. Compensation and financial relief strategies;
4. Workforce data; and
5. Financial resources.

Qualifications & Educational Supports: Establishing policies and pathways that provide access to teachers who are equally well prepared and to program leaders who can effectively support teachers is critical for all children, regardless of where they receive early learning services. With respect to preparation, we appraise whether state expectations for early educators — as codified in state qualification requirements in publicly

“States can enact policies that lead to a system that provides higher quality and more equitable treatment of educators and, consequently, more equitable services for children and families.”

funded pre-K and child care licensing — are consistent across settings and services for children of all ages and in line with research recommendations based on the science of child development. We also assess state efforts to offer financial supports for those currently employed in early childhood jobs to further their education and training.

As in 2016, state minimum qualification requirements, particularly as codified in child care licensing regulations, remain low and out of step with research recommendations. Nonetheless, substantial proportions of the ECE workforce *have* attained associate or bachelor’s degrees, in part due to the scholarship initiatives that exist in most states.

Work Environments: Educators’ ability to apply their knowledge and skills and to continue to hone their practice requires a work environment that supports their ongoing learning, prioritizes time without child responsibilities for professional activities (such as planning, preparation, and reflection with colleagues), and offers dependable benefits that ensure their well-being. Our second category appraises how quality improvement initiatives, represented by the [Quality Rating and Improvement Systems](#)⁸³ now operating in most states, provide direction for early childhood programs in this regard — specifically, whether quality elements, such as paid planning time, are included in QRIS.

There has been some progress in attention to basic work environment elements in QRIS since 2016. Nevertheless, it is still the case that work environments are less commonly addressed in QRIS than other elements, and at both the state and national levels, the United States lags behind international calls to articulate standards for early educator work environments.

Compensation & Financial Relief: Achieving substantial and sustained improvements in the quality of services — the desired outcome of many policies enacted across the states — depends on upgrading the reward and status associated with early childhood employment. This undertaking will require investments and policies aimed at reducing inequities in pay for those with equivalent education, increasing the premium for educational attainment, and ensuring the well-being of early educators through sustainable wages commensurate with the value of their work. In our third category, we examine whether states are tackling poor compensation in the field or, at a minimum, offering financial relief as an interim measure.

Since the release of the 2016 *Index*, the conversation about better compensation for early educators has gained momentum, but to date, there remains little action. The majority of state efforts have been aimed at providing financial relief — wage supplements (stipends, tax credits, or bonuses) to augment low wages — but not predictable changes to ongoing annual earnings for doing the job. And yet making early education an attractive job now and in the future requires real improvement in wages and access to

“Making early education an attractive job now and in the future requires real improvement in wages and access to workplace benefits.”

workplace benefits. Financial relief is just that: immediate relief for early educators currently struggling on low pay. It is not a long-term solution for raising the pay and status of early educators or improving the attractiveness of ECE jobs.

Workforce Data: The absence of good data allows anecdote — and sometimes bias — to drive policy decisions. The states’ ability to design and target professional development opportunities and to assess the impact of policies depends on up-to-date, comprehensive information about the workforce. Furthermore, without tracking who is staying in and who is leaving early childhood employment, states are unable to assess whether they are making progress in strengthening the aggregate knowledge, skills, and compensation of the early childhood workforce.

Since 2016, states have been making progress in this regard. More states have now implemented a workforce registry and/or conducted a recent workforce study. Basic elements of good workforce data collection (such as collecting data on the compensation of the workforce) have also been improving. Yet our assessment remains the tip of the iceberg in terms of what is needed to address the existing workforce data deficit. Furthermore, many states are collecting workforce data largely without coordination or guidance at the national level or across states, making it difficult to compare data from one state to another.

Financial Resources: We examine investment of state dollars (in addition to federal allocations) spent on ECE as our final category, in recognition of the fact that upgrading early childhood jobs — and the equally pressing need to expand access to high-quality services and relieve financial pressures on families — necessitates mobilizing additional and more sustainable public funding.

Although devoting additional funding to the current system of ECE is an important intermediary step, realizing the goal of high-quality, accessible early care and education requires a more transformative vision. The National Academies’ 2018 report, *Transforming the Financing of Early Care and Education*, provides a national example, but state leaders also need to know how much it costs to deliver high-quality ECE in their own state contexts in order to identify the appropriate level of state and federal resources needed to achieve that vision.⁸⁴ Increasingly, stakeholders in the states are recognizing the need for new financing solutions and have begun initial steps toward identifying the costs associated with a transformed ECE system in their states. Purposeful efforts to fully understand the size of the funding gap between the current system and a long-term vision remain elusive, however. Future editions of the *Index* may be able to assess these efforts as they advance through states in the coming years.

Throughout this chapter, we focus on whether states have policies in place as a starting point, but we are unable to assess implementation or how well these policies are working in practice. In addition, some potential indicators in each category were not possible

FIGURE 4.2

Number of States Stalled, Edging Forward, & Making Headway: Early Childhood Workforce Policies



Note: The 14 states identified as “not applicable” under the Work Environments category could not be assessed due to a lack of data in the QRIS compendium. Not all of these states lack a QRIS. For more information, see [Work Environments, p. 81](#).

to include in this edition due to lack of quality data or reporting. Therefore, the indicators selected are not comprehensive, but are intended to represent first steps toward better policy and practice. For this reason, we spotlight states that are making progress or that demonstrate additional aspects of good practice. Future iterations of the *Index* may raise the bar for assessment as states continually move forward.

Notwithstanding the many significant efforts underway, the appraisal of state ECE workforce policies presented in this section of the *Index* reveal a troubling state of affairs, particularly when considered in light of the status of earnings and economic security for early educators presented in [Earnings and Economic Security, p. 29](#). As in 2016, across categories related to qualifications, work environments, compensation, and financial resources, the majority of states were appraised as stalled or edging forward (see Figure 4.2). Workforce data remains the strongest area of progress, though there is still much room for improvement.

Qualifications & Educational Supports

Qualifications

 **THE PROVISION OF FREE SCHOOLING** for all children in grades K-12 throughout the nation has long been recognized as a public good that generates many economic and social benefits. To achieve these benefits, a wide consensus has developed across states and types of school settings (public, charter, private) that these teachers should obtain at least a bachelor's degree plus a grade- or subject-specific certification.⁸⁵ Yet, in the case of those working with children from infancy through preschool, a gap exists between the research evidence on the central role that these early educators play in facilitating learning and development and the codified expectations of early educators' knowledge and abilities, particularly with regard to those serving a highly diverse population of young children.⁸⁶ While a few systems treat preschool teachers as part of the teaching workforce, the persistently low qualifications that have been set for most educators working with children birth to age five perpetuates the false notion that teaching in early education is low-skilled work.

Though nearly all states have established a set of core knowledge and competencies identifying what early educators — from novice to expert — should know and be able to do,⁸⁷ the development of these competencies has not translated into minimum education requirements applied to early educators working with children prior to kindergarten, regardless of setting or age of child. It is rare for early educators to be individually certified like their K-12 counterparts, except in public pre-K programs where certification is more likely to be required. This remains the case, even as the federal Head Start and many state- and local-level public pre-K programs have led the effort to establish bachelor's degree requirements.

The 50 states and the District of Columbia each set their own qualification standards for early educators from entry through administrator level, and those requirements vary widely not only across states, but within states according to setting and source of funding. States typically require one set of qualifications for teaching staff and site administrators in center-based child care, another for those in regulated home-based programs, and yet another for public preschool. Other qualifications set by the federal government for military child care, Early Head Start, and Head Start programs add further complexity to the array of requirements in a given community.

These uneven qualifications across systems fail to reflect what we now know about early learning and development. Based on a comprehensive review of the science of child development and learning and decades of evidence, the Institute of Medicine (IOM) and National Research Council (NRC) report *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation* urges governmental and nongovernmental organizations at local, state, and federal levels to ensure that educator requirements are based on “foundational knowledge and competencies necessary across professional roles.”⁸⁸ The report asserts that lead educators working with infants and toddlers, preschoolers, and those in early elementary grades require equivalent levels of knowledge with specialized competencies and should be on “equal footing in their preparation for practice.” The report addresses the need to strengthen competency-based qualifications for all early educators, including foundational knowledge beginning at entry-level positions and

Qualifications for School Leaders

The need for preparation and specialized competencies is not limited to teaching roles, and many states and field experts have articulated competencies for leaders who have responsibility for early care and education programs. While such competencies are applicable for those working in programs based in child care centers, homes and schools, they are often assumed to apply only to center- and home-based program leaders. Yet in reality, more than one-half of elementary school principals work in schools serving pre-K children, and this number is likely to increase as support for public pre-K increases. These principals are responsible for fostering a school culture that values early education and for understanding what high-quality teaching looks like, although across the country principal certification programs do not typically provide instruction or require field experiences focused on children prior to kindergarten. Though not an area of assessment included in the 2018 *Index*, we know that a small number of states currently require ECE content and clinical experience in their principal licensure process; however, the extent to which these experiences are preparing principals to effectively lead schools that include ECE programs is unclear.⁸⁹

A study conducted in New Jersey, *Early Childhood Preparation for School Leaders: Lessons from New Jersey Principal Certification Programs*, provides an illustration of the lack of attention and content related to child development and early childhood education in preparation programs for future principals. This study revealed that slightly more than one-half of principal preparation programs in the state required principal candidates to learn about the New Jersey Core Knowledge and Competencies for Early Childhood Professionals. Perhaps signaling a recognition that more must be done in this area, more than one-third of preparation program leaders felt that additional faculty knowledge about these core competencies would strengthen their program.

Adapted from *Early Childhood Preparation for School Leaders: Lessons from New Jersey Principal Certification Programs* (2017).⁹⁰

transitioning to a minimum requirement of a bachelor's degree, with specialized knowledge and competencies for all lead teachers working with children from birth to age eight. The report further recommends implementing specific competencies for site administrators and school principals responsible for providing instructional and administrative leadership.

Although qualification *requirements* remain low, many teachers working in school- and center-based early care and education programs have earned bachelor's degrees, and most of these educators have completed some *early childhood development-related*

“Establishing policies and pathways that provide access to teachers who are equally well prepared and to program leaders who can effectively support teachers is critical for all children, regardless of where they receive early learning services.”

college coursework. Similarly, more than one-third of early educators in home-based settings have earned at least an associate degree. But due to the lack of uniformity in minimum educational requirements and funding across programs and settings, in any state, the qualifications children can expect their teachers to meet are dependent on the type of programs that are available and affordable given their family's circumstances, rather than their developmental and educational needs.

In contrast to many other developed countries,⁹¹ U.S. society has yet to fully recognize ECE as an educational endeavor or to embrace it as a public good, as with K-12 education, and thus, our nation falls short on expectations and supports for early educators. For example, the International Labor Organization (ILO), which represents nearly 200 countries, has issued guidelines for ECE personnel that reflect foundational knowledge through advanced degrees with specialized training for teaching staff and program administrators.⁹² The above-mentioned recommendations put forth by the IOM/NRC to strengthen qualifications and other workforce supports represents a significant advance for the United States and are more in step with the global community on efforts to improve the status of early educators.

Establishing policies and pathways that provide access to teachers who are equally well prepared and to program leaders who can effectively support teachers is critical for all children, regardless of where they receive early learning services. There is some evidence that states are attempting to address more uniform and increased qualifications in state workforce plans or recommendations as well as in statutes.⁹³ However, recent proposals to increase qualifications with new regulatory requirements — as in the case of the District of Columbia (an associate degree for lead teaching staff and a bachelor's degree for administrators in licensed child care programs as well as a Child Development Associate credential for home-based providers) and Oregon (a bachelor's degree for public preschool teachers) — have been met with resistance from early educators, program providers, and parents.⁹⁴ Resistance is understandable and unsurprising in the absence of well-articulated phase-in plans that acknowledge experience and provide continued employment opportunities for the current workforce, improve compensation (see [Compensation, p. 93](#)), provide financial and structural supports for the incumbent and incoming workforce to access and successfully engage in education and training, and relieve the cost burden for services for parents. As efforts to advance a skilled and stable workforce are undertaken, it is imperative to recognize that policies related to qualifications do not exist in isolation of other policies and circumstances in the field. The solution, however, is not to maintain the status quo, but rather to provide resources and structures that facilitate success for the workforce and, ultimately, the children for whom they are responsible.

From Aspiration to Educational Attainment

In a longitudinal study of early educators in California who participated in bachelor's degree cohort completion programs, 40 percent of the study participants had made previous attempts to complete a four-year degree. With financial, academic, and access supports, early educators were successful: 81 percent of the cohort participants graduated, a rate more than double that of the typical transfer student from a two- or four-year institution. In addition, 76 percent were women of color, 31 percent identified their primary language spoken at home as being other than English, and most reported being among the first generation in their families to earn a college degree.⁹⁸ Importantly, both the students in the cohort programs and the six institutions of higher education that hosted the degree completion programs received financial and other supports. The funders — a combination of local government agencies and private philanthropic foundations — recognized the importance of addressing the financial and structural aspects of higher education programs and designed or organized their support accordingly. However, despite the success of the original cohort models, as with many pilot programs to support the workforce, these models were not supported with ongoing funds nor did the state build on their success and bring them to scale. Among the institutions that offered the cohort programs included in the study, San Francisco State's EdVance program has demonstrated the most success in identifying resources to implement a well-supported pathway — with multiple entry points — to a bachelor's degree.⁹⁹

A handful of states across the country have begun to allow community colleges to confer bachelor's degrees in early childhood education. Florida is leading the way, with 12 state colleges offering a bachelor's degree option.¹⁰⁰ This model can help to alleviate challenges with articulation (e.g., courses or credits not transferring from an associate degree program), access to courses during non-traditional hours, and the financial burden of attaining a four-year degree, as community colleges typically are a more cost-effective choice for students than traditional four-year institutions.

Other innovative education and training models, like apprenticeship programs linked to college education, also warrant close examination to understand who they serve and the elements that support success. The lessons learned from the cohorts and other models need not be restricted to bachelor's degree programs or to the original institutions in which they were implemented. The same principles for student success should be applied broadly along the educational pathway to support the acquisition of foundational knowledge to more advanced degrees, competencies, and specializations.

Educational Supports

Despite the disparate and low qualification requirements, many early educators *have* pursued education and training, often because there has been support available from public and philanthropic resources that have provided scholarships and other targeted services to facilitate educational advancement. As noted above, a substantial portion of the current workforce has completed college degrees. More than one-half of center-based teaching staff and nearly one-third of home-based, listed providers hold an associate degree or higher. However, a lack of comprehensive data on the workforce across states (see [Workforce Data, p. 108](#)) makes it difficult to assess the focus of those degrees, how far early educators without degrees may be from degree completion, and the educational background of those working in roles outside of teaching, such as administrators and other support staff.

Many states also lack comprehensive state-level data that allows for an assessment of inequities that exist among the workforce with regard to access to education and educational supports. However, as demonstrated in the [About the Workforce section of this report \(p. 17\)](#), there is ample evidence that early educators of color have completed education at disproportionately lower rates than their white counterparts. Research has borne out that there are persistent barriers to accessing higher education among minority groups, particularly African Americans and Hispanics.⁹⁵ The ECE system in the United States has not been immune to the structural inequalities based on gender, class, linguistic and cultural diversity, immigration status, and race that are woven throughout U.S. institutions and culture. This reality raises legitimate concerns about how higher teacher qualifications could threaten the diversity of the early childhood workforce. It is also the reality that, notwithstanding the need to raise wages for all early educators and to upend wage gaps driven by gender and race, there is evidence of an increase in compensation when early educators hold a bachelor's degree. Thus, lack of access to education and to supports to successfully complete a degree has substantial financial implications for teachers and their own families. The solutions to maintaining, and even increasing, the diversity of the ECE workforce can be found in strategies to disrupt, rather than maintain, the status quo and its resulting stratification.

Barriers to educational attainment reside *within* systems, not with the individuals who encounter them. Research has documented that early educators — including those who had previously attempted to complete education, those from minority groups and/or those for whom English is not their first language— can successfully participate in education and training and earn a college degree, and they do so at rates higher than the average college transfer student, with particular supports in place.⁹⁶ Five categories of support have shown particular promise in contributing to success among working adult students: (1) learning communities, such as cohort programs; (2) access-based support, such as classes or services at non-traditional hours or in more accessible locations; (3) skill-based support, such as tutoring, English-language assistance, and computer training; (4) academic advising and counseling; and (5) financial support, such as scholarships for tuition and books.⁹⁷

Financial resources, targeted supports, and innovative strategies for engaging practitioners in education and training are required in order to support participation in educational opportunities. Absent these supports, the persistently low wages experienced by most

Financial Assistance Necessary to Avoid Early Educator Student Loan Debt

In a 2018 CSCCE study of 78 center-based programs participating in the New York Quality Rating and Improvement System, 42 percent of the 356 participating teaching staff surveyed reported carrying student loan debt, with 52 percent reporting debt of \$25,000 or more. Among the 69 directors asked about student debt, 32 percent reported carrying debt, with nearly two-thirds (64 percent) reporting debt of \$50,000 or more. The majority of those with debt among teaching staff and directors had a bachelor's or higher degree (74 percent of teaching staff and 95 percent of administrators).¹⁰²

early educators, coupled with the structural inequities woven throughout the ECE system and wider society, present an unreasonable expectation for the ECE workforce to engage in education and training to meet higher qualification requirements. In recognition of this necessity, the consensus report, *Transforming the Financing of Early Care and Education*, included among their recommendations: "the incumbent ECE workforce should bear no cost for increasing practitioners' knowledge base, competencies, and qualifications, and the entering workforce should be assisted to limit costs to a reasonable proportion of postgraduate earnings, with a goal of maintaining and further promoting diversity in the pipeline of ECE professionals."¹⁰¹

Stakeholders have long recognized the need for such supports. In an effort to narrow the gap between the regulatory requirements and the knowledge and competencies that early educators should optimally acquire, considerable public and private resources have been spent on initiatives to raise educational levels across settings. Today, nearly all states offer scholarships to pursue education or training. While scholarships have yet to be made permanent features of the early childhood infrastructure — and thus are vulnerable to changes in state budgets and priorities, which affect the number of people they can serve, the levels of support they can provide, and their potential enduring impact — they remain a critical support across states. Scholarships may reduce the financial burden associated with continued education, such as tuition, books, the need to assume student debt, or taking unpaid time off work in order to pursue professional development. They may also potentially contribute to teachers' long-term earning power by increasing their education, though this earning potential remains comparatively low (see [Earnings and Economic Security](#), p. 29).

It should be noted, however, that because of unpredictable funding, scholarships as currently implemented are often limited to those working in certain types of programs, serving particular groups of children, earning below a certain wage, or participating in particular initiatives, and therefore, they do not provide opportunities for *all* early educators. Furthermore, while many states can report who are receiving scholarships, in most states

TABLE 4.1

Qualifications & Educational Supports Indicators & Assessment

Qualifications & Educational Supports	Values & Partial Points		Maximum Points Per Indicator
Minimum qualification levels (pre-K)	Lead Teacher – BA: Yes/No	1	2
	Assistant Teacher – CDA/Equivalent or higher: Yes/No	1	
Minimum qualification levels (licensed centers)	Center Director – BA: Yes/No	1	3
	Lead Teacher – BA: Yes/No	1	
	Assistant Teacher – CDA/Equivalent or higher: Yes/No	1	
Minimum qualification levels (licensed home-based)	Lead Teacher – BA: Yes/No	1	2
	Assistant Teacher – CDA/Equivalent or higher: Yes/No	1	
Scholarships to support education pathways	BA	1	3
	AA	1	
	CDA or equivalent	1	
Collects data on scholarship recipients	Yes/No		2
Total			12
0-4 points per category			Stalled
5-8 points per category			Edging Forward
9-12 points per category			Making Headway

Note: For more information on these indicators and their data sources, see [Appendix 1: Data Sources](#).

it is not possible to assess the reach of these scholarships, as states are generally unable to provide an estimate of the proportion of the total workforce that participates in these programs and any differences among those who have and have not accessed scholarships (see [Workforce Data, p.108](#)).

Nonetheless, implementing a scholarship initiative demonstrates an understanding of the need to remove financial burdens for educational attainment among the workforce and a commitment to supporting advancement. Thus, in this edition of the *Index*, we have added two new indicators to assess how states support advancement along educational pathways and whether states track data on scholarship recipients.

Rationale for Indicators

To recognize both the goal of setting appropriate educational qualifications for early educators and program leaders and providing financial resources to educational attainment, we have developed a series of indicators that include educational levels and scholarships to participate in training and education (see Table 4.1). In our assessment of states for this edition of the *Index*, we have modified our qualification indicators and included program administrators in order to more closely align with the educational benchmarks recommended for staff working across settings in the *Transforming the Workforce* report and the expectations for staff that informed the *Transforming the Financing* illustrative example.

For the 2018 *Index*, we examined whether states, across center-based, regulated home-based, and public pre-K settings, have established educational requirements at a minimum of a Child Development Associate (CDA) credential¹⁰³ or equivalent¹⁰⁴ for assistant teachers and a bachelor's degree for lead teachers. We also assessed whether states have established a minimum educational requirement of a bachelor's degree for licensed center-based directors.¹⁰⁵ At this time, we did not assess whether states have an additional certification — such as a credential or endorsement, in addition to a degree — because ECE does not have a uniform educational baseline like K-12, in which it is understood that additional certification is completed in addition to a college degree.

We have also added two new indicators to assess how states support advancement along educational pathways and whether states collect data on scholarship recipients. Though the reach of scholarship programs are typically limited, implementing a scholarship initiative demonstrates an understanding of the need to remove financial burdens for educational attainment among the workforce and a commitment to supporting advancement.

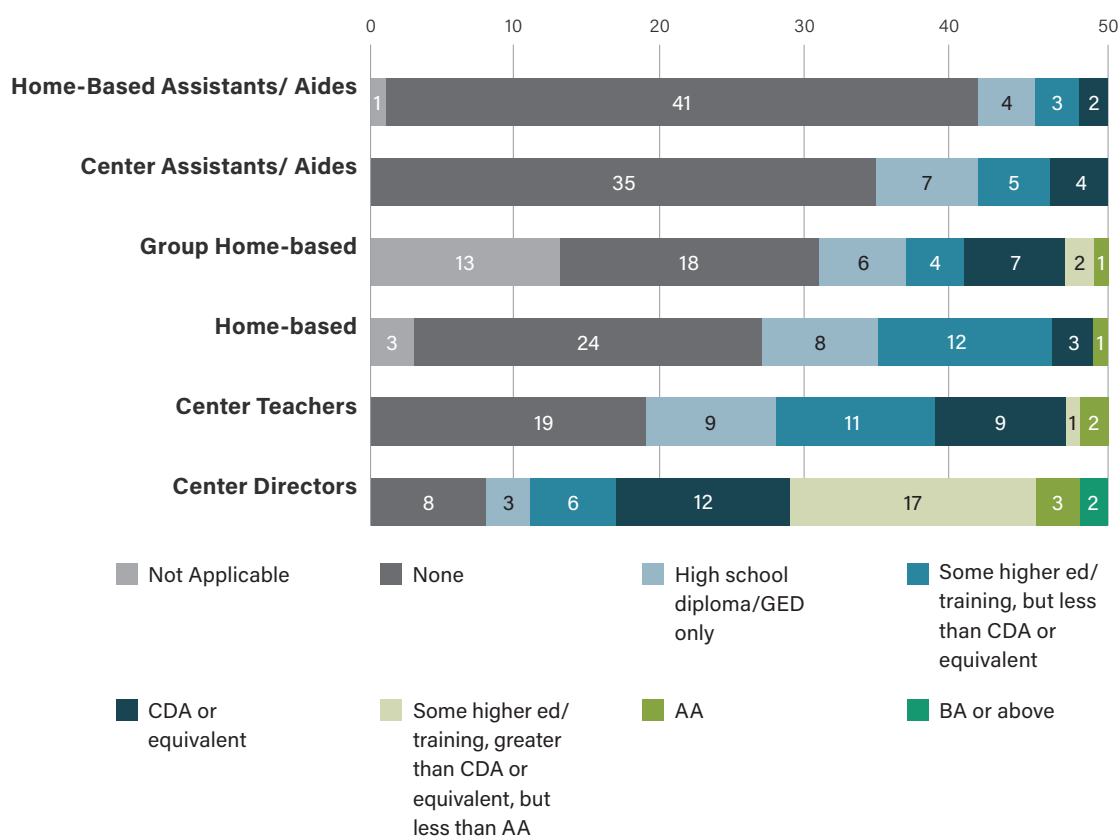
Assessing the States: Qualifications & Educational Supports

Indicator 1: Does the state require a minimum of a bachelor's degree for lead teachers and a minimum of a CDA or equivalent for assistant teachers in public pre-K programs?

Public pre-K programs are offered in 43 states plus the District of Columbia, and 11 states offer two or more programs, although few of these programs serve more than 50 percent of three- and four-year-olds in their states.¹⁰⁶ In the majority of states, these pre-K programs operate in both public-school and community-based settings. Of states with public pre-K programs, 23 require a minimum of a bachelor's degree for lead pre-K teachers across all settings and across all programs (for states with more than one state-funded pre-K program).¹⁰⁷ This is the same number of states as reported in the 2016 *Index*. An additional 14 states require a bachelor's for pre-K teachers, but only for certain types of programs or settings, such as public schools.¹⁰⁸ For assistant teachers, 15 states require a minimum of a Child Development Associate credential or equivalent across all settings and across all programs.¹⁰⁹

FIGURE 4.3

Minimum Qualification Requirements in State Licensing by ECE Role



Indicator 2: Does the state set minimum qualification levels for center-based settings OUTSIDE PRE-K at a bachelor's degree for center directors and teachers and a CDA or equivalent for assistant teachers?

Only the District of Columbia and New Jersey require center directors to have bachelor's degrees, and no states require lead teachers to have bachelor's degrees in center-based programs (outside of public pre-K programs).¹¹⁰ Three states (Hawaii, Minnesota, and Vermont) and the District of Columbia require assistant teachers in such center-based programs to have a CDA or equivalent.

Many states (34) currently require at least a CDA or equivalent, or higher, for center directors, but it is less common to require even such foundational knowledge or training for center-based teachers (12 states) or for center-based assistant teachers (four states, as noted in our indicator assessment). Six states — Idaho, Kentucky, Montana, Oregon, South Dakota, and West Virginia — do not have a minimum education requirement for any early educators working in center-based programs, though they may require certain levels of experience.

CAN YOU ANSWER THESE QUESTIONS ABOUT EARLY EDUCATOR QUALIFICATIONS IN YOUR STATE?

Information can drive policy change, but we lack comprehensive data about the ECE workforce nationally and in most states (see [Workforce Data](#), p. 108). Can you answer these basic questions about early educator qualifications in your state?

- ▶ What percentage of early educators already hold an associate's degree, a bachelor's degree, or higher?
- ▶ What percentage of early educators lack foundational training, such as a CDA?
- ▶ How do the answers to these questions vary by job role? By geographical region? By program auspices? By demographic characteristics?
- ▶ What percentage of the workforce has participated in scholarship initiatives? How do scholarship recipients differ from those who have not received a scholarship?

Indicator 3: Does the state require a minimum of a bachelor's degree for licensed home-based providers and a minimum of a CDA or equivalent for assistant teachers in home-based programs?

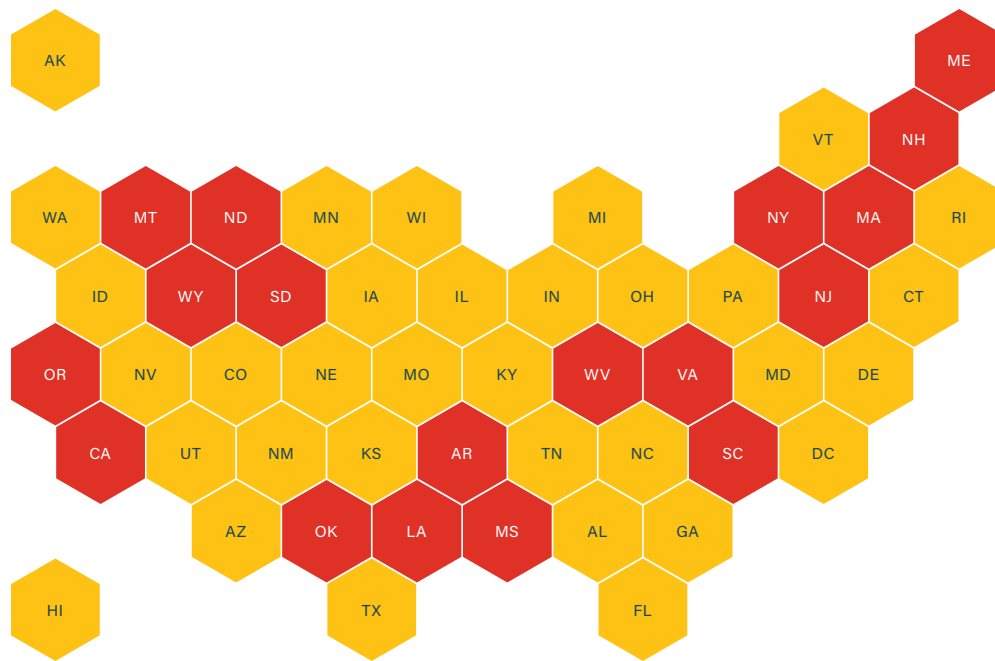
Not a single state requires a bachelor's degree for home-based providers, and only the District of Columbia and Hawaii require a CDA or equivalent for assistant teachers in home-based programs.

There are very few states that require *any* minimum education for home-based providers and assistant teachers. Twenty-four states do not require any formal education or training for lead providers in small home-based settings (usually one provider), and 19 do not require any formal education or training for providers in larger home-based settings (two or more providers).¹¹¹ The majority of states (41) have no minimum education requirements for assistant teachers in home-based settings.

Indicator 4: Does the state have a scholarship to support educational attainment pathways from a CDA or equivalent to associate and bachelor's degrees?

Financial supports are crucial to supporting early educators meet any increased educational requirements. Currently, 42 states have a scholarship to support these specific educational pathways for early childhood educators (from a CDA or equivalent to associate and bachelor's degrees); another four states have other types of scholarships. Thirty-seven states have scholarships that support the attainment of a CDA credential or equivalent specifically; 41 states have scholarships that support the attainment of an

State Map of Qualifications & Educational Supports Assessment



MAKING HEADWAY: The state is taking action and advancing promising policies.

Indicator 5: Does a state collect data on scholarship recipients?

To ensure equity in access to their scholarship programs, states should collect data on scholarship recipients, their outcomes, and their trajectory in the early childhood field. By collecting this information, states can assess which communities do not have access to scholarships and whether this situation is changing over time and adapt their outreach and engagement strategy accordingly. Currently, 33 states collect at least some data on their scholarship recipients, but what is collected varies widely. Collecting data on scholarship recipients is important for articulating the level of funds needed to adequately support the ECE workforce, similar to the need for better data on the workforce more generally (see [Workforce Data, p. 108](#)).

State Assessment

We found 18 states to be **stalled**, having met very few or none of these indicators; 33 states **edging forward**, having met some of the indicators; and no states **making headway**. Changes to indicators between the 2016 and 2018 *Index* mean that it is not possible to compare overall assessment between the two years. See Table 4.2 for a state-by-state overview of each indicator and the overall assessment.

Policy Recommendations: Qualifications & Educational Supports

- ▶ Align qualification requirements with national recommendations, establish minimum requirements that reflect foundational knowledge for *all* early childhood teaching staff and program leaders, and require a bachelor's degree with ECE specialization for lead teachers and center directors, in line with what is required for teachers of older children.
- ▶ As new qualifications are enacted, simultaneously generate timelines to meet new requirements and resources to support acquisition of any education, training, and certification that may be required.
- ▶ Ensure that all members of the current workforce have opportunities and supports to acquire education and training. These supports should begin with entry-level foundational knowledge and align with a pathway based on degree and competency requirements to support attainment of associate and bachelor's degrees.
- ▶ Develop targeted opportunities and supports for members of minority racial and ethnic groups and individuals who speak English as a second language. This strategy will disrupt systemic barriers to educational attainment that extend beyond their status as early educators.

TABLE 4.2 Qualifications Indicators & Assessment by State

State	Pre-K		Center-Based			Home-Based		Scholarships to Support Educational Pathways	Collects Data on Scholarship Recipients	Assessment
	Lead - BA	Assistant - CDA	Director - BA	Lead - BA	Assistant - CDA	Lead - BA	Assistant - CDA			
Alabama	Yes	Yes	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Alaska	Yes	Yes	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Arizona	No	No	No	No	No	No	No	CDA, AA	Yes	Edging Forward
Arkansas	No	Yes	No	No	No	No	No	Not Applicable	Not Applicable	Stalled
California	No	No	No	No	No	No	No	CDA, AA, BA	Not Available	Stalled
Colorado	No	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Connecticut	No	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Delaware	No	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
District of Columbia	No	No	Yes	No	Yes	No	Yes	CDA, AA, BA	Yes	Edging Forward
Florida	No	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Georgia	Yes	Yes	No	No	No	No	No	CDA, AA, BA	Not Available	Edging Forward
Hawaii	Yes	Yes	No	No	Yes	No	Yes	CDA, AA, BA	Not Available	Edging Forward
Idaho	Not Applicable		No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Illinois	Yes	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Indiana	No	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Iowa	No	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Kansas	Yes	No	No	No	No	No	No	AA, BA	Yes	Edging Forward
Kentucky	Yes	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Louisiana	Yes	No	No	No	No	No	No	CDA, AA, BA	Not Available	Stalled
Maine	Yes	Yes	No	No	No	No	No	Not Applicable	Not Applicable	Stalled
Maryland	Yes	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Massachusetts	No	No	No	No	No	No	No	AA, BA	Not Available	Stalled
Michigan	Yes	Yes	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Minnesota	No	Yes	No	No	Yes	No	No	CDA, AA, BA	Yes	Edging Forward
Mississippi	Yes	Yes	No	No	No	No	No	Not Applicable	Not Applicable	Stalled
Missouri	Yes	Yes	No	No	No	No	No	AA, BA	Yes	Edging Forward
Montana	Not Applicable		No	No	No	No	No	Not Applicable	Not Applicable	Stalled

TABLE 4.2 **Qualifications Indicators & Assessment by State**
(continued)

State	Pre-K		Center-Based			Home-Based		Scholarships to Support Educational Pathways	Collects Data on Scholarship Recipients	Assessment
	Lead - BA	Assistant - CDA	Director - BA	Lead - BA	Assistant - CDA	Lead - BA	Assistant - CDA			
Nebraska	Yes	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Nevada	Yes	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
New Hampshire	Not Applicable		No	No	No	No	No	Not Applicable	Not Applicable	Stalled
New Jersey	Yes	No	Yes	No	No	No	No	CDA	Not Available	Stalled
New Mexico	No	Yes	No	No	No	No	No	AA, BA	Yes	Edging Forward
New York	Yes	No	No	No	No	No	No	CDA, AA, BA	Not Available	Stalled
North Carolina	Yes	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
North Dakota	Not Applicable		No	No	No	No	No	CDA	Not Available	Stalled
Ohio	No	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Oklahoma	Yes	No	No	No	No	No	No	CDA	Yes	Stalled
Oregon	No	Yes	No	No	No	No	No	Not Applicable	Not Applicable	Stalled
Pennsylvania	No	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Rhode Island	Yes	Yes	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
South Carolina	No	No	No	No	No	No	No	AA, BA	Yes	Stalled
South Dakota	Not Applicable		No	No	No	No	No	Not Applicable	Not Applicable	Stalled
Tennessee	Yes	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Texas	Yes	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Utah	Not Applicable		No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Vermont	No	No	No	No	Yes	No	No	CDA, AA, BA	Yes	Edging Forward
Virginia	No	No	No	No	No	No	No	AA, BA	Not Available	Stalled
Washington	No	Yes	No	No	No	No	No	AA, BA	Yes	Edging Forward
West Virginia	Yes	Yes	No	No	No	No	No	AA, BA	Not Available	Stalled
Wisconsin	No	No	No	No	No	No	No	CDA, AA, BA	Yes	Edging Forward
Wyoming	Not Applicable		No	No	No	No	No	CDA, AA, BA	Not Available	Stalled
TOTAL	23	15	2	0	4	0	2	CDA: 37, AA: 41, BA: 41	33	

Notes: Scholarships listed in the tables as "CDA" include both CDAs or their functional equivalent, as defined in note 104: There is no established consensus on an equivalent to a CDA. For the purposes of this indicator, eight semester college credits or 120 clock hours of training were used as the standard for comparing whether other minimum qualification requirements were equivalent to, less than, or exceed the CDA, in line with the Council for Professional Recognition standards, see Council for Professional Recognition (n.d.) CDA Credentialing Program FAQs. Retrieved from <https://www.cdacouncil.org/credentials/faqs/apply-for-cda-faqs>. Additional scholarships not listed or linked in the table may be available across states.

Work Environment Standards

 **RESEARCH DOCUMENTING THE NEGATIVE EFFECTS** of mediocre early care and education settings on children’s learning and development underlies decades of debate about the most effective strategies to improve services for young children in the United States.¹¹² There is no single ingredient to effectively prepare teachers of young children and to support their continuing growth as professionals on the job. While strategies focused on increased professional development and education for individual members of the workforce have historically dominated policy and practice, the ingredients that influence early childhood workplace environments — what teachers need in addition to training and education in order to help children succeed — have been routinely overlooked in quality improvement efforts. Yet, just as children’s environments can support or impede their learning, work environments promote or hinder teachers’ practice and ongoing skill development.¹¹³

A good work environment encompasses more than the critical factors of pay and benefits. It includes policies and practices that shape the climate of the workplace, which influences early educators’ ability to teach effectively, strengthen their skills, and improve their relationships with colleagues, children, and parents. Just as being able to depend on certain benefits, like paid time off when sick or to take care of family members, is an important contributor to a good working environment, so are supports that enable good teaching practice, such as sufficient staffing and paid non-child contact time for professional responsibilities and reflection with colleagues.

Teachers in the K-12 system can more readily expect their work environment to implement program policies that allow for and promote teacher initiative and that support teachers’ economic, physical, and emotional well-being. They can rely on such provisions as a salary schedule that accounts for experience and level of education, paid professional development activities, and paid planning time each week, as well as access to such benefits as paid personal/sick leave, health care, and retirement. Public school teacher unions and professional organizations help channel K-12 teachers’ collective voice and represent their interests, and as a result, these educators generally work under negotiated contracts that are explicit about these supports.¹¹⁴

Unionization is much lower among early educators than among K-12 teachers. As of 2012, the union membership rate was only 10 percent for center-based teaching staff¹¹⁵ and currently is 45 percent of elementary and middle school teachers.¹¹⁶ Only slightly more than one-quarter of center-based teaching staff report belonging to *any* professional organization, but ECE professional organizations typically do not represent teaching staff interests on the job.

In contrast to K-12 teachers, early childhood teachers routinely face insufficient teaching supports (such as the lack of paid non-child contact time to perform professional responsibilities) and inadequate rewards for their education and commitment (for example, low pay and lack of benefits, such as paid time off when sick or to take care of family members). These shortcomings contribute to economic worry and stress among teaching staff (see [Earnings and Economic Security, p. 29](#)) and fuel high levels of teacher turnover, preventing

What Teaching Supports Do Early Educators Need?

Teaching supports include a range of workplace tools that influence teaching practice. Ranging from materials and resources to levels of staffing and dedicated time for observation, planning, and sharing with colleagues, teaching supports constitute essential conditions for enabling teaching staff to apply their knowledge and skills. Efforts to improve or sustain program quality are undermined when such supports are missing or unreliable, and additional burdens are placed on the complex and demanding work of teaching, which includes responding to the varied needs of individual children in the classroom.¹¹⁸

Sufficient staffing (including available substitutes) is a critical teaching support often unavailable in ECE classrooms. In 2016, CSCCE examined economic insecurity among approximately 338 early childhood teaching staff as part of a larger effort to examine workplace supports and adult well-being among early educators employed in programs participating in one California county (Alameda) QRIS program.¹¹⁹ Participating programs were predominantly publicly funded programs (including Head Start), state-contracted child care programs, and school district-based preschool programs. Only slightly more than half (57 percent) of teaching staff in these programs agreed that there were enough teaching staff available to help during breaks, and less than half of teaching staff agreed that there were trained substitutes/floaters available (40 percent) or that there were enough teaching staff to give children individual attention (42 percent). Insufficient staffing levels may be exacerbated by teaching staff turnover, as only 52 percent of teaching staff agreed that if turnover occurred, everything possible would be done to hire qualified, new staff.¹²⁰

program improvement and making it increasingly challenging to attract well-trained and educated teachers to work in early learning programs.¹¹⁷

Because supportive adult working environments play a crucial role in promoting quality learning environments for children, in addition to their benefits for early educators themselves, standards for adult working environments should be articulated as part of quality assurance and improvement efforts in early childhood. Despite calls to articulate such standards by international organizations (see Early Educator Work Environment Standards Articulated by the ILO, on the following page), in the United States standards for early educator work environments are either partial or missing entirely.

At the national level, few standards exist for early educator work environments. Federal child care programs, such as Head Start or the Department of Defense child care program,

ECE WORK ENVIRONMENT STANDARDS ARTICULATED BY THE ILO

In 2014, the International Labor Organization (ILO) published *Policy Guidelines on the Promotion of Decent Work for Early Childhood Education Personnel* — the first international text to specifically articulate standards for the work environments of early educators.¹²¹ The ILO guidelines are intended to be reflected in national ECE legislation, policies, and collective bargaining agreements to ensure that certain work environment standards are met for early educators across the globe, including:

- ▶ Remuneration “set at the same level as the equivalent job in primary education with similar qualifications and competency requirements (comparator professions), whether through separate or unified salary scales”;
- ▶ Low child-staff ratios and a “safe, healthy, and collaborative working environment”;
- ▶ “Sound induction plans and management support, including mentoring, for new ECE personnel”;
- ▶ Paid leave (vacation, parental, sick);
- ▶ Non-child contact time for professional development and reflective practice; and
- ▶ Substitute or relief staff for those on leave.¹²²

do not include explicit standards for work environments for providers that receive their funds, though they sometimes address other standards for the workforce, such as minimum qualification levels in Head Start.¹²³ Major national ECE accrediting bodies do not necessarily include work environments in their program standards either. Of the four major accreditation organizations,¹²⁴ the most comprehensive articulation of the need for work environment standards comes from the National Association for the Education of Young Children (NAEYC), yet is limited to accreditation criteria that include: the provision of salary scales and benefit packages (including health insurance, leave time, and retirement); staff breaks; adult-sized sinks for hand washing; and the recommendation that “program leaders have systems, plans, policies, or procedures in place that are inclusive of all staff, show support for staff, build mutual trust, and foster support and collaboration between staff.”¹²⁵ Such principles for early educator work environments are brief compared to the 100+ pages of quality assurance criteria for other programs. Furthermore, they do not specify standards for what is adequate or ideal in these areas and, therefore, offer little guidance for what programs ought to provide ECE staff in order to ensure a good work environment.

While national standards for work environments have yet to be articulated via formal avenues like ECE program policies or accreditation criteria, 20 years ago an elaborate process led by center teaching staff and home-based providers was designed to identify such

Enforcing Work Environment Standards

Even when work environment standards are articulated, such as in worker wage and hour laws or in ECE licensing regulations, they may not be enforced, potentially causing harm to both early educators and the children in their care. This unfortunate consequence is especially likely within early care and education, as ECE staff for the most part are not represented by a professional organization or union that could provide a means of channeling their collective voice.

For example, in New York state, more than one-half (52 percent) of teaching staff assessed being able to take paid breaks during their workday as undependable, although required by law in most instances.¹²⁹

One solution to empower early educators to speak out about the condition of their work environments is a whistleblowing law, as in California. [Article 3 of the 1984 Child Day Care Act](#) specifies that “no employer shall discharge, demote, or suspend, or threaten to discharge, demote, or suspend, or in any manner discriminate against any employee” who makes a good-faith oral or written complaint of violations of licensing or other laws, is involved in a proceeding against their employer for such violations, or refuses to perform work that violates licensing or other laws.¹³⁰

standards. “Model work standards” for both centers and homes were published in the late 1990s and used extensively in workshops with providers to support their implementation.¹²⁶ While these standards should be updated to reflect the current ECE landscape, they are still a useful guide for understanding what good work environments for early educators require. Example guidelines pertaining to paid planning time read:

- ▶ “High quality level: Child care teachers receive five hours of paid planning time each week. This time may be used for: observation, curriculum planning, team meetings and staff collaboration, committee and/or board meetings, parent communication, gathering and preparing materials, reflection on classroom practices, and assessment of children’s growth and development.”
- ▶ “Striving level: Child care teachers receive two hours of paid planning time each week. This time may be used for the activities identified above.”
- ▶ “Child care teachers are not responsible for children during their planning time, as reflected in the program’s staffing pattern or the employment of qualified substitutes or floater teachers.”

With formal guidance at the national level practically non-existent, state-level advocates and decision makers have an opportunity to shape standards for work environments. Given the complexity of the current ECE system, there are a variety of avenues by which states

could both articulate standards and enforce them, including through the allocation of sufficient funding for providers to implement standards. These avenues could include licensing requirements or requirements attached to public funding, such as pre-K or child care contracts. An understanding of what benefits and supports are needed for good working environments should also be built into competencies, training, and higher education programs — teachers should understand what constitutes a good working environment, and those in leadership positions, such as directors and owners of home-based programs, should be trained on how to implement policies and practices to ensure supportive work environments. States also have an opportunity to encourage quality programs through their QRIS¹²⁷ by including workplace and compensation policies among their quality criteria, focusing on teaching supports, adult well-being, and learning opportunities.¹²⁸

Quality Rating and Improvement Systems (QRIS) have become a predominant quality improvement strategy in most states over the past two decades,¹³¹ and the evolution of QRIS over time are at least in part linked to increased expectations for teachers, both substantive and administrative. As of 2017, 44 states had an operational QRIS, with some states, such as California and Florida, operating multiple QRIS at the regional or local levels.¹³² Although QRIS have been widely adopted by states, program participation in QRIS varies widely depending on the state and their eligibility criteria: few states have 100 percent of eligible center-based programs participating, and most systems remain voluntary.¹³³ Their largely voluntary nature also stresses the need to articulate work environment standards via other ECE mechanisms, such as licensing or contracts tied to public funding.

Nevertheless, this investment in QRIS highlights the critical need to understand and examine how these systems define quality, the benchmarks used to indicate quality, and the opportunities in place to support improvement. QRIS ratings are based on standards — or “agreed upon markers of quality established in areas critical to effective programming and child outcomes” — and the elements incorporated communicate important messages to stakeholders (including policymakers, teachers, and administrators) about the values and priorities that are deemed the most important areas for focusing resources and attention.¹³⁴ The degree of attention that a given QRIS pays to the workforce through such factors as staff education and professional development, compensation and benefits, and work environments — factors that have been linked to program quality improvement and sustainability¹³⁵ — may determine how practitioners invest their energies to enhance programs for young children, how public resources are prioritized and allocated for quality improvement, and the ultimate success of the QRIS strategy itself.

Rationale for Indicators

In a [previous policy brief](#), CSCCE performed a systematic analysis of whether QRIS included benchmarks for teaching supports, adult well-being, and learning opportunities for center-based programs.¹³⁹ A key finding was that, while staff qualifications were featured as a quality element in all QRIS, workplace teaching supports and compensation were much less likely to be included.

Staff qualifications and training continue to be one of the most commonly assessed areas of quality, included in nearly all QRIS for both center- and home-based providers.¹⁴⁰ Additionally, some QRIS incorporate financial assistance and incentives for education and

SEQUAL: Understanding Teacher Work Environments

Gathering teachers' perspectives on the features of their work environments that best allow them to apply their skills and continue to develop their knowledge is a starting point for generating new avenues and solutions that can lead to enhanced performance. Other industries, such as health care, have used this approach and have engaged practitioners themselves in strengthening organizational capacity.¹³⁶ SEQUAL is a multi-purpose, validated tool developed by CSCCE to gather teaching staff perspectives about quality improvement.¹³⁷

SEQUAL addresses five critical areas of teachers' learning environments: teaching supports; learning opportunities; policies and practices that support teaching staff initiative and teamwork; adult well-being; and how supervisors and program leaders interact with staff to support their teaching practice. SEQUAL brings teacher voices into quality-improvement strategies, provides contextual information about workplace conditions that impact teacher practice and program quality, and builds a vocabulary for the field around teachers' needs for workplace supports. SEQUAL is used by researchers and policymakers to understand the interplay between teacher education and the work environment and as a technical assistance tool to guide improvements to program policies, practices, and conditions necessary to support teachers' work with children.

For an example of how a SEQUAL study was used to understand teacher work environments and their relationship to program quality in a California county, see *Teachers' Voices – Alameda: Work Environment Conditions That Impact Teacher Practice and Program Quality*.¹³⁸

Several statewide SEQUAL studies are currently underway at CSCCE. These and further studies can be used to think about strengthening quality assurance and improvement as well as designing or augmenting technical assistance.

training for staff.¹⁴¹ However, fewer QRIS acknowledge the importance of positive and supportive work environment benchmarks. As in 2016, we focus on a few select indicators of whether QRIS include attention to workplace supports and compensation: paid time for professional development; paid planning or preparation time; and salary scales or benefit options, such as health insurance or paid leave from work (see Table 4.3).

In our assessment of states, we emphasize the importance of taking a multi-dimensional approach to workplace supports, exemplified through the inclusion of three distinct, but related, aspects of the work environment, as well as the importance of consistency between quality benchmarks for centers and home-based providers.¹⁴² Although the diversity of

TABLE 4.3

Work Environment Standards Indicators & Assessment

Work Environments	Values & Partial Points		Maximum Points per Indicator
In QRIS standards: Paid professional development time	Centers: Yes/No	2	4
	Homes: Yes/No	2	
In QRIS standards: Paid planning/preparation time	Centers: Yes/No	2	4
	Homes: Yes/No	2	
In QRIS standards: Salary scale/benefits	Centers: Yes/No	2	4
	Homes: Yes/No	2	
Total			12
0-4 points per category			Stalled
5-8 points per category			Edging Forward
9-12 points per category			Making Headway

Note: For more information on these indicators and their data sources, see [Appendix 1: Data Sources](#).

settings in the early childhood field makes consistency across settings a challenge, in principle a child should be able to receive high-quality services regardless of whether those services are offered in a center or a home. Therefore, home-based providers should also aim for a quality adult working environment and be funded accordingly. We recognize that structural differences between center- and home-based services present different challenges and require varying levels of funding in order to meet these standards, but all early care and education services require supportive work environments in order to be effective.

Data for the indicators are drawn from the [QRIS compendium](#), which provides an overview of all operational QRIS across the states.¹⁴³ The compendium is a useful resource for understanding what standards are included in QRIS ratings, but it does not provide detailed data on all state standards (e.g., whether certain amounts of paid planning time are required or what type of workplace benefits should be offered), which are crucial for ensuring that early educators have supportive work environments.

Additionally, we assess whether QRIS include particular markers of quality in their ratings *and not* whether programs adopt these standards. For example, some QRIS operate using a “building block” system, where programs are required to meet *all* standards in order to move up in rating; however, many QRIS operate as “point systems,” so that programs are not necessarily required to meet all items in order to advance to a higher rating.¹⁴⁴ Where point systems are used, even if paid planning time is included as a standard, programs do not necessarily need to offer it in order to improve their rating. Additional data on early childhood programs by state is required to understand to what extent these standards are being met in practice.



DATA SPOTLIGHT

CAN YOU ANSWER THESE QUESTIONS ABOUT EARLY EDUCATOR WORK ENVIRONMENTS IN YOUR STATE?

Information can drive policy change, but we lack comprehensive data about the ECE workforce nationally and in most states (see [Workforce Data](#), p. 108). Can you answer these questions about early educator work environments in your state?

- ▶ What percentage of early educators have paid non-child contact time for planning and professional development?
- ▶ What percentage of early educators say they do not have access to paid breaks (possibly in violation of labor law)?
- ▶ How do the answers to these questions vary by job role? By geographical region? By program? By demographic?

Assessing the States: Work Environment Standards

Indicator 1: Does a state's QRIS include paid professional development time for center- and home-based programs?

Continuing professional development is a core aspect of the adult learning environment, yet many educators do not have access to paid time to pursue these opportunities. Only 13 states include paid time for professional development as a quality benchmark for center-based programs, an improvement from four states compared with the 2016 *Index*. However, only one of these states (Vermont) includes the equivalent for home-based providers, up from none in the 2016 *Index*.

Indicator 2: Does a state's QRIS include paid planning and/or preparation time for center- and home-based programs?

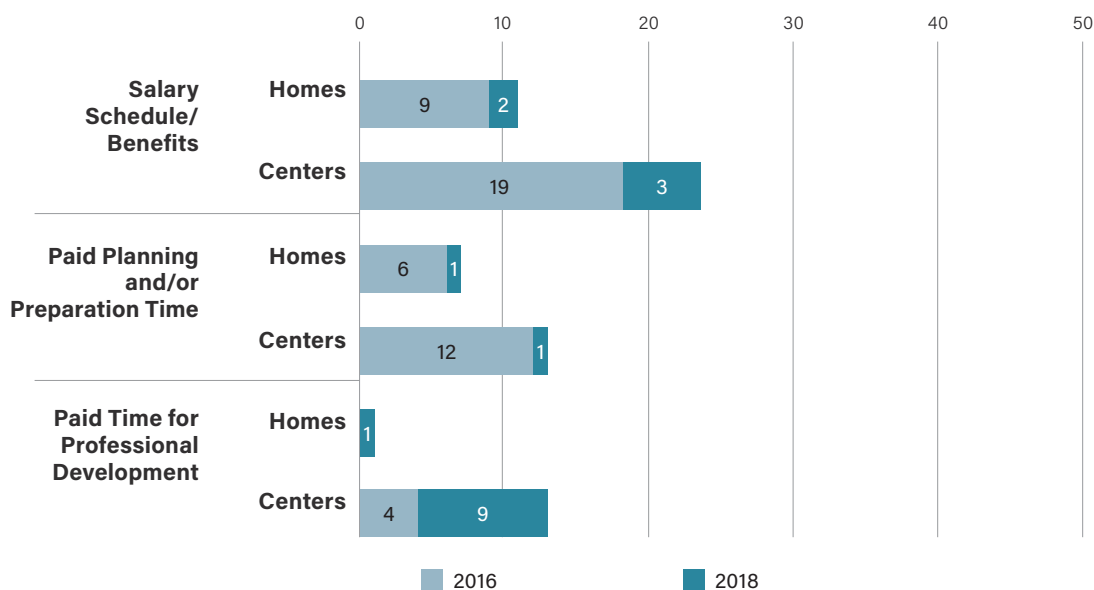
Paid time for teachers to plan or prepare for children's activities is essential to a high-quality service, but it is not a guarantee for early educators, many of whom must plan while simultaneously caring for children or during unpaid hours. Thirteen states include paid time for planning and/or preparation as a quality benchmark for center-based programs, up from 12 in the 2016 *Index*, but only seven of these (Delaware, Massachusetts, New Mexico, New York, Vermont, Washington, and Wisconsin), compared to six in the 2016 *Index*, also include it for home-based providers.

Indicator 3: Does a state's QRIS include salary scale and/or benefits for center- and home-based programs?

QRIS could be an opportunity to signal that — just like education levels — compensation and retention are important markers of quality, but not all QRIS include salary levels and

FIGURE 4.5

Increase in Number of States That Include Work Environment Indicators in QRIS, From 2016 to 2018



benefit packages as part of their ratings. Twenty-two states include salary scales and/or benefit options, such as health insurance and paid time for sick leave, family leave, and vacation/holidays, as benchmarks of program quality for center-based programs, while only half as many include this indicator for home-based providers. Compared to the 2016 *Index*, one additional state — New Hampshire — included a salary scale and/or benefits for both center-based and home-based providers.

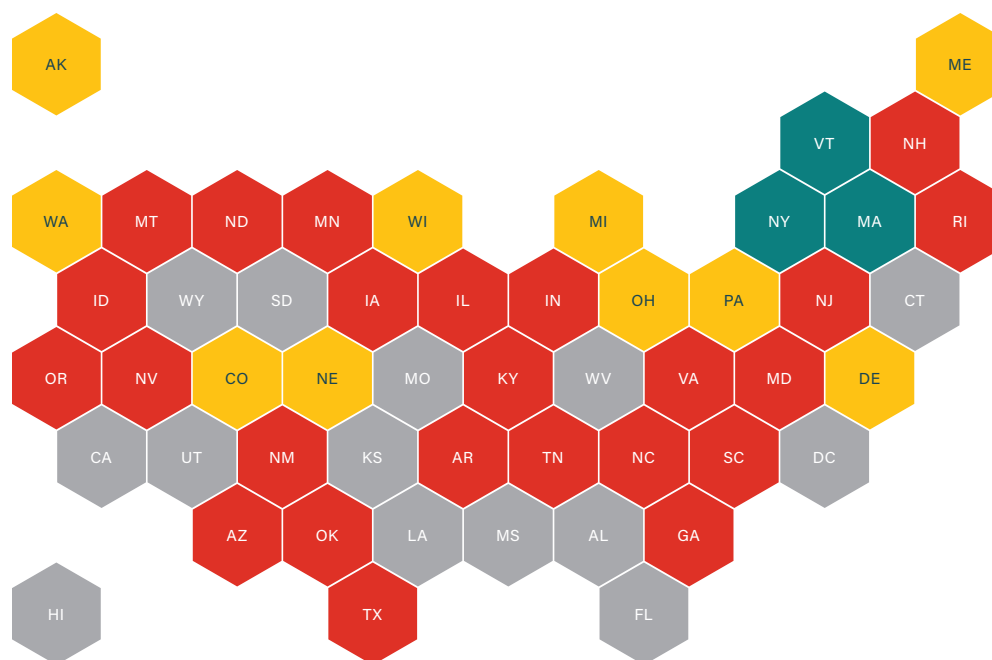
State Assessment

25 states are **stalled**. Ten states are **edging forward**, and three states are **making headway**. See Table 4.4 for a state-by-state overview of each indicator and the overall assessment for 2018. A comparison with the overall state assessment in the 2016 *Index* is not possible due to changes in how indicators were assessed.

Policy Recommendations: Work Environment Standards

- ▶ Develop workplace standards, such as guidance on appropriate levels of paid planning time, which are necessary for educators to engage in professional practice to support children's development and learning and to alleviate conditions that cause educator stress.
 - ▶ Use existing models, such as the [International Labor Organization Policy Guidelines](#) and the Model Work Standards for [Centers and Homes](#).
 - ▶ Engage teachers and providers as influential voices in this process.

State Map of Work Environment Standards Assessment



EDGING FORWARD: The state has made partial progress.

MAKING HEADWAY: The state is taking action and advancing promising policies.

- ▶ Revise QRIS rating criteria and other state guidelines or requirements (licensing, competencies) accordingly.
- ▶ Identify how work environment issues (and eventually standards) can be implemented in training and higher education for both teachers and ECE leadership.
- ▶ Provide financial resources and other assistance to enable programs and providers to implement standards in a reasonable period of time and sustain compliance with these standards over time.
- ▶ Regularly collect data from early educators to assess how they experience work environment standards.
- ▶ Assess worker protections and possible remedies (e.g., California's whistleblowing law) available to ECE staff to ensure enforcement of work environment standards.

TABLE 4.4 Work Environment Standards Indicators & Assessment by State

State	Included in QRIS Standards?						Overall Assessment
	Paid Time for Professional Development		Paid Planning and/or Preparation Time		Salary Schedule/ Benefits		
	Centers	Homes	Centers	Homes	Centers	Homes	
Alabama	---	---	---	---	---	---	---
Alaska	Yes	No	Yes	No	Yes	No	Edging Forward
Arizona	No	No	No	No	Yes	No	Stalled
Arkansas	No	No	No	No	No	No	Stalled
California	---	---	---	---	---	---	---
Colorado	Yes	No	Yes	No	Yes	No	Edging Forward
Connecticut	---	---	---	---	---	---	---
Delaware	No	No	Yes	Yes	Yes	Yes	Edging Forward
District of Columbia	---	---	---	---	---	---	---
Florida	---	---	---	---	---	---	---
Georgia	Yes	No	No	No	Yes	No	Stalled
Hawaii	---	---	---	---	---	---	---
Idaho	No	No	No	No	No	No	Stalled
Illinois	No	No	No	No	No	No	Stalled
Indiana	No	No	No	No	No	No	Stalled
Iowa	No	No	No	No	No	No	Stalled
Kansas	---	---	---	---	---	---	---
Kentucky	No	No	No	No	Yes	No	Stalled
Louisiana	---	---	---	---	---	---	---
Maine	No	No	Yes	No	Yes	Yes	Edging Forward
Maryland	No	No	No	No	Yes	Yes	Stalled
Massachusetts	Yes	No	Yes	Yes	Yes	Yes	Making Headway
Michigan	Yes	No	No	No	Yes	Yes	Edging Forward
Minnesota	No	No	No	No	No	No	Stalled
Mississippi	---	---	---	---	---	---	---
Missouri	---	---	---	---	---	---	---
Montana	No	No	No	No	No	No	Stalled
Nebraska	Yes	No	No	No	Yes	Yes	Edging Forward

TABLE 4.4 Work Environment Standards Indicators & Assessment by State
(continued)

State	Included in QRIS Standards?						Overall Assessment
	Paid Time for Professional Development		Paid Planning and/or Preparation Time		Salary Schedule/ Benefits		
	Centers	Homes	Centers	Homes	Centers	Homes	
Nevada	No	No	Yes	No	Yes	No	Stalled
New Hampshire	No	No	No	No	Yes	Yes	Stalled
New Jersey	Yes	No	No	No	No	No	Stalled
New Mexico	No	No	Yes	Yes	No	No	Stalled
New York	Yes	No	Yes	Yes	Yes	Yes	Making Headway
North Carolina	No	No	No	No	Yes	No	Stalled
North Dakota	No	No	No	No	No	No	Stalled
Ohio	Yes	No	Yes	No	Yes	No	Edging Forward
Oklahoma	No	No	No	No	Yes	No	Stalled
Oregon	No	No	No	No	Yes	Yes	Stalled
Pennsylvania	Yes	No	Yes	No	Yes	Yes	Edging Forward
Rhode Island	No	No	No	No	No	No	Stalled
South Carolina	No	No	No	No	No	No	Stalled
South Dakota	---	---	---	---	---	---	---
Tennessee	Yes	No	No	No	Yes	No	Stalled
Texas	No	No	No	No	No	No	Stalled
Utah	---	---	---	---	---	---	---
Vermont	Yes	Yes	Yes	Yes	Yes	No	Making Headway
Virginia	No	No	No	No	No	No	Stalled
Washington	Yes	No	Yes	Yes	No	No	Edging Forward
West Virginia	---	---	---	---	---	---	---
Wisconsin	No	No	Yes	Yes	Yes	Yes	Edging Forward
Wyoming	---	---	---	---	---	---	---
TOTAL	13	1	13	7	22	11	

Note: Twelve states plus the District of Columbia could not be included in this assessment for one or more of the following reasons: their state does not have a QRIS; their QRIS is not administered at the state level; their QRIS is currently under development; or data for their state were otherwise unavailable through the 2017 QRIS compendium.

“Though various programs and financing mechanisms have been used to supplement ECE practitioners’ wages, their overall compensation is still low, and the temporary nature of such supplements does not create the predictable and steady salaries necessary for recruiting and retaining a highly qualified workforce.”

– NASEM, *TRANSFORMING THE FINANCING OF EARLY CARE AND EDUCATION*, 2018

Compensation & Financial Relief Strategies

 **MOUNTING EVIDENCE ABOUT HOW POOR** compensation and associated working conditions erode the well-being of educators and undermine efforts to improve quality and attract and retain skilled educators lends urgency to the search for strategies to disrupt the status quo.¹⁴⁵ Nonetheless, as demonstrated in [Earnings and Economic Security, p. 29](#), low wages persist within the early childhood sector, despite increased expectations for teachers.

Throughout the years, efforts to secure state investments in compensation initiatives have met considerable impediments. Other priorities vie for limited public dollars, including professional development for the workforce. Crafting reforms is a daunting task in light of the decentralization of early care and education in the United States, which is fueled and sustained by multiple funding sources and regulatory requirements, as well as the current variety of ECE settings and tremendous diversity of the early childhood workforce in terms of professional preparation.

Since the release of the 2016 *Index*, the conversation about better compensation for early educators has gained momentum, but to date, there remains little action. The majority of state efforts have been aimed at providing financial relief — wage supplements (stipends, tax credits, or bonuses) to increase income — but not changes to the wages paid for doing the job. Yet making early education an attractive job now and in the future requires real improvement in wages and access to workplace benefits. Financial relief is just that: immediate (though limited) relief for early educators currently struggling on low pay. It is not a long-term solution for raising the pay and status of early educators or improving the attractiveness of ECE jobs.

What Can States Do to Move Forward on Better Pay and Financial Relief for Early Educators?

The most direct means by which leaders in the states can improve compensation for early educators is to articulate compensation standards, make them mandatory, and provide both system reform and sufficient public funding to meet those standards (see [Financial Resources, p. 120](#)).

Compensation & Financial Relief Strategies: What They Are & What They Aren't

Compensation is “a term used to encompass the *entire range of wages and benefits*, both current and deferred, that employees receive *in return for their work*,” according to the Bureau of Labor Statistics, particularly as used in the National Compensation Survey.¹⁴⁶ Compensation is an early educator’s due as the result of performing a job. So long as a teacher continues to do that job, they have a right to the agreed compensation.

Compensation (wages/benefits like health insurance, paid sick days, and holidays) is distinct from other forms of income that early educators might receive as a supplement to their wages. In this edition of the *Index* and going forward, we refer to the various wage supplements common in the early childhood field (stipends, tax credits, bonuses) as “financial relief” rather than compensation because they are not automatically awarded as part of doing the work of a job, but are a source of income that usually must be applied for and are only provided when additional eligibility criteria are met (e.g., working in certain settings, attaining particular levels of education/training).

Financial relief is paid in addition to and distinctly from a worker’s regular pay. An analogy can be drawn between early educator stipends/tax credits — although not necessarily bonuses, which are smaller, usually one-off, and more likely to be considered solely an award for achieving higher levels of training and education compared with stipends/tax credits — and the Earned Income Tax Credit (EITC). The EITC provides a supplement to many low-income workers’ paychecks. It is eligibility-based, not job-based, and when individuals are no longer eligible (or if the funding for that wage supplement program is cut), recipients no longer benefit from that additional income (see [Family and Income Supports](#), p. 128). Like the EITC, stipends and tax credits have been implemented with the purpose of alleviating the financial stress that is caused by existing low wages but do nothing to change the problem of low wages itself. For this reason, the National Academies 2018 report, *Transforming the Financing of Early Care and Education*,¹⁴⁷ recommended raising base pay for early educators and built this assumption into the cost model used to estimate additional funding needed to finance early care and education.

We also distinguish compensation and financial relief strategies from **educational supports**. Within our definition of financial relief, we include all direct cash funds outside of employer-based compensation that may be used as the early educator sees fit. These types of financial relief (tax credits, stipends, bonuses¹⁴⁸) are distinct from educational supports such as scholarships (although these may have a compensation and/or financial relief component)

(see [Qualifications](#), p. 67). Educational supports usually provide some monetary support (tuition/book costs, travel expenses, and/or computer/internet funds) and may include non-monetary support (counseling, mentorship), but funds come with the condition of paying for the costs of educational attainment and are not a cash award. Educational supports for low-paid early childhood teachers are essential, as they help to prevent or reduce the financial burden associated with continued education, such as tuition, books, or taking unpaid time off work in order to pursue professional development. However, they do not directly address job-based compensation, particularly in the currently underfunded ECE system, in which the wage premium accorded higher education is limited and varies substantially by setting/funding stream (see [Earnings and Economic Security](#), p. 29). Some T.E.A.C.H. Early Childhood* scholarship programs are an exception, to the extent that leadership of ECE settings agree to provide a raise, rather than a bonus, to staff upon completion of certain requirements of the scholarship program. Nevertheless, even these increases have limited impact: the average increase in wages for bachelor's degree scholarship recipients across T.E.A.C.H. programs is 8 percent, or an increase of \$.80 per hour for a teacher making \$10 per hour.¹⁴⁹

Similarly, while **funding mechanisms** — like program-level financial awards and increased reimbursement rates, including those that are tiered based on quality levels — can increase the amount of revenue available to programs and have the potential to be used to increase compensation, these funding mechanisms alone do not guarantee higher wages for staff. Unless allocated resources are specifically designated for pay, program leaders may make other decisions about how to use increased funding to improve or sustain other elements of quality or to reduce fees for parents (see [Financial Resources](#), p. 120). Additional research is required to understand whether and how programs are using increased funding to increase compensation.

At CSCCE, we argue that an appropriate benchmark for determining early childhood educator compensation standards is parity with K-3 teachers, recognizing that early education and care requires just as much skill and training as teaching older children in the birth-to-age-eight continuum.¹⁵⁰ The National Academies 2018 report, *Transforming the Financing of Early Care and Education*,¹⁵¹ similarly acknowledged that pay for early educators and educators of older children should be comparable, and this understanding was built into the cost model used to estimate additional funds needed for early care and education. Yet the National Academies report did not take into account all aspects of compensation parity, including differences in work hours and appropriate increases for additional levels of education and experience. Our framework articulates what compensation parity is (and isn't) and can serve as a guide for states (see [In Pursuit of Higher and Better Aligned Compensation for Teachers](#), p. 97).¹⁵²

EARLY EDUCATOR VOICES: DEMANDS FOR BETTER PAY IN AUSTRALIA

The problem of low wages in ECE is not unique to the United States, and advocacy efforts in other countries can also offer examples of paths forward. For example, in Australia, early educator wages are delineated by the government and linked to qualifications and years of experiences. Still, early educator pay is low compared to wages for teachers of older children and for workers in other jobs, particularly those filled mostly by men. To pressure policymakers to raise sector wages, United Voice ECEC, the largest union representing early educators, launched the Big Steps Campaign in 2016, calling for “valuing every child by valuing their educator” with the “respect and recognition of professional wages.”¹⁵⁰ Periodic “Walk Offs” are central to the Big Steps Campaign. The latest Walk Off was held on International Women’s Day on March 8 and drew participation from hundreds of educators as well as supportive parents and employers across the country.

While our parity framework has so far been used to evaluate existing compensation policies for public pre-K programs,¹⁵⁶ there is no reason that it should not be more broadly applied to all early educators of children birth to age five. To the extent that early educators have equivalent education (a bachelor’s and certification) and experience — and many already do — they should be paid equivalently to teachers of older children, regardless of the setting in which they teach. The challenge is finding the appropriate funding mechanism — in principle, this could be done by subsidizing child care via contracts, with appropriate requirements built into the contract — as well as allocating the necessary level of funding.

Given substantial variation in qualification requirements (see [Qualifications, p. 67](#)) and educational attainment currently existing in the ECE field, it is also essential to articulate compensation standards for a wider range of educational levels and roles. A first step should be articulating a wage floor or minimum compensation level, due to the urgency of addressing compensation for low-paid early educators, many of whom suffer economic insecurity and worry (see [Earnings and Economic Security, p. 29](#)). Possible benchmarks could include a locally determined living wage or self-sufficiency wage — these are wages calculated to be enough to afford basic necessities in a given community (the minimum wage in most cases does not meet these standards). Existing tools, such as the [Living Wage Calculator](#) or the [Self-Sufficiency Standard](#), can be used as a starting point.

In addition to articulating a wage floor, further compensation standards based on role, education, and experience can be scaffolded to bridge the distance between the minimum compensation level and the highest level of compensation. Possible benchmarks could include median wages for similar roles and levels of education in other occupations or the broader labor force. Likewise, consideration of the special circumstances of home-

“Raising base pay for the ECE workforce through contracts is the most direct way to ensure that adequate compensation reaches them and provides a predictable and steady increased annual salary for prospective and current educators.”

– NASEM, *TRANSFORMING THE FINANCING OF EARLY CARE AND EDUCATION*, 2018

based providers is crucial to ensure sufficient funding for compensation standards to be applied to the earnings of home-based providers and their staff.

Both the District of Columbia and Vermont have articulated compensation standards or guidelines for early educators beyond pre-K teachers, and 13 total states have plans to do so, as detailed in our indicators below. The 2016 *Early Childhood Workforce Index* profiled three states that had commissioned reports on addressing the compensation crisis in ECE (Connecticut, Illinois, and Washington).¹⁵⁷ Since that time, 11 additional states have convened advisory groups, task forces, or have made other plans to address this issue.¹⁵⁸

It is crucial that compensation standards are not simply articulated, but are made mandatory as a condition of public funding and are funded accordingly. Several states have now achieved this goal within their pre-K programs (see [In Pursuit of Higher and Better Aligned Compensation for Teachers](#), p. 97), but to date, no such requirements (and attendant funding) have been secured specifically for the ECE workforce outside of pre-K. Instead, collective efforts to improve early educator wages outside of pre-K have primarily been driven by broader labor policies, such as increases to the minimum wage (see [Earnings and Economic Security](#), p. 29, and [Family and Income Supports](#), p. 135). In the District of Columbia, a living wage is currently set at \$14.20 per hour — \$1.70 more than the current minimum wage¹⁶⁰ — and it applies to organizations receiving public funding, including community-based ECE settings.¹⁶¹

Compensation standards should be accounted for in public funding to ensure that sufficient amounts are provided so that programs can meet those standards. Fully addressing this problem will require large-scale reform regarding how early care and education is provided. ECE must be recognized as a public good, in line with education more generally, and must be funded to ensure access for *all* families, which will require public investment beyond the limited programs that exist today, as outlined in the 2018 *Transforming the Financing of Early Care and Education* report. Immediate steps toward providing sufficient funding for compensation standards include: 1) building compensation standards into cost models to understand how much funding is required (see [Financial Resources](#), p. 120); and 2) earmarking funding for salaries within broader public funds. Two states (Massachusetts and Montana) currently earmark funding for salaries in public funds outside pre-K. Likewise, accountability mechanisms are crucial to ensure that funding intended for salaries is actually used for that purpose.

In Pursuit of Higher and Better Aligned Compensation for Teachers, Regardless of Age Group Taught

Teachers of all ages do not receive adequate levels of compensation for the important work they do, yet early educators in particular lag behind. In general, the younger the age of the child, the lower their teachers' wages (see [Earnings & Economic Security](#), p. 29).

In partnership with the National Institute for Early Education Research, CSCCE has developed a series of materials that define and assess compensation parity among teachers of young children.¹⁵³ We define "compensation parity" as parity for salary and benefits for equivalent levels of education and experience, adjusted to reflect differences in hours of work and including payment for non-child contact hours (such as paid time for planning). We distinguish between compensation parity and other forms of compensation improvement that may be close to parity, but do not quite meet the full definition, referred to in our framework as "partial parity," "sub-parity," or "other forms of compensation improvement," see Table 4.6.¹⁵⁴

Equivalence in work hours is a key issue, since currently the hours and weeks per year that early educators work vary widely, depending on the setting. Some early educators may work similar schedules to K-3 teachers, in which case it is appropriate to peg salaries to existing K-3 salaries. However, in circumstances where early educators are working longer hours per week or more weeks per year, as full-time care services usually require, salaries should be adjusted to account for those longer working hours. Similarly, having a salary scale or schedule in place is important for going beyond articulating starting salaries to rewarding tenure and experience.

Currently, the most progress in moving toward compensation parity for early educators has been in state-funded pre-K programs.¹⁵⁵ Much of this progress has to do with higher funding levels and more stable funding mechanisms than in the rest of the ECE system (although pre-K funding is still lower than for K-12, see [Financial Resources](#), p. 120). Resources alone, however, are not necessarily a guarantee that compensation will be addressed.

Toward this effort, some states have explicit requirements to pay pre-K teachers with salaries comparable to K-3 teachers. Other states have no explicit salary guidelines, and therefore, pre-K teachers could be making considerably less than teachers working with older children in the classroom next door. However, even where salary requirements are in place, they are not necessarily equitable. Some states set salary requirements only for pre-K teachers

working in public schools, but not community-based settings. For more information, see Indicator 1.

Further Resources:

- ▶ [In Pursuit of Pre-K Parity: A Proposed Framework for Understanding and Advancing Policy and Practice](#)
- ▶ [Strategies in Pursuit of Pre-K Teacher Compensation Parity: Lessons From Seven States and Cities](#)
- ▶ [Teacher Compensation Parity Policies and State-Funded Pre-K Programs](#)

Financial Relief Strategies: Stipends, Tax Credits, & Bonuses

To the extent that compensation strategies have not yet been implemented, state leaders should consider introducing financial relief strategies (stipends, tax credits, or bonuses) as an interim measure. Stipends include programs that offer cash awards annually or every six months to teachers on graduated supplement scales according to educational level and retention. One such stipend program is WAGE\$®, developed by T.E.A.C.H. Early Childhood®.¹⁶² Other states have created their own stipend programs, such as REWARD in Wisconsin. Tax credits, like those in Louisiana and Nebraska, supplement wages by providing refundable tax credits rather than stipends but operate similarly. Stipends and tax credits may be applied for annually for qualifying teachers, if funds are available, which is not guaranteed. Bonuses are typically small cash awards that, in contrast to stipends/tax credits, are usually provided as a one-off recognition of educational achievement.¹⁶³ Many of these incentives are explicitly linked to the state's scholarship program, such as the T.E.A.C.H. Early Childhood® scholarships.

Financial relief programs of all types come with eligibility criteria that limit who can receive the additional income — such as teachers working in certain types of programs, those serving particular groups of children, or those meeting specific education and training requirements — though the exact eligibility criteria vary by state.

Similarly, the cash amounts provided vary substantially across the states, though they are typically limited, compared with what is needed to move early educator earnings in line with the earnings of teachers of older children. The median minimum *annual* award across existing stipends and tax credits is \$400, and the median maximum is only \$2,545 (less than \$50 per week). The higher award amounts are typically reserved for higher levels of education (bachelor's, master's, or even doctoral degrees). These awards might seem substantial in dollar amounts, but the added income is independent of a worker's regular pay and does not necessarily provide an ongoing or dependable wage increase for the duration of employment.

“Financing mechanisms such as wage supplements and tax credits, while useful for temporarily providing some financial relief to some ECE professionals, do not markedly change the underlying base salary that the ECE workforce receives.”

– NASEM, *TRANSFORMING THE FINANCING OF EARLY CARE AND EDUCATION*, 2018

Only some states collect or report data about the early educators participating in these relief initiatives, making it difficult to assess how close the program comes to meeting demand, identify workplace and demographic characteristics of participants, or assess the average award amount early educators actually receive and how many are receiving higher or lower awards within the range available. A lack of good workforce data more generally (including those educators who do not participate in these initiatives) makes it impossible to determine potential barriers or inequity of access to these sources of additional income ([see Workforce Data, p. 108](#)).

Stipends, tax credits, and bonuses may be the most politically feasible option to provide additional income to early educators at a given time period or in a certain political environment but, ultimately, attracting skilled workers to ECE jobs now and in the future will require increases to job-based compensation. Advocacy efforts should be clear that financial relief is not a long-term solution.

Rationale for Indicators

To recognize both the goal of appropriate compensation for early educators and how far we still are from that goal currently, we have developed a series of indicators that include strategies to raise compensation as well as strategies that provide some financial relief in the interim (see Table 4.5). We have explicitly categorized tax credits, stipends, and bonuses as financial relief strategies distinct from compensation strategies because the classification used in the 2016 *Index* appeared to reinforce the status quo of greater movement on financial relief than on improvements to actual compensation. Greater points are assigned to initiatives that are aimed at raising job-based pay (compensation) compared to those providing financial relief.

Compensation includes not only wages (which should account for variation in working hours and paid time to complete all professional responsibilities), but also an array of benefits, such as health insurance and retirement contributions. These benefits are standard in many fields, but are not consistently available across settings in ECE. Due to limited data and policy movement in this area, we could not assess efforts to improve benefits in the *Index*. For information on the inclusion of staff benefits in QRIS program standards, see [Work Environments, p. 81](#)).

TABLE 4.5

Compensation & Financial Relief Indicators & Assessment

Indicators	Values & Partial Points		Maximum Points per Indicator
Compensation: Salary parity for publicly funded pre-K teachers?	Parity (all)	3	3
	Parity (some)	2	
	Partial parity or sub-parity (all)	1	
Compensation: Required standards (outside pre-K)?	Yes/No		3
Compensation: Standards guidelines or plans (outside pre-K)?	Guidelines: Yes/No	2	2
	Plans only: Yes/No	1	
Compensation: Earmarks for salaries in public funding (outside pre-K)?	Yes/No		1
Financial relief: Stipend or tax credit?	Yes/No		2
Financial relief: Bonus?	Yes/No		1
Total			12
0-4 points per category			Stalled
5-8 points per category			Edging Forward
9-12 points per category			Making Headway

Note: For more information on these indicators and their data sources, see [Appendix 1: Data Sources](#).

Assessing the States: Compensation & Financial Relief Strategies

Indicator 1: Does the state require salary parity for publicly funded pre-K teachers?

We have focused on whether states meet the criteria for *salary* parity — both starting salary and salary schedule — if not full compensation parity, which would include benefits and equivalent non-child contact time for professional responsibilities and professional development (see **In Pursuit of Higher and Better Aligned Compensation for Teachers**).¹⁶⁴ Do states require the same starting salary *and* salary schedule, pro-rated, for pre-K teachers as for K-3 teachers, and does this parity apply to publicly funded pre-K teachers in all types of settings and all programs?¹⁶⁵

As of the 2015-2016 school year, just three states (Alabama, Oklahoma,¹⁶⁶ and Tennessee) met these criteria for pre-K salary parity in all settings, while another 10 (Delaware, Georgia, Maine, Maryland, Missouri, Nevada, New Jersey, New Mexico, Texas, and Vermont) required salary parity only for pre-K teachers in public settings.¹⁶⁷

Seven states (Idaho, Montana, New Hampshire, North Dakota, South Dakota, Utah, and Wyoming) do not have state pre-K programs, and Florida does have a pre-K program, but no information was reported, so for these states no data are available.¹⁶⁸ In addition, it is important to note that many states do not meet salary parity in part because they also do not require educational parity — only 23 states (including Alabama, Oklahoma, and Tennessee, which meet our definition of salary parity) require a minimum of a bachelor's degree for lead pre-K teachers across all settings and across all programs (for states with more than one state-funded pre-K program), though 37 states require a bachelor's for specific programs or settings, such as public schools only.¹⁶⁹ For more information, see [Qualifications, p. 67](#).

Compared to our assessments of parity in the 2016 *Index*, Tennessee and Oklahoma are the only states that met the criteria for pre-K parity in all settings in both 2016 and 2018. Alabama did not meet the parity criteria in 2016, but does in 2018. Hawaii and Missouri report that they no longer meet certain criteria.¹⁷⁰

Although not assessed in the *Index*, cities have also been moving forward with implementing their own pre-K programs, and some have actively addressed compensation parity.¹⁷¹

Indicator 2: Does the state set required compensation standards for ECE settings outside of public pre-K programs?

No states set required compensation standards for ECE settings outside of pre-K, including for infant and toddler teachers.

Indicator 3: Does the state have plans or guidelines for compensation in ECE settings outside of public pre-K programs?

Only Vermont and the District of Columbia had compensation guidelines for settings outside of pre-K programs. In Vermont, programs must pay all employees at least 85 percent of Vermont's livable wage order to achieve a certain rating in the state's QRIS. The District of Columbia published recommended pay-scale guidelines in a study from the Commission on Early Childhood Teacher Compensation.¹⁷²

Thirteen total states had plans to develop compensation requirements or guidelines; two of these states (Montana and Washington) had plans that were mandated, while the rest were voluntary plans.

Indicator 4: Does the state earmark public funding for early educator salaries in settings outside of public pre-K programs?

Only two states, Massachusetts and Montana, designated funding specifically for early educator salaries. Massachusetts has a rate reserve for early educator salaries, while Montana's QRIS requires programs to allocate a portion of their incentive dollars toward the base pay of early educators.



DATA SPOTLIGHT

CAN YOU ANSWER THESE QUESTIONS ABOUT ECE WORKFORCE COMPENSATION IN YOUR STATE?

Information can drive policy change, but we lack comprehensive data about the ECE workforce nationally and in most states (see [Workforce Data](#), p. 108). Can you answer these basic questions about early educator compensation in your state?

- ▶ What percentage of early educators in your current workforce earn at or above your state's minimum wage?
- ▶ What is the median wage of early educators by qualification level? For teachers with a bachelor's degree or higher, what is the difference in wages/salaries compared to kindergarten teachers?
- ▶ What percentage of early educators have access to health insurance? Paid sick days? Paid vacation time?
- ▶ How do the answers to these questions vary by job role? By geographic region? By program/setting? By demographic characteristics?

Indicator 5: Is there a statewide stipend or tax credit to supplement early educator pay?

Twelve states have a statewide stipend program, such as WAGE\$ or similar, and two states (Louisiana and Nebraska) offer ECE teacher tax credits. All twelve statewide stipend programs tie award amounts to teachers' levels in the state's registry. Although we do not include them in our indicators, some states offer stipends available at the local level or in multiple regions of the state (e.g., Arizona, California, Florida, Texas, and Iowa). It should be noted that regional programs in some states may reach a larger proportion of the workforce than statewide programs in other states, depending on the area/population served and factors such as eligibility requirements and the availability of funding.¹⁷³ California's AB212 Child Care Retention Program is a statewide fund that can be used locally for stipends, but stipends are not a required component — local administering agencies have flexibility in whether to use funds for professional development and/or direct stipends.¹⁷⁴

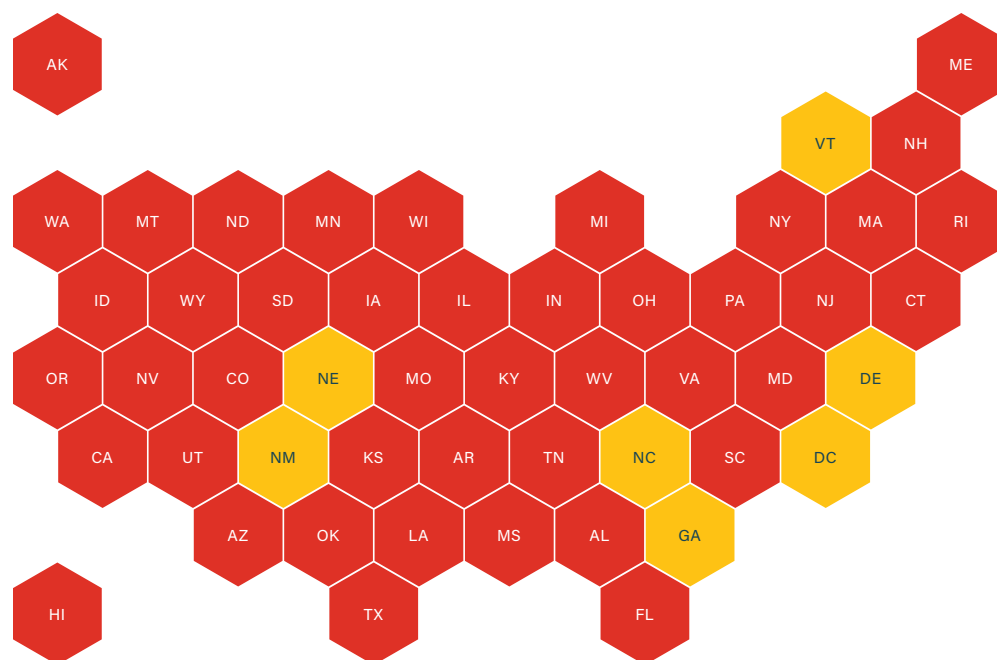
Compared to the same indicator in the 2016 *Index*, 10 of the 14 states with statewide stipends or tax credits still had these programs in 2018. Oklahoma's program ended in July 2016. The stipend programs of three states (Arizona, Florida, and Iowa) were removed from our list of statewide programs because, while offered to significant regional populations, they are not available to early educators in all regions of the state. Four programs not included in the 2016 *Index* (in Delaware, the District of Columbia, Georgia, and Utah) were added to the 2018 *Index*.¹⁷⁵

Indicator 6: Is there a statewide bonus to supplement early educator pay?

A total of 33 states offer a statewide bonus program; 22 of these are part of a T.E.A.C.H. scholarship program. Twenty-six of these state programs tie award amounts to training or qualification levels.

FIGURE 4.7

State Map of Compensation Strategies Assessment



STALLED: The state has made limited or no progress.

EDGING FORWARD: The state has made partial progress.

MAKING HEADWAY: The state is taking action and advancing promising policies.

State Assessment

In total, 44 states are **stalled**, having little formal structure for increasing compensation, though many of these states had plans for compensation guidelines, partial compensation parity in some settings, and/or a stipend or tax credit program to supplement wages. Seven states are **edging forward**, by setting compensation guidelines, requiring some form of parity, and supplementing wages with stipends. No states were **making headway**. See Table 4.7 for a state-by-state overview of each indicator and the overall assessment.

The indicators used to assess compensation strategies in this *Index* are different from those used in the 2016 *Index*, contextualizing parity requirements and wage supplements with detail about state efforts to raise wages through compensation requirements and guidelines and earmarked funding for salaries. With these new and more selective indicators, the 2018 *Index* rates 10 more states as stalled, and nine fewer as edging forward, than the 2016 *Index*. The only state making headway in 2016, Oklahoma, ended its wage supplement program shortly after the release of the 2016 *Index* and is now rated as stalled.

TABLE 4.6

Compensation Parity & Related Forms of Compensation Improvement: A Framework

Type of Compensation Improvement	Components of Compensation			
	Salary		Benefits	Payment for Professional Responsibilities
	Starting Salary	Salary Schedule ¹⁷⁷		
Parity (defined as equivalent)	Same, prorated for day length and number	Same, prorated for day length and number	Same package, same options for coverage for health, retirement, and vacation/holiday/sick leave	Same menu of supports and dosage for non-child contact responsibilities (e.g., planning time, professional development days)
Partial Parity (defined as equivalent for select components)	Same, prorated for day length and number	Not same or absent	Equivalent options for some benefits, but not full package of benefits	Equivalent options for some supports, but not full menu of supports
Sub-Parity (defined as similar but not equivalent)	Same, not prorated	Same, not prorated or not same/absent	Same package of benefits, not equivalent value	Same menu of supports, not equivalent value
Alternative Forms of Compensation Improvement	Strategies that improve pre-K compensation in order to close the gap with teachers of older children, but fall well short of parity. In theory, compensation improvement strategies could also set goals higher than earnings of K-12 teachers in public schools, though in practice this is rare. ¹⁷⁸			

Source: Whitebook, M. & McLean, C. (2017). In Pursuit of Pre-K Parity: A Proposed Framework for Understanding and Advancing Policy and Practice. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley and New Brunswick, NJ: The National Institute for Early Education Research.

Policy Recommendations: Compensation & Financial Relief Strategies

- ▶ Articulate long- and short-term goals for increasing annual earnings of early educators as distinct from financial relief and educational support.
- ▶ Establish compensation standards for starting and ongoing wages, benefits, and non-contact time for professional responsibilities, including:
 - ▶ Pay scales for all teaching and auxiliary roles and education levels, using living wage/self-sufficiency standards as a minimum; and
 - ▶ For lead teachers with bachelor's degrees, regardless of setting, the compensation standard should be at least parity with K-3 teachers.
- ▶ Ensure adequate public funding is available to meet articulated compensation standards.
- ▶ Frame advocacy messages to clarify that financial relief initiatives are an interim strategy, not a long-term solution to achieve appropriate wages and benefits.
- ▶ Elevate compensation as an essential component of state workforce strategies and educate policymakers and the public at large about the importance of better pay in ensuring a skilled and stable early educator workforce.

TABLE 4.7

Compensation & Financial Relief Strategies Indicators & Assessment by State

	Compensation Strategies				Financial Relief Strategies		Overall Assessment
State	Salary Parity	Compensation Requirements	Compensation Guidelines or Plans	Earmarks	Stipend/ Tax Credit	Bonus	
Alabama	Parity (all)	No	No	No	No	Yes	Stalled
Alaska	No parity	No	No	No	No	No	Stalled
Arizona	No parity	No	No	No	No	Yes	Stalled
Arkansas	No parity	No	No	No	No	No	Stalled
California	No parity	No	No	No	No	No	Stalled
Colorado	No parity	No	Yes: Plans Only	No	No	Yes	Stalled
Connecticut	No parity	No	No	No	No	Yes	Stalled
Delaware	Parity (public only)	No	Yes: Plans only	No	Yes	Yes	Edging Forward
District of Columbia	Sub-parity (public only)	No	Yes: Guidelines	No	Yes	Yes	Edging Forward
Florida	Not reported	No	No	No	No	Yes	Stalled
Georgia	Parity (public only)	No	No	No	Yes	Yes	Edging Forward
Hawaii	Sub-parity (public only)	No	No	No	No	No	Stalled
Idaho	Not applicable	No	No	No	No	Yes	Stalled
Illinois	No parity	No	No	No	Yes	No	Stalled
Indiana	No parity	No	Yes: Plans only	No	No	Yes	Stalled
Iowa	No parity	No	No	No	No	Yes	Stalled
Kansas	No parity	No	No	No	Yes	Yes	Stalled
Kentucky	Sub-parity (public only)	No	No	No	No	Yes	Stalled
Louisiana	No parity	No	No	No	Yes	No	Stalled
Maine	Parity (public only)	No	No	No	No	No	Stalled
Maryland	Parity (public only)	No	No	No	Yes	No	Stalled
Massachusetts	No parity	No	No	Yes	No	No	Stalled
Michigan	No parity	No	No	No	No	Yes	Stalled
Minnesota	No parity	No	Yes	No	Yes	Yes	Stalled
Mississippi	Sub-parity (public only)	No	No	No	No	No	Stalled
Missouri	Parity (public only)	No	No	No	No	Yes	Stalled
Montana	Not applicable	No	Yes: Plans only	Yes	No	Yes	Stalled

TABLE 4.7

Compensation & Financial Relief Strategies Indicators & Assessment by State *(continued)*

	Compensation Strategies				Financial Relief Strategies		Overall Assessment
State	Salary Parity	Compensation Requirements	Compensation Guidelines or Plans	Earmarks	Stipend/ Tax Credit	Bonus	
Nebraska	Sub-parity (public only)	No	Yes: Plans only	No	Yes	Yes	Edging Forward
Nevada	Parity (public only)	No	No	No	No	Yes	Stalled
New Hampshire	Not applicable	No	Yes: Plans only	No	No	No	Stalled
New Jersey	Parity (public only)	No	No	No	No	Yes	Stalled
New Mexico	Parity (public only)	No	No	No	Yes	Yes	Edging Forward
New York	No parity	No	Yes: Plans only	No	No	No	Stalled
North Carolina	Sub-parity (public only)	No	Yes: Plans only	No	Yes	Yes	Edging Forward
North Dakota	Not applicable	No	No	No	No	No	Stalled
Ohio	No parity	No	No	No	No	Yes	Stalled
Oklahoma	Parity (all)	No	No	No	No	No	Stalled
Oregon	No parity	No	Yes: Plans only	No	No	Yes	Stalled
Pennsylvania	No parity	No	Yes: Plans only	No	Yes	Yes	Stalled
Rhode Island	Sub-parity (all)	No	No	No	No	Yes	Stalled
South Carolina	Sub-parity (public only)	No	No	No	No	Yes	Stalled
South Dakota	Not applicable	No	No	No	No	No	Stalled
Tennessee	Parity (all)	No	No	No	No	No	Stalled
Texas	Parity (public only)	No	No	No	No	Yes	Stalled
Utah	Not applicable	No	No	No	Yes	Yes	Stalled
Vermont	Parity (public only)	No	Yes: Guidelines	No	No	Yes	Edging Forward
Virginia	Sub-parity (public only)	No	No	No	No	No	Stalled
Washington	No parity	No	Yes: Plans only	No	No	Yes	Stalled
West Virginia	No parity	No	No	No	No	Yes	Stalled
Wisconsin	No parity	No	No	No	Yes	Yes	Stalled
Wyoming	Not applicable	No	No	No	No	No	Stalled

Note: Links to state initiatives added where available. In some states, there may be more than one bonus initiative.

Workforce Data

 **BETTER INFORMATION LEADS TO BETTER POLICY.** Quality data are essential for making headway on higher qualifications, educational supports, and better pay and working conditions for the ECE workforce. But shortcomings persist in our efforts to collect ECE workforce data at both the national and state levels, as illustrated by CSCCE's policy brief *The Workforce Data Deficit: Who It Harms and How It Can Be Overcome*.¹⁷⁹

There is no comprehensive, longitudinal data source for tracking the early childhood workforce in its entirety across the United States.¹⁸⁰ Occupational data from the Bureau of Labor Statistics cannot be disaggregated by certain roles or settings, and federal administrative agencies, such as the Office of Head Start, only collect data on teaching staff who work in those programs. The 2012 National Survey of Early Care and Education provided some much-needed detail on the ECE workforce at the national level and is due to be repeated in 2019, but this resource remains severely limited in the extent to which it can be used to understand state and local variation (see [About the Workforce, p. 17](#)).

Across states, there are similar data challenges. Administrative data sets vary based on the settings in which early educators work and the agency responsible (Head Start, pre-K, child care licensing). Some states, such as Maryland and Rhode Island, have been linking workforce data from a variety of administrative sources,¹⁸¹ but administrative data do not necessarily capture all providers if they do not receive state funding or are not licensed.

These disparate data sources, each covering only a slice of the workforce, make it very difficult for states to provide a comprehensive estimate of how many teachers are providing early care and education and to design and assess the impact of professional development (see [Qualifications, p. 67](#)) and compensation initiatives (see [Compensation and Financial Relief Strategies, p. 93](#)). Understanding the reach and effectiveness of such policies requires data not only about early educators who participate in professional development or state-funded initiatives, but also those who do not participate, in order to understand differences between these groups and any barriers to participation.

In order to better understand how policies affect the ECE workforce, states have employed data collection mechanisms like workforce registries and/or workforce surveys.¹⁸² Every state except one (New Mexico) currently has a formal data collection mechanism.¹⁸³ The vast majority of states (48) use registries. More than half (27) of the states have published workforce survey reports at some point within the past five years (2013-2018), the majority of which (17) were conducted since 2016.¹⁸⁴

Yet, even with this expansion of state-level registries and surveys, few states currently have the ability to estimate the total number of early educators in their state, and those that are able to report an estimate may not have a good-quality estimate, depending on how it was developed. For example, states with registries may be able to report total participants and estimated coverage, but the data could include inactive participants or may only include those who voluntarily choose to participate, making any findings potentially unrepresentative of the wider workforce. Similarly, states with workforce surveys may have only sampled particular segments of the workforce and/or may have very low

“WHAT WOULD YOU DO WITH ADDITIONAL FUNDS FOR WORKFORCE DATA COLLECTION?”

As part of our survey of states for the 2018 *Index*, we asked ECE representatives what they would do if they had more funding for workforce data collection. Representatives from 34 states (67 percent) responded. Their answers showcase plenty of ideas for improving workforce data collection, they just need the funding to make it happen.

Representatives from 21 states discussed building workforce registries or developing their existing registries, including making them more inclusive of the ECE workforce (five states) and linking registries with wider ECE data systems (QRIS or licensing) (seven states). Some examples include:

- ▶ “Require participation in the registry as part of the licensing process (both program and individual level).”
- ▶ “[Integrate] with other state systems to support system efficiency, utilization of the registry, and further data collection and analysis. Example: Integration with child care licensing and state QRIS to reduce compliance burden.”

Representatives from five states also discussed carrying out regular surveys or studies of the workforce.

- ▶ “Complete an official workforce study to determine the actual size of the ECE workforce.... [Our state's registry reports include] the demographics of the membership, but it's still unknown how many people are not participating (even though it's mandatory, there are some who have not applied), which makes it difficult to determine an accurate saturation rate.”
- ▶ “Replicate [a workforce survey] on a regular basis to accumulate historical data.”

Representatives from seven states mentioned particular data elements they would like to collect.

- ▶ “Gather data on workplace environments: prep time, benefits, paid time off, retirement, etc.”
- ▶ “Collect more information on the supports the workforce needs or prefers — we have very little information about the goals of individual teaching staff and the barriers to achieving those goals.”

Representatives from three states mentioned the importance of providing reports for stakeholders.

- ▶ “Pay for the creation of reports, articles, etc. based on our data.”
- ▶ “Provide reports for the public, legislators, policymakers, and administrators to show the workforce demographics and needs.”

Representatives from two states discussed the need for personnel primarily focused on managing and analyzing the workforce data.

- ▶ “Hire a data specialist to analyze data.”

and uneven response rates. Without a baseline total, states cannot estimate the reach or saturation of specific programs and policies, nor can they understand who lacks access to professional development opportunities and why.

The type of data that states collect about the workforce is similarly crucial. For example, without knowledge of the educational distribution of the workforce across settings and by demographic characteristics, it is nearly impossible to estimate the proportion of the incumbent workforce that might need to pursue more education in response to new degree requirements or to assess the distance between current levels of educational attainment and degree completion. Without these data, stakeholders lack the ability to gauge the capacity of higher education institutions to respond to demand. Furthermore, it is impossible to appropriately craft and sufficiently fund policies to ensure equitable access to opportunities for advancement among those from historic minority communities currently underrepresented or overrepresented in various educator roles. Yet, in the majority of states and communities and across all segments of the workforce, such questions cannot be fully answered.

Although states have made great progress toward better workforce data collection, they have been doing so largely on a state-by-state basis, limiting comparability of data across states and making it difficult for researchers and other stakeholders to understand differences in workforce characteristics and opportunities not only within states, but across states. The National Workforce Registry Alliance has played an instrumental role in coordinating data collection among its member states with ECE workforce registries and, in recent years, has built a cross-state data set.¹⁸⁵ Greater coordination of workforce data — including both registries and surveys — at the federal or cross-state level would help ensure that data on the workforce collected in Illinois, North Carolina, California, or any other state can be compared, which is crucial for understanding how effective state policies have been in improving the preparation, support, and compensation of early educators.

Strengthening and coordinating early childhood workforce data will require purposeful public funding. In recent years, federal funding, such as the Child Care Development Fund, and earlier competitive federal grants, like Race to the Top–Early Learning Challenge, have played a key role.¹⁸⁶ Increased CCDF funding¹⁸⁷ can be employed to spur further progress and to ensure that the workforce data collected are of sufficient quality to be used for policymaking.

Rationale for Indicators

We focus on data collection mechanisms that have the *potential* to include the entire ECE workforce, like workforce registries or surveys.¹⁸⁸ While both registries and surveys have their strengths and limitations, either format can be used to fulfill the function of collecting data on the size and characteristics of the ECE workforce, and states in the *Index* are able to meet our indicator criteria using either mechanism.¹⁸⁹ We do not include administrative data regularly collected as part of ECE programs, such as pre-K or Head Start, or data primarily at the program level, such as QRIS data.

As in 2016, we focus on a few key indicators to establish whether states have in place at least some basic elements of data collection and reporting on the ECE workforce. Across

TABLE 4.8

Workforce Data Indicators & Assessment

Workforce Data	Values & Partial Points		Maximum Points per Indicator
Inclusive across settings?	Licensed +	7	7
	All Licensed Settings	5	
Collects compensation data?	Wages: Yes/No	2	2
	Benefits: Yes/No	1	
Collects race/ethnicity data?	Yes/No		2
Summary data reported online?	Yes/No		1
Total			12
0-4 points per category			Stalled
5-8 points per category			Edging Forward
9-12 points per category			Making Headway

Note: For more information on these indicators and their data sources, see [Appendix 1: Data Sources](#).

the four indicators, points are heavily weighted toward the indicator on inclusiveness across settings, in order to convey the critical importance of gaining a better picture of the overall size of the ECE workforce.¹⁹⁰ States assessed as “licensed +” receive the maximum amount of points for this indicator because they include all licensed teaching staff and directors in both center- and home-based child care settings, as well as early educators in one or more of the following settings: public pre-K programs, Head Start, and/or license-exempt child care. States that only include all teaching staff and directors in both center- and home-based licensed child care facilities receive reduced points, and states that do not fulfill the criteria of either the “all licensed” or “licensed +” categories receive no points, in order to convey the importance of collecting data across the ECE workforce, regardless of setting or program funding.¹⁹¹

Another change in the 2018 edition is that the 2016 indicator about whether states have a formal mechanism with the potential to collect data on the workforce across settings (e.g., a registry or survey) is no longer assessed because all states, with the exception of New Mexico, have one or both of these mechanisms in place. Instead, a new indicator on whether demographic information on race/ethnicity is collected has been added. In addition, an existing indicator on whether data on wages and benefits are collected has been updated to allow for partial credit, see [Table 4.8, on p. 111](#). Weighting of points was further adjusted to acknowledge the importance of *collecting data over reporting data publicly*, even though the latter is also crucial, as explained under Indicator Four.

“Although states have made great progress toward better workforce data collection, they have been doing so largely on a state-by-state basis, limiting comparability of data across states.”

These indicators were chosen as simplified signals of wider elements of good data collection, but they do not encompass all that is needed.¹⁹² For example, the quality of workforce data reports varies widely by state, with some states reporting only basic information on the size and core demographics of the workforce, and others reporting more detailed analyses of the workforce, including educational attainment, wages, and benefits by job role or setting, for example. While we could not assess the quality of reporting or all of the core data elements needed to understand the characteristics of the workforce due to limited space in the *Index*, good data collection practices and state examples are discussed further in CSCCE’s 2018 policy brief, *The Workforce Data Deficit*.¹⁹³ Future editions of the *Index* may continue to raise the bar in an effort to promote better practice in this area.

Assessing the States: Workforce Data

Indicator 1: Does the state have at least one formal mechanism that is inclusive of the ECE workforce across settings?

Disparate data sources, each covering only a slice of the workforce, make it very difficult for states to provide a comprehensive estimate of how many teachers are providing early care and education to children and to assess the impact of workforce initiatives.

Twenty-one states had at least one formal data mechanism with required participation (in the case of registries) or sampling (for workforce surveys) that was inclusive of licensed centers and home-based programs, as well as Head Start, preschool, and/or license-exempt settings. Another eight states required registry participation or used a workforce survey to sample educators from licensed child care settings only. The remaining 22 states either required participation/sampling for a defined but limited subset of the workforce, allowed for voluntary registry participation across settings, or did not use a formal mechanism for workforce data.

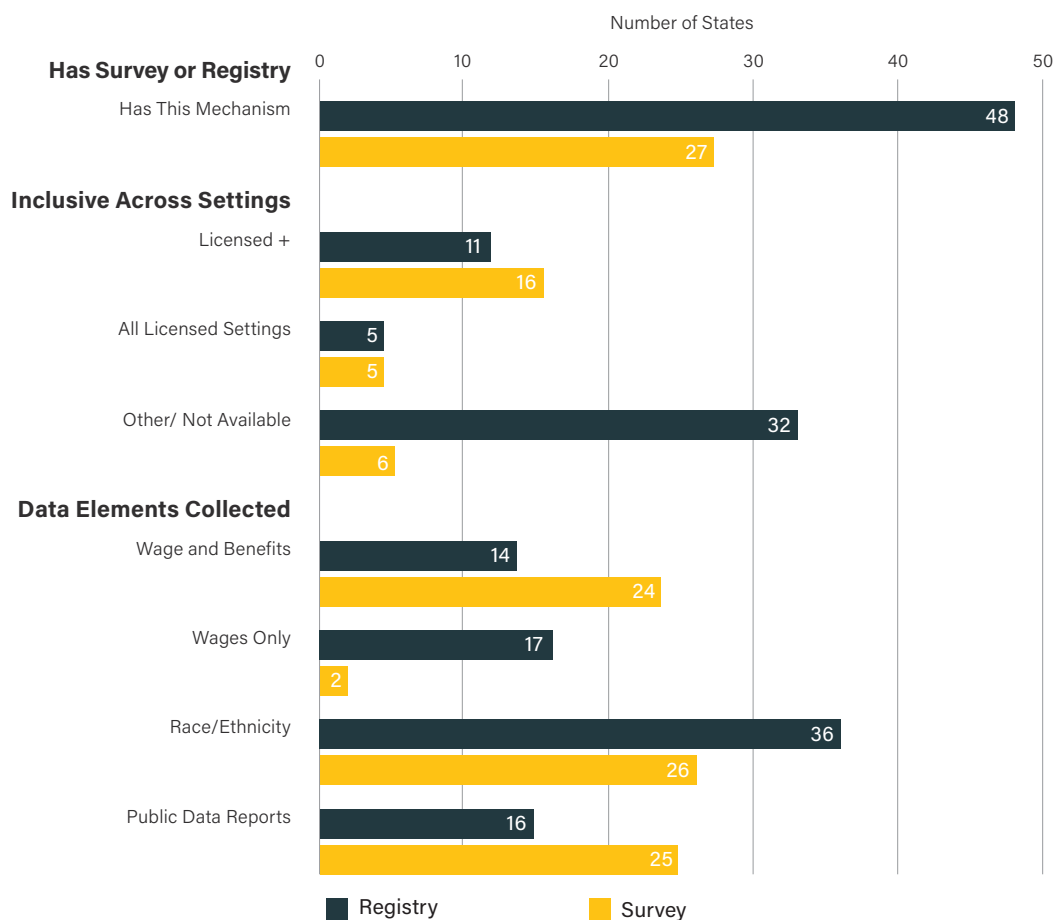
Indicator 2: Does the state’s mechanism for collecting workforce data include compensation?

Given the many negative consequences of inadequate wages, including economic insecurity and increased turnover (see [Earnings and Economic Security, p. 29](#)), it is critical that states understand the breadth of the problem across sectors.

In total, 44 states collect either wage or benefit data via their registry or survey: 33 states collect both wage and benefit data; 11 states collect wage data only; and seven states collecting neither.¹⁹⁴ Of the 27 states with recent workforce surveys, nearly all include information on wages and benefits (26 have data on wages, 24 on benefits). It is less

FIGURE 4.8

Number of States Meeting Workforce Data Indicators, 2018



common for registries to collect this information: 31 of the 48 states with registries collect wage data; and 14 states collect information on benefits.

Compared to the 2016 *Index*, 12 more states are collecting either wage or benefit data via their workforce data mechanisms: 44 states in 2018 as compared to 32 states in 2016. Eight more states have recent workforce surveys, and as in 2016, nearly all of these collect wage or benefit data. With six more states having registries in total, six more of the states with registries collect wage data, and three more collect benefits, as compared to 2016.

Indicator 3: Does the state's mechanism for collecting workforce data include information on race/ethnicity?

Understanding the demographics of the workforce is critical for bringing attention to and creating remedies for existing biases and inequitable opportunities for professional



DATA SPOTLIGHT

CAN YOUR STATE'S WORKFORCE DATA COLLECTION SHED LIGHT ON INEQUITABLE COMPENSATION FOR EARLY EDUCATORS?

Earnings for all early educators are low, yet current and prospective early educators face a highly uneven playing field with regard to compensation, depending on where they are employed (see [Earnings and Economic Security, p. 29](#)). Can your state's workforce registry or survey assess differences in compensation (such as wages, including paid time for professional responsibilities, and benefits, like health insurance or paid sick days) by:

- ▶ Educational attainment (no degree, associate degree, or bachelor's degree);
- ▶ Demographics (age, race/ethnicity, languages spoken); and
- ▶ Setting (age of children taught, funding stream, turnover rates)?

For more information on strengthening state workforce registries and surveys, see:

- ▶ [The Workforce Data Deficit: Who It Harms and How It Can Be Overcome](#)

development and advancement (see [About the Workforce, p. 17](#)). In total, 43 states collect race/ethnicity data via their registry or a recent survey, with 18 states collecting these data through both mechanisms. Of the 27 states with recent workforce surveys, almost all (26) collected race/ethnicity data, and 36 of the 48 states with registries collected this data (75 percent).

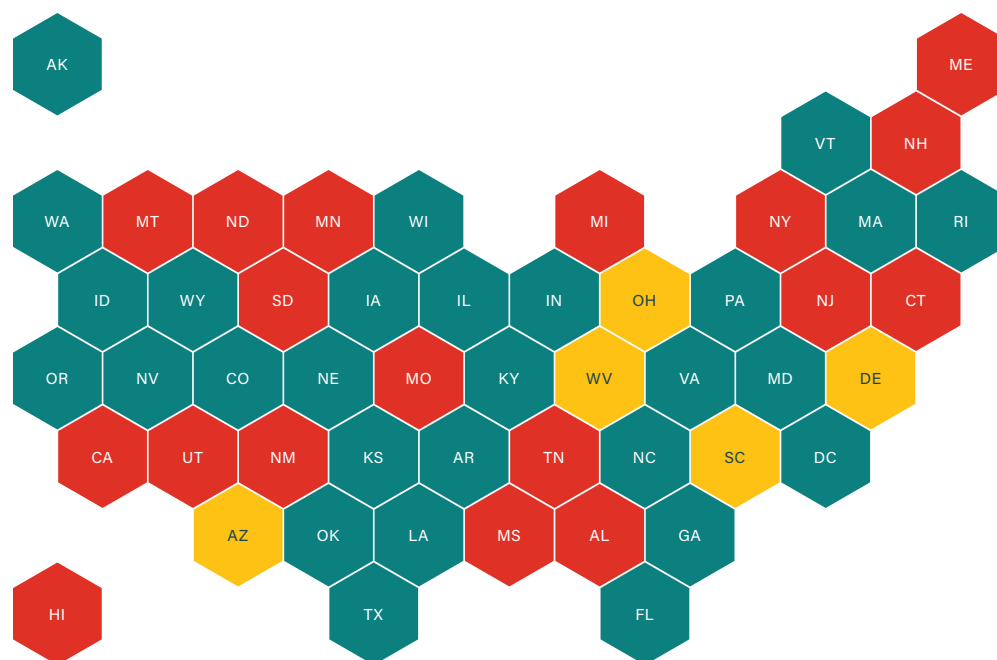
Indicator 4: Does the state use the data collected to report publicly on the status of the workforce?

One of the challenges of assessing state-level workforce data is that states do not always report aggregate data publicly. Yet, without this information, researchers, advocates, and other stakeholders are unable to understand and evaluate the status of the ECE workforce and the barriers to improving working conditions.

In total, 33 states report some aggregate data online via survey and/or registry data collection. Most states with recent workforce surveys report workforce data online (25 out of 27 states, compared to 17 out of 18 in 2016), but only 16 states out of a total of 48 with registries publish this information electronically (compared to nine out of 42 in 2016). However, 35 of the 48 states with registries report data internally and/or to select organizations, such as partner agencies.

FIGURE 4.9

State Map of Workforce Data Assessment



STALLED: The state has made limited or no progress.

EDGING FORWARD: The state has made partial progress.

MAKING HEADWAY: The state is taking action and advancing promising policies.

State Assessment

Eighteen **stalled** states lacked sufficiently up-to-date and detailed workforce data mechanisms. Five states are **edging forward**, meeting some but not all indicators of a robust workforce data system. Twenty-eight states are **making headway**, meeting most of our indicators. See Table 4.9 for a state-by-state overview of each indicator and the overall assessment.

The indicators used to assess workforce data in this *Index* are somewhat different from those used in the 2016 *Index*. With these new and revised indicators, the 2018 *Index* rates six more states as stalled, 14 fewer as edging forward, and nine additional states as making headway.

THE NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE (NASEM) REPORT,
TRANSFORMING THE FINANCING OF EARLY CARE AND EDUCATION, RECOMMENDED THAT

“The federal government should align its data collection requirements across all federal ECE funding streams to collect comprehensive information about the entire ECE sector and sustain investments in regular, national data collection efforts from state and nationally representative samples that track changes in the ECE landscape over time, to better understand the experiences of ECE programs, the ECE workforce, and the developmental outcomes of children who participate in ECE programs.”¹⁹⁵

Policy Recommendations: Workforce Data

- ▶ Develop and strengthen existing workforce data collection through the steps that follow.
 - ▶ Commit to and develop a plan to enact policies requiring participation in state workforce data systems by all members of the ECE workforce employed in licensed child care settings and in settings receiving public subsidies.
 - ▶ Identify potential federal (e.g., CCDF), state, and local funding sources and design advocacy strategies to secure funds for workforce data collection, management, and analysis. Prioritize workforce data system development and improvement in state CCDF plans.
 - ▶ Ensure that workforce data collection and analysis are part of early childhood governance structures and support the integration of workforce data systems with broader early childhood data, such as licensing databases, resource and referral databases, quality rating and improvement systems, early childhood health data, and K-12 data.
 - ▶ Encourage federal leaders to resolve long-standing problems in federally funded datasets and actively support implementation of the National Academies’ recommendation for more cohesive workforce data collection.

TABLE 4.9 Workforce Data Indicators & Assessment by State

State		Inclusive Across Settings	Collects Compensation Data		Collects Race/Ethnicity Data	Reports Aggregate Data Publicly Online	Workforce Data Assessment
			Wages	Benefits			
Alabama	Registry	Other	No	No	Yes	No	Stalled
	Survey	Other	Yes	No	Yes	No	
Alaska	Registry	Other	Yes	Yes	Yes	No	Making Headway
	Survey	Licensed +	No	No	Yes	No	
Arizona	Registry	Other	Yes	Yes	Yes	Yes	Edging Forward
	Survey	Not applicable	No	No	No	No	
Arkansas	Registry	Licensed +	Yes	No	Yes	No	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
California	Registry	Other	Yes	Yes	Yes	No	Stalled
	Survey	Not Applicable	No	No	No	No	
Colorado	Registry	Other	Yes	No	Yes	Yes	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Connecticut	Registry	Other	Yes	No	Yes	No	Stalled
	Survey	Not Applicable	No	No	No	No	
Delaware	Registry	Other	Yes	No	Yes	No	Edging Forward
	Survey	Other	Yes	Yes	Yes	Yes	
District of Columbia	Registry	Licensed +	No	No	Yes	No	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Florida	Registry	Other	No	No	Yes	Yes	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Georgia	Registry	Other	No	No	Yes	No	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Hawaii	Registry	Other	No	No	No	No	Stalled
	Survey	Not Applicable	No	No	No	No	
Idaho	Registry	Other	Yes	No	Yes	No	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Illinois	Registry	Licensed +	Yes	No	Yes	Yes	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Indiana	Registry	Not Applicable	No	No	Not Applicable	Not Applicable	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Iowa	Registry	Licensed +	No	No	Yes	No	Making Headway
	Survey	Other	Yes	Yes	Yes	Yes	
Kansas	Registry	Not Applicable	No	No	Not Applicable	Not Applicable	Making Headway
	Survey	All Licensed Settings	Yes	Yes	Yes	Yes	
Kentucky	Registry	Licensed +	No	No	Yes	No	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	

TABLE 4.9 Workforce Data Indicators & Assessment by State
(continued)

State		Inclusive Across Settings	Collects Compensation Data		Collects Race/Ethnicity Data	Reports Aggregate Data Publicly Online	Workforce Data Assessment
			Wages	Benefits			
Louisiana	Registry	Other	No	No	Yes	Yes	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Maine	Registry	Other	No	No	Yes	No	Stalled
	Survey	Not Applicable	No	No	No	No	
Maryland	Registry	All Licensed Settings	Yes	No	Not Available	No	Making Headway
	Survey	All Licensed Settings	Yes	Yes	Yes	Yes	
Massachusetts	Registry	Licensed +	Yes	Yes	Yes	No	Making Headway
	Survey	Not Applicable	No	No	No	No	
Michigan	Registry	Not Available	Not Available	Not Available	Not Available	No	Stalled
	Survey	Not Applicable	No	No	No	No	
Minnesota	Registry	Other	Yes	No	Yes	Yes	Stalled
	Survey	Not Applicable	No	No	No	No	
Mississippi	Registry	Other	Yes	No	Not Available	Not Applicable	Stalled
	Survey	Not Applicable	No	No	No	No	
Missouri	Registry	Other	Yes	No	Yes	Yes	Stalled
	Survey	Not Applicable	No	No	No	No	
Montana	Registry	Other	Yes	No	Yes	No	Stalled
	Survey	Not Applicable	No	No	No	No	
Nebraska	Registry	Other	Yes	Yes	No	No	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Nevada	Registry	All Licensed Settings	Yes	Yes	Yes	Yes	Making Headway
	Survey	Not Applicable	No	No	No	No	
New Hampshire	Registry	Other	Yes	Yes	Yes	No	Stalled
	Survey	Not Applicable	No	No	No	No	
New Jersey	Registry	Other	Yes	No	No	No	Stalled
	Survey	Not Applicable	No	No	No	No	
New Mexico	Registry	Not Applicable	No	No	Not Applicable	Not Applicable	Stalled
	Survey	Not Applicable	No	No	No	No	
New York	Registry	Other	Yes	No	Yes	No	Stalled
	Survey	Not Applicable	No	No	No	No	
North Carolina	Registry	Other	No	No	No	No	Making Headway
	Survey	All Licensed Settings	Yes	Yes	Yes	Yes	
North Dakota	Registry	Other	Yes	No	No	No	Stalled
	Survey	Other	Yes	Yes	No	Yes	

TABLE 4.9 Workforce Data Indicators & Assessment by State
(continued)

State		Inclusive Across Settings	Collects Compensation Data		Collects Race/Ethnicity Data	Reports Aggregate Data Publicly Online	Workforce Data Assessment
			Wages	Benefits			
Ohio	Registry	Other	No	No	Yes	No	Edging Forward
	Survey	Other	Yes	Yes	Yes	Yes	
Oklahoma	Registry	Licensed +	Yes	No	No	Yes	Making Headway
	Survey	Not Applicable	No	No	No	No	
Oregon	Registry	All Licensed Settings	Yes	Yes	Yes	Yes	Making Headway
	Survey	Not Applicable	No	No	No	No	
Pennsylvania	Registry	Licensed +	No	No	Yes	No	Making Headway
	Survey	Not Applicable	No	No	No	No	
Rhode Island	Registry	Other	Yes	Yes	No	Yes	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
South Carolina	Registry	All Licensed Settings	No	No	Yes	No	Edging Forward
	Survey	Not Applicable	No	No	No	No	
South Dakota	Registry	Other	Yes	No	Yes	No	Stalled
	Survey	Other	Yes	No	Yes	Yes	
Tennessee	Registry	Other	Yes	No	Yes	Yes	Stalled
	Survey	Not Applicable	No	No	No	No	
Texas	Registry	Other	Yes	Yes	Yes	Yes	Making Headway
	Survey	All Licensed Settings	Yes	Yes	Yes	Yes	
Utah	Registry	Other	No	No	No	No	Stalled
	Survey	Not Applicable	No	No	No	No	
Vermont	Registry	Licensed +	No	No	No	No	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Virginia	Registry	Other	Yes	Yes	Yes	No	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
Washington	Registry	Licensed +	No	No	Yes	Yes	Making Headway
	Survey	Licensed +	Yes	Yes	Yes	Yes	
West Virginia	Registry	Other	Yes	Yes	Yes	Yes	Edging Forward
	Survey	Not Applicable	No	No	No	No	
Wisconsin	Registry	Other	Yes	Yes	Yes	Yes	Making Headway
	Survey	All Licensed Settings	Yes	Yes	Yes	Yes	
Wyoming	Registry	Licensed +	Yes	Yes	Yes	No	Making Headway
	Survey	Not Applicable	No	No	No	No	
TOTAL	Registries: 48 Surveys: 27	Licensed +: 21 Licensed: 7	Wages & Benefits: 33		43	33	

Note: Links to state registries and surveys provided where available. Some states may have additional workforce surveys not listed.

Financial Resources

PROGRESS ON POLICIES TO PREPARE, SUPPORT, AND COMPENSATE

 the workforce requires system reform and sufficient dedicated funding. Both are necessary to ensure that the well-being of the early childhood workforce does not come at the expense of the equally urgent economic needs of families already overburdened by the high cost of early care and education. The recently released consensus report by the National Academies of Science, Engineering, and Medicine, [*Transforming the Financing of Early Care and Education*](#), acknowledges that “for too long the nation has been making do with ECE policies and systems that were known to be broken” and calls for a new national financing structure for early care and education to address the deficiencies in the current system.¹⁹⁶

To date, however, most efforts to improve both access and quality have amounted to no more than tinkering around the edges of the system. Much of the recent conversation about reform has focused on “transforming the workforce” by changing early educators themselves via human capital development (education, training, professional development) rather than changing the financing of the wider ECE system in which early educators practice. Small ad hoc increases to public funding are not a solution to the chronic insufficiency of resources that characterize the system as a whole. A transformative vision and the financial resources to implement that vision are critical to building a system that delivers on the promise of early education for all children, their families, and the educators upon whom they rely.

Transforming the Financing of Early Care and Education offers a vision of a system that aligns with the science and best practices of early learning and development¹⁹⁷ and articulates an approach to estimating the cost of financing such a system.¹⁹⁸ The report breaks the silence on the financial costs involved in creating an equitable, high-quality ECE system as it makes clear that substantial new sources and levels of funding are a requirement for reform (see Speaking Up for the True Costs of Early Education and Care, on the following page). Notwithstanding recent increases,¹⁹⁹ federal funding has historically been and remains insufficient to make broad changes to the ECE system, and states have been reluctant to assume the costs of quality early education, particularly as it extends beyond certain groups of three- or four-year-olds in pre-K programs.²⁰⁰

Efforts to envision better workforce policies have been constrained in part by an assumption that change must fit within the confines of the existing infrastructure and funding streams. Such constraints have undermined a comprehensive approach to quality improvement and workforce policies and have allowed practices like raising qualifications for the workforce without linking them to resources that simultaneously address teachers’ earnings and economic well-being. The federal Head Start program — one of the largest federally funded ECE programs — is a prime example of this problem. Regulatory requirements beginning in 2007 required Head Start teachers to increase their education and obtain degrees. Between 1997 and 2014, the share of Head Start teachers with an associate or bachelor’s degree increased by 61 percent, and the share of assistant teachers with a degree increased by 24 percent.²⁰¹ However, Head Start teacher salaries have remained stagnant and have not kept pace with inflation since 2007. While Head Start programs are permitted to improve compensation for degreed teachers, there is no

Speaking Up for the True Costs of Early Education and Care

Transforming the Financing of Early Care and Education provides an illustrative estimate of the costs associated with providing affordable services for all families and ensuring a highly qualified workforce, which includes improvements in annual salaries, workplace conditions, and benefits, as well as assistance for the incumbent workforce to meet higher educational qualifications. According to this report, the estimated cost of providing high-quality ECE for all children in the United States is at least \$140 billion per year (from all sources, public and private), equivalent to about 0.75 percent of U.S. gross domestic product, which is slightly less than the current average of 0.8 percent of GDP allocated to ECE by the nations in the Organization for Economic Cooperation and Development (OECD). To meet this estimate, our nation's public investments would need to grow to \$53 billion a year above the actual current level, and ensuring full compensation parity with teachers of older children would require an additional \$14 billion.²⁰³

explicit policy requiring alignment between higher educational attainment and compensation, nor are there dedicated funds to do so.²⁰²

Continuing to pursue single-pronged strategies and avoiding the discussion of the costs associated with implementing comprehensive reform only serves to reinforce the status quo. Setting a price to comprehensive workforce policies is long overdue. This undertaking entails explicit discussion about what resources are necessary to support educators to achieve higher levels of both entry and advanced qualifications, provide work environments that support effective teacher practice and protect their well-being, and ensure predictable and appropriate increases in compensation that are sufficient to attract and retain skilled educators.

What Can States Do to Improve Funding?

It is imperative that states articulate how the long-term vision outlined in *Transforming the Financing of Early Care and Education* can be applied in their state context to determine the level of national and state resources required to implement that vision. The amount of funding available for the workforce is the linchpin of the ECE system — without well-qualified, supported, and compensated early educators, programs will not be able to provide a high standard of quality for the children in their care. Getting these costs right is important, as these estimates are being used to inform policy and revenue solutions. Once the costs of a transformed system are determined, understanding the gap between current funding and additional resources requires robust workforce data (see Estimating the Funding Gap Between What Early Educators Have and What They Need, on the following page).



DATA SPOTLIGHT

ESTIMATING THE FUNDING GAP BETWEEN WHAT EARLY EDUCATORS HAVE AND WHAT THEY NEED

Estimating costs based on a vision of what ECE should look like — including appropriate preparation, support, and compensation for early educators — can inform both short- and long-term ECE state strategies for achieving an ECE system with a highly qualified workforce. But realistically assessing what it will take to achieve this vision requires data that allows determination of the distance between the status quo and the goal.

To estimate the investment required to fill the funding gap between the current system and the cost of improvements in annual salaries and benefits, workplace conditions, and assistance for educational advancement, states will need up-to-date data about:

- ▶ The number of educators at different levels of educational attainment; and,
- ▶ Their current salaries, benefits, and paid non-contact time for professional responsibilities.

Existing pay disparities based on ages of children served and program funding and sponsorship mean that gaps will vary among settings (see [Earnings and Economic Security](#), p. 29). Furthermore, depending on the distribution of the workforce by program type, calculating the proportion of the incumbent workforce that will require assistance in meeting higher qualifications is necessary to determine the gap between the current and envisioned system and the level of resources that will be required.

To move from the status quo to a new and brighter reality, states can identify opportunities to devote additional state funding to ECE as a down payment toward the level of funding that will ultimately be required. State-funded pre-K has been a primary means of dedicated state ECE spending over the past several decades,²⁰⁴ but states can also contribute resources in other ways, such as additional spending on child care subsidies or developing initiatives with designated funds for ECE, like First Five in California, Smart Start in North Carolina, and First Things First in Arizona.

Rationale for Indicators

State representatives surveyed for the *Index* were asked whether their state has utilized an existing cost-estimation tool (e.g., the Provider Cost of Quality Calculator) and/or employed its own cost study. Several states indicated that they had employed some approach to calculating cost. However, we were not consistently able to identify the extent to which approaches were used to assess the cost to deliver a truly equitable and high-quality system, including appropriate preparation, support, and compensation for

TABLE 4.10

Financial Resources Indicators & Assessment

Financial Resources	Values	Maximum Points per Indicator
Pre-K per-child spending as % of K-12: Greater than 50%?	Yes/No	6
State reports extra CCDBG spending?	Yes/No	6
Total		12
0-4 points per category		Stalled
5-8 points per category		Edging Forward
9-12 points per category		Making Headway

Note: For more information on these indicators and their data sources, see [Appendix 1: Data Sources](#).

early educators, or for some other purpose (e.g., expanding existing services to a targeted population, braiding existing funding streams to create efficiencies). Future editions of the *Index* may be better able to assess these efforts, particularly now that the *Transforming the Financing of Early Care and Education* report has articulated a framework.²⁰⁵

In the interim, the 2018 *Index* continues to track whether states are devoting additional state funding above and beyond what is required to receive federal funding. Although federal and local governments also play a role in funding ECE, our focus is on assessing the commitment of state governments to fund early childhood programs within the state. Specifically, we include two indicators of spending: whether a state reports additional Child Care and Development Block Grant (CCDBG) spending beyond what is required; and whether states are approaching comparable spending between their pre-K and K-12 systems.²⁰⁶

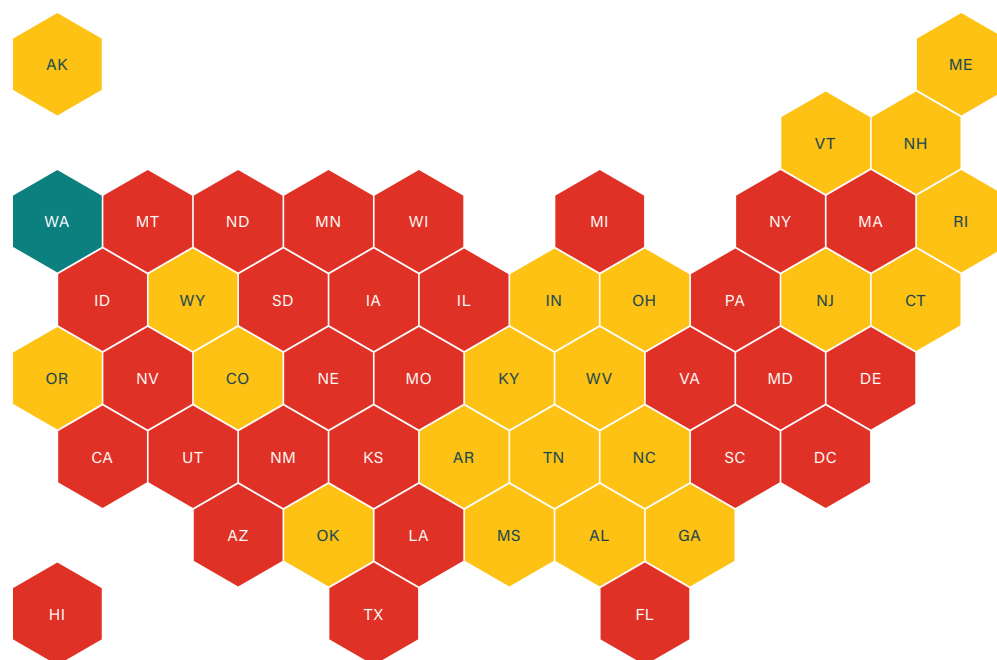
Assessing the States: Financial Resources

Indicator 1: Did the state report extra Child Care and Development Block Grant (CCDBG) spending?

Federal funds constitute a high proportion of expenditures in ECE compared to K-12 and are a key resource for states seeking to invest in early childhood, though states may be constrained by federal rules or by a lack of guidance about how to use the funds. The largest single federal funding stream for early care and education is the Child Care and Development Block Grant. Since its establishment in 1990, CCDBG primarily devotes resources to increasing access to early care and education services for children in low-income working families; states are provided with a block grant of dollars for that purpose.

FIGURE 4.10

State Map of Financial Resources Assessment



STALLED: The state has made limited or no progress.

EDGING FORWARD: The state has made partial progress.

MAKING HEADWAY: The state is taking action and advancing promising policies.

From its inception, one component of CCDBG has been a set-aside for quality improvement to be spent on licensing enforcement, referral services for parents, and workforce development activities. To draw down funds, states must agree to provide some matching funds and report on how their service and quality dollars are spent related to essential elements of early childhood workforce systems for delivering high-quality programs, which may include compensation, benefits, and workforce conditions (see [Compensation and Financial Relief Strategies, p. 93](#)). In practice, CCDBG allows states considerable leeway to make decisions about teaching staff qualifications, per-child reimbursement rates, and the use of quality dollars, and states are not required to allocate funds or identify any specific goals related to compensation.

In order to receive all federal CCDBG funds, states must spend a set match amount and meet Maintenance of Effort (MOE) requirements. We focus on whether states spent over and above the minimum requirement for matching or MOE funds for at least one of the

preceding three fiscal years for which information is available (2014-2016), using CCDBG expenditure data from the Center for Law and Social Policy (CLASP).²⁰⁷ In total, nine states met this criterion (down from 15 in the 2016 *Index*). Of these, only three states (Alaska, Ohio, and Vermont) reported spending above the MOE for all three years, and no states reported spending above the matching requirement for all three years.²⁰⁸ Reported state expenditure may include local as well as state contributions. Changes in state spending as a result of recently expanded CCDBG funds are not reflected in this edition of the *Index*.

Indicator 2: Is pre-K per-child spending more than 50 percent of per-child K-12 spending?

Even in publicly funded pre-K, which of all areas of ECE has come the closest to being accepted as education and a public good, there still remains lower funding per child compared with that of older children. Of states with pre-K programs, no state spends the same or more per child on pre-K compared with K-12.²⁰⁹ North Carolina is the closest, with per-child pre-K spending at 84 percent of K-12 spending. Oklahoma spends 77 percent. An additional 12 states spend between 50 and 75 percent. In total, 14 states spent more than 50 percent of per-child K-12 funding on pre-K (up from 13 in the 2016 *Index*). Seven states (Idaho, Montana, New Hampshire, North Dakota, South Dakota, Utah, and Wyoming) do not have state pre-K programs, so no data are available.²¹⁰

State Assessment

In total, 29 **stalled** states met none of these indicators; 21 states are **edging forward**, having met one of the indicators; and one state (Washington) is **making headway**, having met both indicators. See Table 4.11 for a state-by-state overview of each indicator and the overall assessment.

Policy Recommendations: Financial Resources

- ▶ Estimate the cost of advancing preparation, workplace supports, and compensation of the workforce in line with other *Early Childhood Workforce Index* recommendations for reform.
- ▶ Determine the extent of the cost gap between existing resources and what is required to accomplish reforms.
- ▶ Articulate a phase-in plan to meet reforms, identify costs associated with each phase, and commit to securing dedicated, sustainable funds to realize reforms.
- ▶ Develop an educational campaign to assist policymakers and the public in understanding what building an equitable system will cost and the benefits of this investment.

TABLE 4.11 Financial Resources Indicators & Assessment by State

State	State Reported Extra CCDBG Spending, 2014-16	Ratio of Pre-K to K-12 Spending More Than 50%	Overall Assessment
Alabama	No	68.3%	Edging Forward
Alaska	Yes	21.4%	Edging Forward
Arizona	No	40.1%	Stalled
Arkansas	No	69.2%	Edging Forward
California	No	45.6%	Stalled
Colorado	Yes	31.6%	Edging Forward
Connecticut	Yes	43.3%	Edging Forward
Delaware	No	40.3%	Stalled
District of Columbia	No	48.2%	Stalled
Florida	No	23.2%	Stalled
Georgia	Yes	46.0%	Edging Forward
Hawaii	No	44.1%	Stalled
Idaho	No	Not Applicable	Stalled
Illinois	No	30.9%	Stalled
Indiana	No	67.5%	Edging Forward
Iowa	No	26.3%	Stalled
Kansas	No	17.7%	Stalled
Kentucky	No	58.5%	Edging Forward
Louisiana	No	35.2%	Stalled
Maine	No	65.0%	Edging Forward
Maryland	No	46.8%	Stalled
Massachusetts	No	18.7%	Stalled
Michigan	No	39.8%	Stalled
Minnesota	No	50.0%	Stalled
Mississippi	No	67.5%	Edging Forward
Missouri	No	29.3%	Stalled

TABLE 4.11 Financial Resources Indicators & Assessment by State
(continued)

State	State Reported Extra CCDBG Spending, 2014-16	Ratio of Pre-K to K-12 Spending More Than 50%	Overall Assessment
Montana	No	Not Applicable	Stalled
Nebraska	No	47.2%	Stalled
Nevada	No	41.2%	Stalled
New Hampshire	Yes	Not Applicable	Edging Forward
New Jersey	No	58.4%	Edging Forward
New Mexico	No	39.5%	Stalled
New York	No	24.6%	Stalled
North Carolina	No	83.5%	Edging Forward
North Dakota	No	Not Applicable	Stalled
Ohio	Yes	33.8%	Edging Forward
Oklahoma	No	77.3%	Edging Forward
Oregon	No	69.3%	Edging Forward
Pennsylvania	No	40.2%	Stalled
Rhode Island	No	54.4%	Edging Forward
South Carolina	No	24.9%	Stalled
South Dakota	No	Not Applicable	Stalled
Tennessee	No	61.5%	Edging Forward
Texas	No	34.1%	Stalled
Utah	No	Not Applicable	Stalled
Vermont	Yes	27.0%	Edging Forward
Virginia	No	47.4%	Stalled
Washington	Yes	65.9%	Making Headway
West Virginia	No	61.2%	Edging Forward
Wisconsin	No	43.7%	Stalled
Wyoming	Yes	Not Applicable	Edging Forward
TOTAL	9	14	

5

**FAMILY
& INCOME
SUPPORT
POLICIES**



ECONOMIC INSECURITY — LINKED TO LOW WAGES and lack of access to core services and benefits (e.g., health care, paid leave) — is rampant for many families and workers in the United States, not only those who work in the early childhood field.²¹¹ This insecurity falls disproportionately on women, especially women of color, both in the early childhood field (see [About the Workforce, p. 17](#)) and in occupations more broadly.²¹²

A dearth of supports to ease the pressure on working families threatens the well-being of adults and children in every state. At the national level, public policies and services to support workers across occupations are currently non-existent (for example, paid family leave) or limited in their assistance (health care subsidies), compared to other industrialized nations, where worker protections and social policies such as paid leave and cash-based assistance are often much more robust and are available more widely across the population.²¹³ Since 2016, there have been efforts at the federal level to further roll back the limited supports already in place: the (unsuccessful) attempt to repeal the Affordable Care Act and a shift toward allowing work requirements for Medicaid eligibility being some of the most prominent examples.

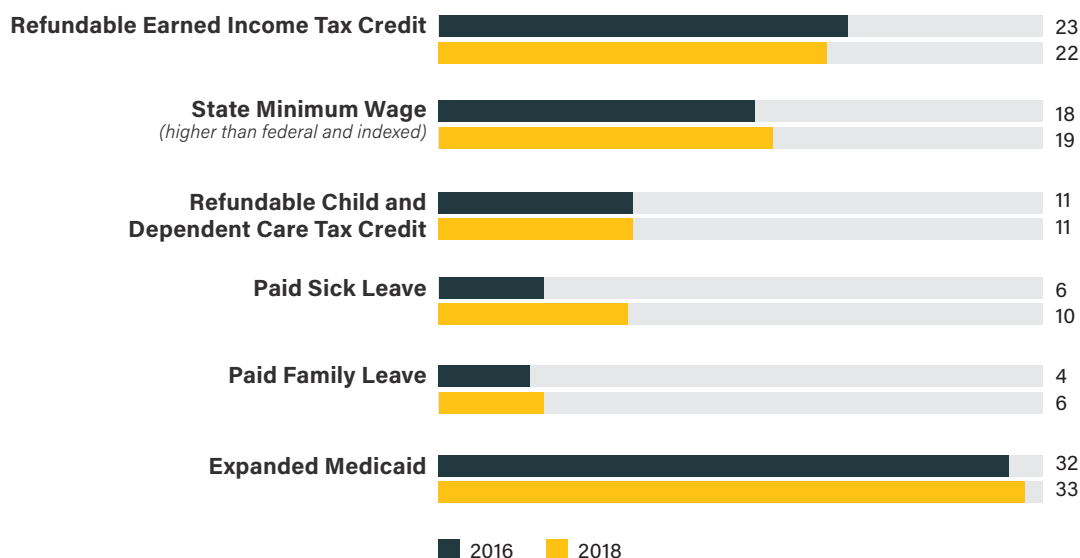
At state and local levels, advocates and policymakers have the opportunity to challenge existing efforts to reduce already-minimal supports for workers and to actively implement supports beyond what is provided or allowed at the federal level. As demonstrated in the 2016 *Index*, some states have adopted or expanded programs (such as tax credits, minimum wage legislation, and paid leave programs) to alleviate the effects of low earnings and poor job quality. Designed to benefit workers and their families across occupations, rather than the members of one field in particular, these support policies play a key role in shaping job quality and working conditions in the United States.²¹⁴

Since 2016, there has been some state-level progress in supports for workers and families, particularly with more states implementing paid sick and family leave. In general, however, the number of states with key supports for income and health and well-being has changed little since 2016 (see Figure 5.1).

Furthermore, in line with the national movement to undermine existing supports for workers, some states have not only declined to implement state-level supports, but have

FIGURE 5.1

Number of States Meeting Family & Income Support Indicators, 2016-2018



Note: Medicaid eligibility was expanded in Virginia on June 7, 2018, and is not reflected in these figures.

also actively opposed city and county efforts to do so by enacting preemption laws that prevent local ordinances from taking effect. States have passed such preemption laws to oppose local-level minimum wage increases, paid leave ordinances, and other policies that support working families. The use of preemption to block local efforts related to labor standards has increased in recent years in response to an increase in successful campaigns to implement progressive policies.²¹⁵ For example, prior to 2012, only five localities had minimum wage laws; currently, 40 counties and cities have such laws, and several of these minimum wage ordinances in states such as Alabama, Florida, Kentucky, Iowa, and Missouri have been overturned as a result of state preemption laws.²¹⁶ As of March 2018, 25 states had preemption laws to block local minimum wage increases, and 22 states had preemption laws to block paid family or sick leave ordinances.²¹⁷

“Since 2016, there has been some state-level progress in supports for workers and families, particularly with more states implementing paid sick and family leave. In general, however, the number of states with key supports for income and health and well-being has changed little since 2016.”

“Early childhood stakeholders must understand broader work and family support policies and how they can be implemented successfully to effectively advocate for these policies and any early childhood reforms or additional public funding that may be needed.”

Impact on the ECE Workforce

 **ALTHOUGH PROGRESS TOWARD BETTER SUPPORTS** for workers in the United States has been limited and incomplete, in some ways the progress made so far has had a larger impact on the job quality and working environments of the ECE workforce than efforts specifically within the early childhood field, where recent attention and funds have focused primarily on qualifications and competencies. For example, compensation initiatives in ECE have been primarily limited to certain elements of the workforce (such as pre-K teachers) or have focused more on financial relief than on raising base pay (see [Compensation and Financial Relief Strategies, p. 93](#)). In contrast, minimum wage legislation applies to a wider breadth of early educators, particularly given how many early educators earn low wages. There is some evidence that minimum wage increases in several states over the past two years have led to increases in child care worker wages, as demonstrated in the [Earnings and Economic Security chapter \(p. 29\)](#). Similarly, paid sick day and paid family leave legislation can have a particularly strong impact on the work environments of early educators, few of whom have access to such benefits through their employers.

Nevertheless, states vary widely with regard to which supports they have enacted and with respect to the design, generosity, and eligibility requirements of these policies, all of which shape whether and to what extent the ECE workforce may benefit from them. Furthermore, such across-the-board policies can pose challenges for the early childhood field, as well, particularly at the provider/owner-level, where directors and family child care providers must meet any employer-based costs of supportive policies. It is crucial that those in the early childhood field understand these types of policies, their benefits, and how they can be implemented successfully so that they can effectively advocate for these policies and any reforms or additional public funding that may be needed (See Minimum Wage and ECE Reform Go Hand in Hand: Why Minimum Wage Legislation Needs ECE Advocates at the Table, on the following page).

Additionally, greater receptivity to public policies for and investment in worker well-being, including supports for working families, creates the conditions necessary for a broad-based coalition calling to reform the early care and education system — specifically, to increase the level and improve the mechanism of public financing. Greater public investment is needed to ensure that early educators and other workers providing services to families benefit from policies intended for all workers, but also to ensure that supports for workers do not drive up the cost of services for families already struggling to afford them.

Minimum Wage & ECE Reform Go Hand in Hand: Why Minimum Wage Legislation Needs ECE Advocates at the Table

Increasing the minimum wage can be a successful strategy to raise the wage floor for the lowest-paid early childhood educators across multiple programs and settings. But a minimum wage strategy must be coupled with increased public investment and additional strategies to combat wage compression (where pay varies little among those with different levels of education and experience) in order to secure comprehensive compensation reform in the early childhood field (see [Compensation and Financial Relief Strategies](#), p. 93). Similarly, public investment is required to ensure that parent fees do not increase as a result of increased labor costs.

In some industries, employers have the option of raising their prices to cover any increases in labor costs as a result of minimum wage legislation. In the ECE field, this solution presents more of a challenge, for many reasons. One issue is that minimum wage increases have a greater impact on ECE provider finances because wages are a much greater share of overall costs compared to most industries. At the same time, parents are already paying high prices and are overburdened by their share of the costs of early care and education.

As a result, the ability of ECE providers to meet minimum wage increases will require further public investment. It will also require re-imagining and restructuring current policies and practices that govern funding mechanisms and levels, such as childcare subsidies, not only to better withstand periodic increases in the wage floor, but to advance toward a sustainable and equitable raise in pay for all early educators.

ECE advocates must be at the table when minimum wage increases are discussed and implemented in order to ensure that they work for early educators and for all families. Issues that should be considered in designing ECE reform along with minimum wage increases include the following:

- ▶ Raising child care subsidy rates is important but not a panacea:
 - ▶ Most providers serve a mix of families who receive subsidies and families who do not (some of whom may be income eligible, but limited public funding leaves them without access). By law, rates paid by private fee paying families cannot be less than government reimbursement rates for child care subsidies. When the state raises reimbursement rates — an important strategy to help programs serving families with subsidies to cover increasing labor costs — programs can only avail themselves of these higher rates if they also charge private fee families the same amount or higher, yet child care costs are already out of reach for many families. Public investment is necessary not only to increase reimbursement rates to providers, but also to expand access to childcare subsidies.
 - ▶ Most child care subsidies are distributed via vouchers that cover child care costs for individual children whose eligibility may shift, sometimes on short notice, due to changes in family circumstances. In contrast, contracts that designate a certain number of children to be served on an ongoing basis are more typically used for Head Start and public pre-K programs. Voucher payments can be less stable than contracts and result in a shaky foundation on which to structure wage increases.

- ▶ Increasing the wage floor is not enough: additional public funding must be secured to raise wages for those who are already earning above the minimum wage, but are still underpaid, in order to provide incentives to attain higher education and training and to remain in the ECE field.
- ▶ Increasing earnings for home-based providers face similar but also additional challenges: as self-employed workers, they are not governed by labor laws, though their paid assistants are. Increases in public funding should consider not only wage standards for assistants but appropriate payments to ensure higher earnings for home-based providers themselves.
- ▶ Increased public investment in ECE must go hand in hand with minimum wage increases, but as always, the devil is in the details. Proposed initiatives in two major metropolitan areas in northern California could point the way for other localities and states.

In the California Bay Area, Alameda County, which includes the cities of Oakland and Berkeley, introduced a ballot measure for June 2018 to expand subsidized child care, improve the quality of child care services, and increase worker wages to at least \$15 an hour in participating programs. The plan calls for an increase in the sales tax by one-half of 1 percent, raising \$140 million in tax revenue annually. About 60 percent of these funds are to be used to create new ECE scholarships for low- and middle-income families. About one-third of the funds are to be set aside for supplementing worker wages and improving the quality of child care services, with the remaining funds set aside for facilities and evaluation. Program eligibility includes center- and home-based programs that provide early care and education services to children from low- and middle-income families. If selected, child care providers would receive funds based on the number of eligible children they serve. In order to participate, providers would agree to follow specific wage and benefit standards for workers and participate in a quality assessment and improvement process. While the ballot measure explicitly states that the program's entry-level wage will be at least \$15 an hour, it also creates a Task Force to set a wage scale for workers with higher levels of training and experience and to develop strategies to provide benefits and professional supports to workers.

Across the bay, the voters of San Francisco are considering another ballot measure to expand child care subsidies in June 2018. The measure would impose a 1-percent tax on rents of warehouse spaces in the city as well as a 3.5-percent tax on commercial spaces with rents of more than \$1 million a year to raise a revenue of \$146 million annually.²¹⁸ Eighty-five percent of the funding would go toward: expanding child care subsidies to families earning 85 percent or less of the state median income (\$88,187) or 200 percent or less of the area median income (\$207,500); investment into physical, emotional, and cognitive developmental services for young children; and increased compensation for child care providers and caregivers.²¹⁹ The subsidy will be given on a sliding scale, depending on need and family income.²²⁰ The remaining 15 percent will be available for any public purpose.

At the time of writing, the results of these ballot initiatives have not been officially confirmed. The San Francisco measure had a slight majority in favor and the Alameda measure was just short of the two-thirds majority required for passage. Should these ballot initiatives pass, important lessons can be learned by evaluating their implementation. If they do not pass, their proposals can serve to inform similar efforts to be tried elsewhere or in the future.

Adapted from *At the Wage Floor: Covering Home Care and Early Care and Education Workers in the New Generation of Minimum Wage Laws*.²²¹

TABLE 5.1

Income Supports & Health & Well-Being Indicators & Assessment

Income Supports	Values	Maximum points per indicator
Minimum Wage (<i>higher than federal, indexed for inflation</i>)	Yes/No	4
Refundable Earned Income Tax Credit	Yes/No	4
Refundable Child Care Tax Credit	Yes/No	4
Total		12
Health & Well-Being	Values	Maximum points per indicator
State Sick Leave	Yes/No	4
State Family Leave	Yes/No	4
Expanded Medicaid	Yes/No	4
Total		12
0-4 points per category		Stalled
5-8 points per category		Edging Forward
9-12 points per category		Making Headway

Rationale for Indicators

- ▶ **THE POLICIES WE ASSESS IN THE** *Index* have the potential to support many in the early childhood workforce, as well as workers and families more broadly. The *Index* focuses on two key areas of state legislation and policy across occupations:
1. Income supports and child care assistance for low-income workers and parents, which include state tax credits, minimum wage legislation, and child care tax credits; and
 2. Supports for health and well-being, which include paid sick leave, paid family leave, and access to health insurance.

These categories were chosen as core areas in which states might develop legislation and policy to improve working conditions across occupations. While we discuss each area as a distinct category, in practice they are mutually reinforcing: income support policies can indirectly contribute to worker health and well-being by reducing economic stress or worry, and supports for health and well-being can increase income by avoiding loss of pay during leave from work in the event of illness, family emergency, or following the birth of a child.

Indicators within each category focus on select family and income supports and are not exhaustive.²²² Other aspects of policy, such as affordable housing, are also important for adult well-being. Similarly, we have focused on whether states have an active policy in the categories selected, but we could not assess all details of these policies, such as eligibility/exclusions and amount of benefits, which are nevertheless important for understanding the impact of these programs.

Income Supports

 **THREE OF THE MOST RELEVANT TYPES** of federal supports designed to increase take-home pay and alleviate substantial cost burdens for working families are the Earned Income Tax Credit, the minimum wage law established by the Fair Labor Standards Act, and the Child and Dependent Care Tax Credit. The minimum wage law prohibits payment for services below a certain level and creates a wage floor, while the Earned Income Tax Credit provides further supplements to wage income to ensure a minimum level of overall household income. Child care assistance, including via tax credits, reduces the substantial cost burden of paying for child care for individual families and thereby supplements take-home pay indirectly. Much state policy in this area is shaped by or augments policies set at the federal level.

Assessing the States: Income Supports

Indicator 1: Do states have statewide legislation that sets the minimum wage above the federal minimum, and is it indexed to inflation?

Minimum wage laws are designed to raise wages directly for the lowest-paid workers across occupations. The current federal minimum wage, set in 2009, is \$7.25 per hour. If the minimum wage had kept up with inflation, it would now be more than \$8.50 per hour,²²³ a level still generally considered too low to meet a living wage.²²⁴ Over the years, many states (and some localities²²⁵) have established laws that set a higher minimum wage than the federal legislation.

The early childhood workforce in particular stands to gain from increases in the minimum wage: nationally, about 44 percent of center-based teaching staff make less than \$10.10 an hour, and about 75 percent make less than \$15 per hour.²²⁶ There is some evidence that minimum wage increases in several states are linked to wage growth for child care workers over the past two years (as demonstrated in the [Earnings and Economic Security chapter, p. 29](#)).

In light of the impact that increased minimum wages can have on the earnings of early educators, we have focused on whether states have set a bar higher than the federal minimum and whether the minimum wage is indexed to inflation (i.e., automatically adjusted each year for increases in prices). As of 2018, 19 states met both of these criteria, up from 18 in 2016, due to Maine's 2016 legislation implementing indexing beginning in 2021.

There are additional aspects of minimum wage legislation that should be considered in order to ensure that the ECE workforce benefits. For example, some states carve out exemptions or delay implementation for particular sectors or for small businesses, either of which may lead to segments of the ECE workforce being excluded from minimum wage legislation or receiving wage increases later than other workers.

Indicator 2: Do states have a refundable earned income tax credit?

The [Earned Income Tax Credit](#) (EITC),²²⁷ one of the largest federal income-support programs, is utilized by 41 percent of child care workers and their families and 30 percent of

preschool/kindergarten teachers and their families (see [Earnings and Economic Security, p. 29](#), for further information on use of public income supports by child care workers and their families). Designed to increase income for low-income working families without reducing incentives to work, the amount of the tax credit depends on a recipient's income, marital status, and number of children. The tax credit is phased out as household income rises, and families with children continue to be eligible at higher household income levels than families without children.

States have the opportunity to supplement the federal EITC with their own programs, usually set as a percentage of the federal credit. In most states that offer them, these tax credits are fully refundable if the eligible amount is greater than the taxes owed by an individual or family. However, in Delaware, Ohio, and Virginia, the state EITC only reduces a worker's tax liability; it does not provide a refund. Like early childhood teacher-specific tax credits in two states, Louisiana and Nebraska (see [Compensation and Financial Relief, p. 93](#)), these tax credits do not fundamentally raise base pay for workers, but they do provide important financial relief.

We have focused only on states that provide a refundable credit, as this policy provides a more robust means of assisting low-income earners (including many early educators), who usually do not have a high tax liability to reduce. As of 2018, 22 states met these criteria, down from 23 in 2016 (Oklahoma's credit was made nonrefundable in 2016).²²⁸

Indicator 3: Do states have a refundable child and dependent care tax credit?

Child care costs make up a substantial proportion of household budgets; in many regions of the United States, families spend more on child care than on other major expenses, such as housing or college tuition.²²⁹ Survey results from Child Care Aware® of America show that many families spend significantly more than 10 percent of their income on child care, an amount that is considered the benchmark of affordability by the U.S. Department of Health and Human Services.²³⁰ Forty-two percent of center-based teaching staff have at least one child under 13 years old in their household, and about one-quarter have at least one child five years old or younger,²³¹ yet the earnings of much of the early childhood workforce are too low to afford early education and care services for their own children.

The federal government provides some supports to reduce the burden of the cost of child care through programs such as the [Child Care and Development Fund](#)²³⁶ (CCDF) and the [Child and Dependent Care Tax Credit](#) (CDCTC).²³⁷ Federal CCDF funds are distributed to each state to design child care assistance programs for low-income families to help cover the costs of care while they work or are in training (for more information, see [Financial Resources, p. 120](#)). The 2016 *Index* indicator "Do states meet the maximum federal income eligibility limit for child care subsidies (85 percent of the state median income for a family of three)?" has not been included in this edition because "eligibility" does not equal "access." Fewer than one in six children potentially eligible under federal rules actually receives child care assistance.²³⁸ While this gap in access is partly due to narrow state eligibility rules, as assessed by our 2016 indicator, it is also due to insufficient funding. With a historic increase to CCDF dollars in 2018, it is possible that higher percentages of eligible families may be served in the future, but even

Child Care Costs Out of Reach for Child Care Workers

High-quality early care and education is expensive. Child care costs make up a substantial proportion of household budgets in the United States, higher in many regions than the cost of other major expenses, such as housing and college tuition.²³²

Child care teachers themselves are also often parents and affected by the problem of high child care costs. Forty-two percent of center-based teaching staff have at least one child under 13 years old in their household, and about one-quarter have at least one child five years old or younger,²³³ yet the earnings of much of the early childhood workforce are too low to afford early education and care services for their own children. In 2016, the most recent year for which child care cost data are available, in *all* states child care workers would need to spend more than half of their income in order to afford center-based child care for two children, and in nine states, the price of such care exceeds child care worker average income.²³⁴

Additionally, not all early educators have free or even reduced-fee access to services at their own place of employment: a review of the few recent state-level surveys that report this information suggests that, across states, only about 9 to 16 percent of centers offer free care and only 50 to 73 percent offer any reduction in the cost, which may not be sufficient to make the services affordable.²³⁵

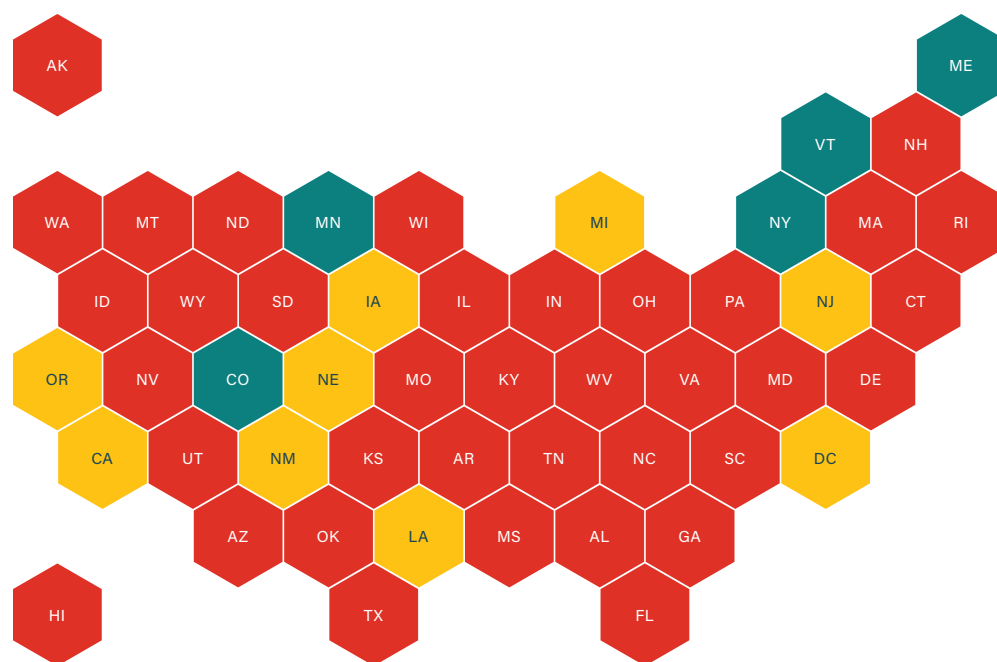
with the additional funding, states will still face trade-offs between expanding access and increasing quality.²³⁹

In addition to targeted assistance for low-income families, federal tax policy helps offset expenses for the care of children and adult dependents through the CDCTC. Families can claim a credit for between 20 and 35 percent of allowable expenses, depending on their household income, with maximum expenses set at \$3,000 for one child/dependent and \$6,000 for two children/dependents per year. The federal CDCTC is not refundable, thus its benefits accrue to those with tax liability and exclude many of the lowest-paid workers.²⁴⁰

Some states have supplemented the federal CDCTC with state-level, refundable tax credits for child care expenses. As with the EITC, we focus on child care tax credits that are refundable, as they benefit even those families with little or no tax liability. Eleven of the 22 states with child care tax credits have made their credits refundable, with no change since 2016. However, some of these states set limits on the refund amounts or limit eligibility for a refundable credit to those workers earning below a certain income.²⁴¹

FIGURE 5.2

State Map of Income Supports Policy Assessment



STALLED: The state has made limited or no progress.

EDGING FORWARD: The state has made partial progress.

MAKING HEADWAY: The state is taking action and advancing promising policies.

State Assessment

In all, 37 states are stalled, nine states are edging forward, and five states are making headway. See Table 5.2 for a state-by-state overview of each indicator and the overall assessment for 2018. In general, there was very little change since 2016 — only Maine progressed from edging forward to making headway, due to the passage of legislation to index their minimum wage to inflation.²⁴²

Supports for Health & Well-Being

▶ **JOB QUALITY AND WORKER WELL-BEING** are not related to earnings and income alone. Workplace policies that support the ability to look after oneself and one's family members are key to a happy, healthy, and productive work environment. Healthier, less-stressed adults are more effective on the job, and for the ECE workforce, that means they are better able to engage in the high-quality interactions that support children's development and learning.²⁴³

“Healthier, less-stressed early educators are better able to engage in the high-quality interactions that support children’s development and learning.”

However, individuals living on low incomes, including early childhood teachers,²⁴⁴ generally have poorer health²⁴⁵ and less access to employee benefits such as health insurance²⁴⁶ and paid leave.²⁴⁷ State policy can ensure equitable job quality that leads to better health and well-being among workers and their families — including those in the early childhood field — through various means, such as supporting increased health coverage, passing paid sick days legislation, and enacting paid family leave programs. Such policies also affect family income: paid time off to care for oneself or family members avoids loss of pay during illness or emergencies, which can be crucial when living on low wages, as is the case for many in the early childhood workforce (see [Earnings and Economic Security, p. 29](#)).

Assessing the States: Supports for Health & Well-Being

Indicator 1: Have states expanded Medicaid eligibility under the Affordable Care Act?

Access to health care services is important for worker well-being, but skyrocketing costs make access difficult for many families, especially those on low incomes. Improving access to health care services, especially preventive care, was a major focus of the [Affordable Care Act](#),²⁴⁸ which, among other things, established new subsidies for individuals to purchase health insurance and allowed states to expand eligibility for Medicaid to individuals previously ineligible (such as single adults), using matching federal funds.

Early educators are especially likely to benefit from [expanded Medicaid](#)²⁴⁹ and other provisions in the Affordable Care Act (ACA) because many early educators cannot access health insurance from their workplaces.²⁵⁰ In 2012, prior to full implementation of the ACA, almost one-quarter of center-based teaching staff did not have any type of health insurance coverage.²⁵¹ For home-based providers, this figure ranged from about 21 percent for listed providers to 28 percent for unlisted providers. Now that the ACA has been implemented, 30 percent of child care workers and their families and 23 percent of preschool/kindergarten teachers and their families access health care through Medicaid or the Children’s Health Insurance Program (CHIP) (for more information on the use of public income supports and health care services by early educators and their families, see [Earnings and Economic Security, p. 29](#)).

Only 33 states have chosen to expand health coverage via Medicaid, with the other states leaving a gap in support for families, likely including many early educators’ families, who remain ineligible for Medicaid but cannot afford to purchase health insurance. Maine is the only state to have expanded Medicaid since the 2016 *Index*. Medicaid eligibility was expanded in Virginia on June 7, 2018, and is not reflected in this assessment.⁵⁰⁸



DATA SPOTLIGHT

INCREASES IN EARLY EDUCATOR HEALTH CARE COVERAGE SINCE THE AFFORDABLE CARE ACT

A recent ECE workforce study in North Carolina found an increase in health insurance coverage for early educators over the past few years: about one-third (34 percent) of center-based teachers and assistants had no health insurance from any source in 2013, compared with fewer than one-fifth (19 percent of teachers, 17 percent of assistant teachers) in 2015. The authors of the report explicitly identify the ACA as a contributor:

*"This is likely due to uptake of insurance through the availability of more options through the Affordable Care Act and extensive community outreach, as well as targeted marketing to the ECE workforce conducted by numerous community agencies in North Carolina, including the Child Care Services Association. In fact, nearly one in four teachers and assistants (24 percent) indicated that they receive insurance either as a result of the Affordable Care Act or that they are on their parents' insurance (which was expanded through the Affordable Care Act)."*²⁵²

Another recent ECE workforce study in Illinois showed a similar improvement in health insurance coverage for home-based providers: 93 percent reported having health insurance in 2015, up from 80 percent in 2013.²⁵³

Indicator 2: Do states have paid sick leave legislation?

Even workers with health insurance struggle to make use of health care services due to a lack of paid time off from work when ill or to care for a family member who is ill.²⁵⁴ Nationwide, 72 percent of the entire U.S. workforce had access to some paid sick leave through their employers in 2017.²⁵⁵ However, the proportion of low-wage workers with access is much lower: only about 46 percent of those in the bottom quartile of occupations by average hourly wage had access to paid sick leave.²⁵⁶ This is an improvement from 2015, when less than two-thirds of the U.S. workforce had access to paid sick leave, and only about one-third of low-wage workers had access.²⁵⁷

Employees with no or very limited paid sick leave may be left with little choice but to come to work while sick, spreading illness to others.²⁵⁸ Paid sick leave is therefore especially important for early childhood teachers who come in regular contact with young children and their families. There is no national data on access to paid sick leave for the early childhood workforce, but recent state surveys from Illinois, Iowa, Virginia, and North Carolina suggest that only between 59 and 75 percent of centers offer paid sick leave as a workplace benefit, depending on the state.²⁵⁹

“A child care worker should not have to choose between a paycheck or not giving the kids in her care the flu.”

– NEW JERSEY GOVERNOR PHIL MURPHY, ON HIS SUPPORT FOR ESTABLISHING PAID SICK DAY LEGISLATION IN HIS STATE²⁶⁰

Yet access to employer-based paid sick time remains crucial, as there is no federal legislation guaranteeing paid sick days in the United States. Some states and local communities have taken the initiative to ensure that workers have minimum protections for time off when ill or to care for an immediate family member.²⁶¹ Eleven states in the nation have now passed paid sick day laws, up from six states in 2016. However, as with minimum wage legislation, some states maintain exemptions for particular types of workers or for small businesses, either of which may lead to segments of the ECE workforce being excluded from this benefit.²⁶²

Indicator 2: Do states have paid family leave legislation?

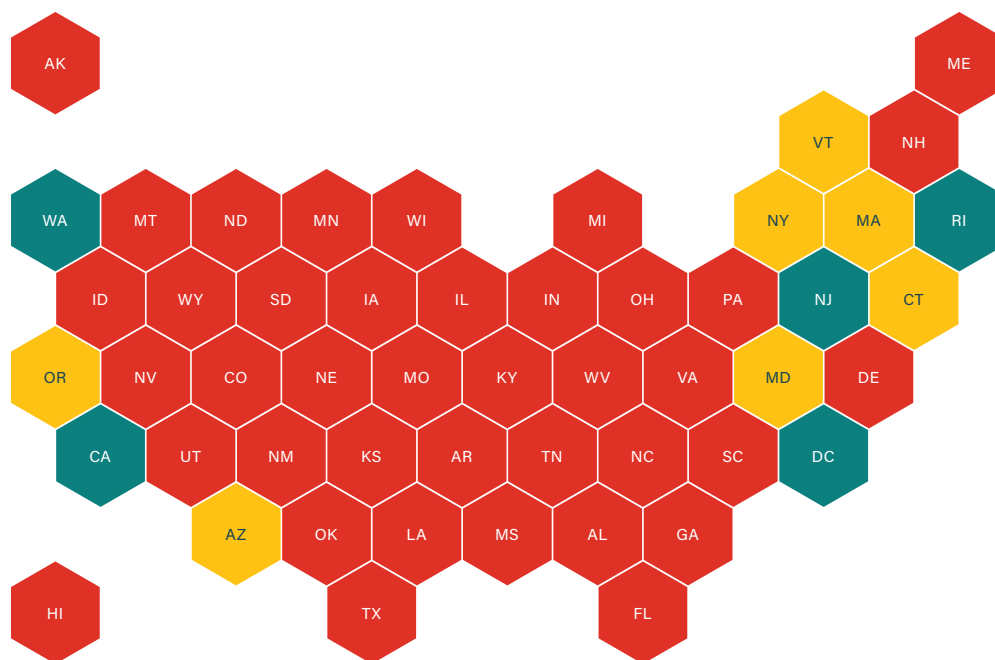
The United States is one of a handful of countries across the globe that lacks a national paid leave program for parents or at least mothers.²⁶³ Although [the Family and Medical Leave Act](#) (FMLA)²⁶⁴ entitles eligible employees to up to 12 weeks of job-protected leave to care for a child or family member, this leave is only available to employees who work at businesses of a certain size (50 employees or more) and therefore excludes broad swathes of the ECE workforce. Furthermore, the FMLA entitlement is unpaid. Since most low-income workers cannot afford to take unpaid leave, access to paid family leave is critical: it helps workers maintain economic stability when they need to attend to their own or a family member’s medical and care needs. Yet only an estimated 15 percent of the U.S. workforce had access to paid family leave through their employers in 2017 (compared to 88 percent with access to unpaid leave).²⁶⁵ Again, this figure is lower for those earning lower wages, such as early childhood teaching staff: only 6 percent of workers in the bottom quartile of occupations by average hourly wage had access to paid family leave, compared to 81 percent with access to unpaid leave.

As with paid sick leave, there is no national data on access to paid family leave for the early childhood workforce, and not many state workforce surveys report access to paid family leave. What data are available suggest that few early educators have such leave: in Idaho, only 9 percent of child care staff report being able to access paid family leave from their employer,²⁶⁶ and in Virginia, only 12 percent of centers offer paid parental leave.²⁶⁷ Nebraska reports somewhat higher access (20 percent) to paid maternity leave for center-based teachers, but this is still only one in five teachers.²⁶⁸

Some states have supplemented the FMLA with more generous unpaid leave provisions, but only six states have passed *paid* family leave legislation, up from four in 2016. The implementation of these programs is also important — eligibility requirements and levels of wage replacement determine who benefits from these programs and how supportive they are.²⁶⁹ For example, in all states with paid family leave, the amount of wage replacement while on leave is limited to some fraction of the pay that would be earned while at

FIGURE 5.3

State Map of Supports for Health & Well-Being Assessment



STALLED: The state has made limited or no progress.

EDGING FORWARD: The state has made partial progress.

MAKING HEADWAY: The state is taking action and advancing promising policies.

Medicaid eligibility was expanded in Virginia on June 7, 2018, and is not reflected in this assessment.

work, and in some cases, maximum amounts are set, regardless of wages. Depending on the level of wage replacement in a particular state, families may still be unable to afford to take the paid leave to which they are entitled.²⁷⁰

State Assessment

In total, we found 39 stalled states, which have none or only one of the indicators shown (in practice, expanded Medicaid eligibility). Eight states are edging forward. Four states (California, New Jersey, Rhode Island, Washington) plus the District of Columbia are making headway by meeting all three indicators. One state, California, also met all three indicators in 2016. See Table 5.3 for a state-by-state overview of each indicator and the overall assessment.

The 2018 *Index* assessment raises the bar compared with 2016. It is now necessary to have at least one type of paid leave (paid family leave and/or paid sick days) in order to

Early Childhood Teaching Staff Need Paid Sick Days, But Rarely Get Them

Access to employer-based paid sick days remains a rarity in the early childhood field and for many other workers in low-paid occupations across the United States. Paid time off when ill is crucial for all members of the workforce, but even more so for teachers and caregivers of very young children. Not only do early educators risk spreading infections to young children (and their families) when they come to work sick, but it is unreasonable to expect them to provide the quality, responsive interactions young children need while they are themselves ill. At the same time, programs struggle to cover the costs of paid sick time, as they must pay for both the worker who is ill and a substitute to ensure safe and legal ratios of staff to children at all times.

Early educators in 10 states will now benefit from paid sick day requirements, but public investment in early care and education — including funding specifically to provide paid time off in times of illness and to hire teacher substitutes — is needed to ensure that programs can meet the costs without increasing fees for parents.

In 2018, CSCCE examined economic insecurity among teaching staff employed in programs participating in Quality Stars, the New York state QRIS.²⁷¹ Among the 356 teaching staff employed at 110 centers across the state, three-quarters possessed at least an associate degree or higher, while more than one-half had earned a bachelor's or master's degree. On average, teaching staff received 7.5 sick days per year. The overall well-being of teaching staff improved with each additional sick day earned. Yet 60 percent expressed worry about losing pay if they or someone in their family became ill. A similar percentage (54 percent) also expressed worry about being able to take time off from work to take care of any family issues that might arise. In addition, teaching staff who perceived their program policies related to leave and working conditions as less dependable were more worried about job security and meeting their basic expenses.

be rated as edging forward, whereas in 2016, states could be rated as edging forward for having expanded Medicaid only. As a result of this change, 20 states are now stalled that were previously edging forward, and five states are now edging forward that were previously making headway in 2016. Three states (California, New Jersey, Rhode Island) plus the District of Columbia, which were making headway in 2016, continue to do so in 2018, and one state (Washington) moved into the making headway category, despite the bar being raised between 2016 and 2018.

TABLE 5.2 **Income Supports Policy Indicators & Assessment by State, 2018**

State	Earned Income Tax Credit State has refundable credit	Minimum Wage Higher than federal and indexed for inflation	Child & Dependent Care Tax Credit State has refundable credit	2018 Assessment
Alabama	No	No	No	Stalled
Alaska	No	Yes	No	Stalled
Arizona	No	Yes	No	Stalled
Arkansas	No	No	Yes	Stalled
California	Yes	Yes	No	Edging Forward
Colorado	Yes	Yes	Yes	Making Headway
Connecticut	Yes	No	No	Stalled
Delaware	No	No	No	Stalled
District of Columbia	Yes	Yes	No	Edging Forward
Florida	No	Yes	No	Stalled
Georgia	No	No	No	Stalled
Hawaii	No	No	Yes	Stalled
Idaho	No	No	No	Stalled
Illinois	Yes	No	No	Stalled
Indiana	Yes	No	No	Stalled
Iowa	Yes	No	No	Edging Forward
Kansas	Yes	No	No	Stalled
Kentucky	No	No	No	Stalled
Louisiana	Yes	No	No	Edging Forward
Maine	Yes	Yes	Yes	Making Headway
Maryland	Yes	No	No	Stalled
Massachusetts	Yes	No	No	Stalled
Michigan	Yes	Yes	No	Edging Forward
Minnesota	Yes	Yes	Yes	Making Headway
Mississippi	No	No	No	Stalled
Missouri	No	Yes	No	Stalled

TABLE 5.2

Income Supports Policy Indicators & Assessment by State, 2018 *(continued)*

State	Earned Income Tax Credit State has refundable credit	Minimum Wage Higher than federal and indexed for inflation	Child & Dependent Care Tax Credit State has refundable credit	2018 Assessment
Montana	No	Yes	No	Stalled
Nebraska	Yes	No	Yes	Edging Forward
Nevada	No	Yes	No	Stalled
New Hampshire	No	No	No	Stalled
New Jersey	Yes	Yes	No	Edging Forward
New Mexico	Yes	No	Yes	Edging Forward
New York	Yes	Yes	Yes	Making Headway
North Carolina	No	No	No	Stalled
North Dakota	No	No	No	Stalled
Ohio	No	Yes	No	Stalled
Oklahoma ¹	No	No	No	Stalled
Oregon	Yes	Yes	No	Edging Forward
Pennsylvania	No	No	No	Stalled
Rhode Island	Yes	No	No	Stalled
South Carolina	No	No	No	Stalled
South Dakota	No	Yes	No	Stalled
Tennessee	No	No	No	Stalled
Texas	No	No	No	Stalled
Utah	No	No	No	Stalled
Vermont	Yes	Yes	Yes	Making Headway
Virginia	No	No	No	Stalled
Washington	No	Yes	No	Stalled
West Virginia	No	No	No	Stalled
Wisconsin	Yes	No	No	Stalled
Wyoming	No	No	No	Stalled
TOTAL	22	19	11	

TABLE 5.3

Supports for Health & Well-Being Indicators & Assessment by State, 2018

State	Statewide Paid Sick Days	Statewide Paid Family Leave	Expanded Medicaid Eligibility	Overall Assessment
Alabama	No	No	No	Stalled
Alaska	No	No	Yes	Stalled
Arizona	Yes	No	Yes	Edging Forward
Arkansas	No	No	Yes	Stalled
California	Yes	Yes	Yes	Making Headway
Colorado	No	No	Yes	Stalled
Connecticut	Yes	No	Yes	Edging Forward
Delaware	No	No	Yes	Stalled
District of Columbia	Yes	Yes	Yes	Making Headway
Florida	No	No	No	Stalled
Georgia	No	No	No	Stalled
Hawaii	No	No	Yes	Stalled
Idaho	No	No	No	Stalled
Illinois	No	No	Yes	Stalled
Indiana	No	No	Yes	Stalled
Iowa	No	No	Yes	Stalled
Kansas	No	No	No	Stalled
Kentucky	No	No	Yes	Stalled
Louisiana	No	No	Yes	Stalled
Maine	No	No	Yes	Stalled
Maryland	Yes	No	Yes	Edging Forward
Massachusetts	Yes	No	Yes	Edging Forward
Michigan	No	No	Yes	Stalled
Minnesota	No	No	Yes	Stalled
Mississippi	No	No	No	Stalled
Missouri	No	No	No	Stalled

TABLE 5.3

Supports for Health & Well-Being Indicators & Assessment by State, 2018 *(continued)*

State	Statewide Paid Sick Days	Statewide Paid Family Leave	Expanded Medicaid Eligibility	Overall Assessment
Montana	No	No	Yes	Stalled
Nebraska	No	No	No	Stalled
Nevada	No	No	Yes	Stalled
New Hampshire	No	No	Yes	Stalled
New Jersey	Yes	Yes	Yes	Making Headway
New Mexico	No	No	Yes	Stalled
New York	No	Yes	Yes	Edging Forward
North Carolina	No	No	No	Stalled
North Dakota	No	No	Yes	Stalled
Ohio	No	No	Yes	Stalled
Oklahoma ¹	No	No	No	Stalled
Oregon	Yes	No	Yes	Edging Forward
Pennsylvania	No	No	Yes	Stalled
Rhode Island	Yes	Yes	Yes	Making Headway
South Carolina	No	No	No	Stalled
South Dakota	No	No	No	Stalled
Tennessee	No	No	No	Stalled
Texas	No	No	No	Stalled
Utah	No	No	No	Stalled
Vermont	Yes	No	Yes	Edging Forward
Virginia	No	No	No	Stalled
Washington	Yes	Yes	Yes	Making Headway
West Virginia	No	No	Yes	Stalled
Wisconsin	No	No	No	Stalled
Wyoming	No	No	No	Stalled
TOTAL	11	6	33	

Medicaid eligibility was expanded in Virginia on June 7, 2018, and is not reflected in this assessment.

Appendix 1

Data Sources

About the Workforce / Earnings & Economic Security

 **THREE MAJOR NATIONAL SURVEYS INFORM THE** first two chapters of the *Index*: the [National Survey of Early Care and Education](#),²⁷² the [Occupational Employment Statistics](#),²⁷³ survey, and the [Current Population Survey](#).²⁷⁴ Each survey has its own strengths and limitations, necessitating use of one or another for specific purposes.

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 the 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/program,” as well as “kindergarten teacher” and “elementary school teacher.” 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 survey 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 survey, 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.

Early Childhood Workforce Policies

▶ **THERE IS NO SINGLE SOURCE OF COMPREHENSIVE** information about early childhood workforce policies across all 50 states. For the 2018 *Index*, CSCCE compiled data across each state in a two-part process. During the first stage (November-December 2017), state early care and education agency websites were reviewed to update and supplement information gathered in the 2016 *Index*. In the second stage (February-March 2018), an online survey was sent to one or more representatives from each state (child care licensing/subsidy administrators, QRIS administrators, registry administrators, etc.) to verify and supplement previously collected information. We received survey responses from at least one representative in every state but one. In the state in which we did not receive a response, we reported publicly available information from the state agency website.

In some instances, we were able to use existing data available from databases and reports covering all 50 states, such as the [NIEER Preschool Yearbook](#)²⁷⁵ or the [Quality Rating and Improvement Systems Compendium](#).²⁷⁶

The specific data source for each policy indicator can be found under [State Profiles and Assessment, p. 151](#).

Family & Income Support Policies

▶ **MANY FAMILY AND INCOME SUPPORT POLICIES ARE TRACKED** across all 50 states by various research and policy organizations, such as the [National Conference of State Legislatures](#) and the [National Partnership for Women & Families](#). We make use of several cross-state databases and reports to assess whether states provide supports for workers and families.

The specific data source for each policy indicator can be found under [State Profiles and Assessment, p. 151](#).

State Context

State Context Indicators	Data Sources	Notes
Total child population under age 6	Kids Count Data Center – Child population, by single age, 2016 ²⁷⁷	Totals calculated by CSCCE.
% of children under age 6 with all available parents in the labor force	Kids Count Data Center – Children under age 6 with all available parents in the labor force, 2016 ²⁷⁸	The share of children under age 6 whose resident parents are in the civilian labor force.
% of children under age 6 in low-income working families	Kids Count Data Center – Children in low-income working families, by age group, 2016 ²⁷⁹	The share of children under age 6 living in own families that meet two criteria: 1) the family income is less than twice the federal poverty level; 2) at least one parent works 50 or more weeks during the previous year.
Number of early childhood employees	Occupational Employment Statistics, 2017 ²⁸⁰	Total includes the following occupations as defined by the Standard Occupational Classification of the U.S. Bureau of Labor Statistics: “child care workers,” “preschool teachers, excluding special education,” “preschool teachers, special education,” “education administrators: preschool/child care center programs.” These data do not include the self-employed, although home-based child care assistants, who are employees, are likely included in the “child care worker” category. Due to the limited data available across states in the OES survey, state-based surveys or registries may provide more comprehensive estimates of the ECE workforce.

Earnings & Economic Security

Earnings & Economic Security Indicators	Data Sources	Notes
Median wage, 2015, all occupations (adjusted for inflation)	Occupational Employment Statistics, 2015 ²⁸¹	Figures for 2015 were adjusted for inflation using the CPI Inflation Calculator from the Bureau of Labor Statistics.
Median wage, 2017, all occupations	Occupational Employment Statistics, 2017 ²⁸²	
% change in median wage, all occupations, 2015 vs. 2017	Occupational Employment Statistics, 2017 ²⁸³	Figures for 2015 were adjusted for inflation using the CPI Inflation Calculator from the Bureau of Labor Statistics.
Public income support and health care program participation rates	American Community Survey, 2014 ²⁸⁴ Current Population Survey, 2014 ²⁸⁵ and program administration data	Participation rate in public income support and health care programs (Earned Income Tax Credit, Medicaid/Children's Health Insurance Program, Food Stamps, Temporary Assistance for Needy Families) for child care workers and their families. Figures available for select states in which there was a sufficient sample size (1,000 year-round child care workers or more).

Early Childhood Workforce Policies

Assessment Key for Policy Indicators					
0-4 points per category			Stalled		
5-8 points per category			Edging Forward		
9-12 points per category			Making Headway		
Qualifications & Educational Supports					
Indicators	Values & Partial Points		Maximum Points per Indicator	Data Sources	Notes
Minimum qualification levels (pre-K)?	Lead Teacher – BA: Yes/No	1	2	NIEER State of Preschool Yearbook, 2017 ²⁸⁶	State requires a bachelor’s degree for all lead teachers in publicly funded pre-K programs.
	Assistant Teacher – CDA/ Equivalent or higher: Yes/No	1			States requires at least a Child Development Associate® Credential (CDA) or equivalent for assistant teachers in publicly funded pre-K programs.
Minimum qualification levels (licensed centers)?	Center Director – BA: Yes/No	1	3	CSCCE scan of state licensing requirements	State requires a bachelor’s degree for directors of licensed child care centers.
	Lead Teacher – BA: Yes/No	1			State requires a bachelor’s degree for teachers who may lead groups of children in licensed child care centers.
	Assistant Teacher – CDA/ Equivalent or higher: Yes/No	1			State requires at least a Child Development Associate® Credential (CDA) or equivalent for assistant teachers in licensed child care settings.
Minimum qualification levels (licensed home-based)?	Lead Teacher – BA: Yes/No	1	2		State requires a bachelor’s degree for teachers who may lead groups of children in licensed child care homes.
	Assistant Teacher – CDA/ Equivalent or higher: Yes/No	1			State requires at least a Child Development Associate® Credential (CDA) or equivalent for assistant teachers in licensed child care homes.
Scholarships to support educational pathways?	BA	1	3	CSCCE scan of state agency websites; CSCCE survey of state representatives, 2018	Scholarship funds can be applied to fees and/or tuition for coursework for a Child Development Associate® Credential (CDA) or equivalent, associate degree, or bachelor’s degree. Eight semester college credits or 120 clock hours of training were used as the standard for establishing equivalence with the CDA. ²⁸⁷ Books, paid release time, travel reimbursement, supplies, and other supports may or may not be included. Some states have more than one scholarship program.
	AA	1			
	CDA or equivalent	1			
Collects data on scholarship recipients?	Yes/No		2		Scholarship program collects basic data on recipients that may include total number of recipients, as well as information on demographics, geographical area, etc.
Total			12		

Early Childhood Workforce Policies

Work Environments					
Indicators	Values & Partial Points		Maximum Points per Indicator	Data Sources	Notes
In QRIS standards: Paid professional development time?	Centers: Yes/No	2	4	QRIS Compendium , 2017 ²⁸⁸	State's Quality Rating and Improvement System includes this marker of quality for center- or home-based providers.
	Homes: Yes/No	2			
In QRIS standards: Paid planning/ preparation time?	Centers: Yes/No	2	4		
	Homes: Yes/No	2			
In QRIS standards: Salary scale/ benefits?	Centers: Yes/No	2	4		
	Homes: Yes/No	2			
Total			12		

Compensation & Financial Relief					
Indicators	Values & Partial Points		Maximum Points per Indicator	Data Sources	Notes
Compensation: Salary parity for publicly funded pre-K teachers?	Parity (all)	3	3	NIEER State of Preschool Yearbook , 2016 ²⁸⁹	State requires the same starting salary and salary schedule for teachers in state-funded pre-K programs as for teachers in K-12.
	Parity (some)	2			State requires the same starting salary and salary schedule for <i>some</i> , but not <i>all</i> , publicly funded pre-K teachers.
	Partial parity or sub-parity (all)	1			Partial Parity: State requires the same starting salary, but not the same salary schedule. Sub-Parity: Pro-rating to take account of differences in work hours is either not included or not reported.
Compensation: Required standards (outside pre-K)?	Yes/No		3	CSCCE scan of state agency websites; CSCCE survey of state representatives, 2018	State requires compensation standards outside of pre-K programs as a condition of public funding.
Compensation: Standards guidelines or plans (outside pre-K)?	Guidelines: Yes/No	2	2		State has articulated compensation standards or guidelines for programs outside of publicly funded pre-K.
	Plans only: Yes/No	1			State has plans to develop guidelines for compensation standards or guidelines outside of publicly funded pre-K.
Compensation: Earmarks for salaries in public funding (outside pre-K)?	Yes/No		1		State funding includes earmarks specifically for salaries outside of publicly funded pre-K.
Financial Relief: Stipend or tax credit?	Yes/No		2		State offers a stipend or tax credit to supplement early educator pay.
Financial Relief: Bonus?	Yes/No		1	State offers a bonus, typically a one-time award, linked to educational attainment.	
Total			12		

Early Childhood Workforce Policies

Workforce Data					
Indicators	Values & Partial Points		Maximum Points per Indicator	Data Sources	Notes
Inclusive across settings?	Licensed+	7	7	CSCCE scan of state agency websites; CSCCE survey of state representatives, 2018	State registry requires participation for directors and teaching staff in licensed settings and one or more additional settings (public pre-K programs, Head Start, and/or license-exempt child care); OR state survey samples all licensed settings and one or more additional settings (public pre-K programs, Head Start, and/or license-exempt child care).
	All licensed settings	5			State registry requires participation for directors and teaching staff in licensed settings; OR state's survey samples all licensed settings.
	All other: Defined, Voluntary, Not applicable	0			States that do not fulfill the criteria of either the "licensed" or "licensed+" categories receive no points, in order to convey the importance of collecting data across the ECE workforce, regardless of setting or program funding. In practice, these are states that do not have one of these data collection mechanisms; states that have workforce registries with voluntary rather than required participation for the "licensed" or "licensed+" settings described in the text; or states with either workforce registries or surveys that include some defined sub-set of the ECE workforce (e.g., registries that require membership for all early educators participating in state-funded professional development initiatives or surveys of public pre-K teachers).
Collects compensation data?	Wages: Yes/ No	1	2		State registry OR survey collects data on wages and/or benefits.
	Benefits: Yes/ No	1			
Collects race/ ethnicity data?	Yes/No		2		State registry OR survey collects data on race/ethnicity of the workforce.
Summary data reported online?	Yes/No		1	State reports online information on the early childhood workforce from their registry OR survey.	
Total			12		
Financial Resources					
Indicators	Values & Partial Points		Maximum Points per Indicator	Data Sources	Notes
Pre-K per-child spending as % of K-12: Greater than 50%?	Yes/No		6	NIEER State of Preschool Yearbook , 2017 ²⁹⁰	State per-child spending on pre-K is more than 50% of state per-child spending on K-12. The <i>NIEER Yearbooks</i> are the most comprehensive source on pre-K spending by state but may underestimate sources of federal and local funding. Furthermore, they do not include special education funding, which may represent a not-insignificant proportion of total K-12 spending, depending on the state. However, there is no recent state-by-state data on K-12 special education funding, which could be used to adjust these totals to more adequately assess differences in pre-K and K-12 spending, excluding special education funding.
State reports extra CCDBG spending?	Yes/No		6	Communication with Center for Law and Social Policy , 2018 ²⁹¹	State reported spending additional matching or Maintenance of Effort (MOE) funds for the federal Child Care Development Block Grant.
Total			12		

Family & Income Support Policies

Income Supports				
Indicators	Values & Partial Points	Maximum Points per Indicator	Data Sources	Notes
State Minimum Wage: Higher than federal and indexed for inflation?	Yes/No	4	Internal Revenue Service, State and Local Governments with Earned Income Tax Credit, 2018. ²⁹²	State has a minimum wage that is higher than the federal minimum wage and is indexed for inflation.
EITC: State has refundable credit?	Yes/No	4	National Conference of State Legislatures, 2018 Minimum Wages by State, 2018. ²⁹³	State has an Earned Income Tax Credit that is refundable.
Child & Dependent Care Tax Credit: State has refundable credit?	Yes/No	4	Tax Credits for Working Families, States Tax Credits, n.d. ²⁹⁴	State has a child care tax credit that is refundable.
Total		12		

Health & Well-Being				
Indicators	Values & Partial Points	Maximum Points per Indicator	Data Sources	Notes
State-wide mandated paid sick leave?	Yes/No	4	National Partnership for Women & Families, Paid Sick Days – State and District Statutes, 2018. ²⁹⁵	State has a paid sick days law.
State-wide mandated family leave?	Yes/No	4	National Partnership for Women & Families, State Paid Family and Medical Leave Insurance Laws, 2018. ²⁹⁶	State has a paid family leave law.
Expanded Medicaid?	Yes/No	4	Families USA, A 50-State Look at Medicaid Expansion, 2018. ²⁹⁷	State has expanded Medicaid eligibility under the provisions of the federal Affordable Care Act.
Total		12		

Appendix 2: Supplemental Tables, Chapter 3

APPENDIX TABLE 3.1

Total & Percentage of ECE Employee Workforce by Occupation & State, 2017

	Child Care Workers		Preschool Teachers, Excl. Special Ed		Preschool Teachers, Special Ed		Preschool/Child Care Center Directors		All ECE Employees
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total
NATIONAL	562420	54%	409740	39%	28540	3%	49130	5%	1049830
Alabama	8620	81%	1790	17%	40	0%	170	2%	10620
Alaska	1800	68%	660	25%	80	3%	100	4%	2640
Arizona	9400	55%	6160	36%	330	2%	1050	6%	16940
Arkansas	6630	60%	3240	29%	690	6%	530	5%	11090
California	58630	49%	51990	43%	1790	1%	7350	6%	119760
Colorado	8200	44%	8750	47%	940	5%	780	4%	18670
Connecticut	9440	60%	5490	35%	200	1%	730	5%	15860
Delaware	1360	35%	2280	59%	Not available	Not available	230	6%	3870
District of Columbia	2030	61%	1320	39%	Not available	Not available	Not available	Not available	3350
Florida	34190	57%	21380	36%	2860	5%	1090	2%	59520
Georgia	15320	47%	15300	47%	320	1%	1880	6%	32820
Hawaii	2180	51%	1620	38%	280	7%	180	4%	4260
Idaho	1510	56%	1030	38%	40	1%	140	5%	2720
Illinois	17370	42%	20620	49%	1520	4%	2220	5%	41730
Indiana	9510	60%	5570	35%	210	1%	680	4%	15970
Iowa	8200	61%	4330	32%	180	1%	710	5%	13420
Kansas	5840	65%	2260	25%	440	5%	510	6%	9050
Kentucky	11760	76%	3170	21%	140	1%	340	2%	15410
Louisiana	8420	68%	2420	19%	1310	11%	290	2%	12440
Maine	3180	69%	1270	27%	Not available	Not available	180	4%	4630
Maryland	8830	43%	10000	49%	800	4%	980	5%	20610
Massachusetts	13530	41%	16390	50%	1090	3%	1830	6%	32840
Michigan	15690	59%	9340	35%	360	1%	980	4%	26370
Minnesota	11550	55%	7610	36%	1240	6%	780	4%	21180
Mississippi	7010	71%	2500	25%	Not available	Not available	370	4%	9880
Missouri	12890	68%	5050	27%	310	2%	630	3%	18880

APPENDIX TABLE 3.1

Total & Percentage of ECE Employee Workforce by Occupation & State, 2017*(continued)*

	Child Care Workers		Preschool Teachers, Excl. Special Ed		Preschool Teachers, Special Ed		Preschool/Child Care Center Directors		All ECE Employees
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total
Montana	2660	68%	1100	28%	Not available	Not available	130	3%	3890
Nebraska	8520	86%	1090	11%	150	2%	180	2%	9940
Nevada	3920	67%	1330	23%	460	8%	160	3%	5870
New Hampshire	2410	40%	3120	52%	Not available	Not available	470	8%	6000
New Jersey	18740	53%	14960	42%	130	0%	1740	5%	35570
New Mexico	2550	48%	2460	47%	Not available	Not available	250	5%	5260
New York	40280	48%	34110	41%	5230	6%	4480	5%	84100
North Carolina	18210	50%	15990	44%	670	2%	1680	5%	36550
North Dakota	3060	73%	850	20%	80	2%	200	5%	4190
Ohio	20290	55%	13670	37%	1040	3%	2110	6%	37110
Oklahoma	7000	53%	5530	42%	130	1%	640	5%	13300
Oregon	6460	44%	7120	49%	230	2%	740	5%	14550
Pennsylvania	23740	57%	14110	34%	820	2%	2880	7%	41550
Rhode Island	2330	61%	1260	33%	80	2%	150	4%	3820
South Carolina	6860	54%	5040	40%	180	1%	520	4%	12600
South Dakota	2610	65%	1310	32%	40	1%	80	2%	4040
Tennessee	8120	50%	6860	42%	420	3%	820	5%	16220
Texas	50090	56%	34950	39%	1410	2%	2780	3%	89230
Utah	5680	74%	1380	18%	360	5%	250	3%	7670
Vermont	1290	47%	1040	38%	110	4%	290	11%	2730
Virginia	14580	56%	9730	38%	590	2%	980	4%	25880
Washington	9080	46%	8830	45%	660	3%	1180	6%	19750
West Virginia	2360	55%	1770	41%	Not available	Not available	200	5%	4330
Wisconsin	6710	38%	9700	55%	120	1%	960	5%	17490
Wyoming	1800	63%	900	31%	70	2%	100	3%	2870

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

APPENDIX TABLE 3.2

Family Participation Rates in Public Income Support & Health Care Programs for Child Care Worker* Families by State, 2014-2016

State	Year	EITC Participation	Medicaid/ CHIP Participation	Food Stamp Participation	TANF Participation	Total Participation
California	2014-2016	43%	44%	22%	4%	58%
	2009-2013	44%	26%	17%	5%	47%
Florida	2014-2016	55%	25%	37%	1%	63%
	2009-2013	51%	16%	31%	1%	52%
Illinois	2014-2016	38%	27%	31%	1%	50%
	2009-2013	42%	25%	28%	1%	46%
Michigan	2014-2016	38%	27%	27%	1%	49%
	2009-2013	39%	22%	32%	2%	47%
New Jersey	2014-2016	44%	30%	15%	1%	51%
	2009-2013	42%	17%	19%	1%	39%
New York	2014-2016	57%	46%	30%	1%	65%
	2009-2013	56%	29%	31%	2%	59%
Ohio	2014-2016	37%	31%	19%	2%	50%
	2009-2013	35%	15%	17%	3%	37%
Pennsylvania	2014-2016	32%	23%	22%	1%	50%
	2009-2013	35%	21%	19%	1%	43%
Texas	2014-2016	47%	26%	23%	1%	56%
	2009-2013	48%	22%	25%	1%	54%
Virginia	2014-2016	37%	15%	14%	1%	51%
	2009-2013	39%	14%	16%	1%	39%
NATIONAL	2014-2016	41%	30%	23%	1%	53%
	2009-2013	42%	21%	23%	2%	46%

Source: UC Berkeley Labor Center calculations from the American Community Survey 2014-2016, the Current Population Survey 2015 to March 2017, and program administrative data. Estimates for 2009-2013 as reported in the Early Childhood Workforce Index, 2016.

* According to our definition of "year-round" worker: 27 or more weeks and usually 10 hours or more per week; excludes workers in "Residential Care Without Nursing."

APPENDIX TABLE 3.3

Median Hourly Wages, Actual & Adjusted for Cost of Living, for ECE Occupations by State, 2017

State	Child Care Worker				Preschool Teacher				Preschool/Child Care Center Director			
	Median Hourly Wage	Median Hourly Wage (adjusted)	Annual Median Wage	Annual Median Wage (adjusted)	Median Hourly Wage	Median Hourly Wage (adjusted)	Annual Median Wage	Annual Median Wage (adjusted)	Median Hourly Wage	Median Hourly Wage (adjusted)	Annual Median Wage	Annual Median Wage (adjusted)
NATIONAL	\$10.72	N/A	\$22,290	N/A	\$13.94	N/A	\$28,990	N/A	\$22.54	N/A	\$46,890	N/A
Alabama	\$8.93	\$10.26	\$18,580	\$21,356	\$10.98	\$12.62	\$22,830	\$26,241	\$16.36	\$18.80	\$34,040	\$39,126
Alaska	\$11.99	\$9.80	\$24,940	\$20,376	\$14.82	\$12.11	\$30,820	\$25,180	\$28.86	\$23.58	\$60,020	\$49,036
Arizona	\$11.24	\$11.37	\$23,380	\$23,640	\$13.42	\$13.57	\$27,910	\$28,220	\$18.05	\$18.25	\$37,550	\$37,968
Arkansas	\$9.32	\$10.90	\$19,380	\$22,667	\$14.25	\$16.67	\$29,650	\$34,678	\$19.94	\$23.32	\$41,480	\$48,515
California	\$12.29	\$9.58	\$25,570	\$19,930	\$16.19	\$12.62	\$33,670	\$26,243	\$23.91	\$18.64	\$49,720	\$38,753
Colorado	\$12.60	\$12.71	\$26,200	\$26,438	\$13.88	\$14.01	\$28,870	\$29,132	\$22.73	\$22.94	\$47,290	\$47,719
Connecticut	\$11.87	\$9.56	\$24,690	\$19,895	\$16.58	\$13.36	\$34,480	\$27,784	\$24.71	\$19.91	\$51,390	\$41,410
Delaware	\$10.21	\$10.29	\$21,230	\$21,401	\$12.54	\$12.64	\$26,070	\$26,280	\$24.44	\$24.64	\$50,840	\$51,250
District of Columbia	\$14.33	\$10.58	\$29,810	\$22,000	\$18.02	\$13.30	\$37,480	\$27,661	N/A	N/A	N/A	N/A
Florida	\$10.09	\$10.54	\$20,980	\$21,923	\$11.70	\$12.23	\$24,350	\$25,444	\$22.89	\$23.92	\$47,610	\$49,749
Georgia	\$9.53	\$10.59	\$19,830	\$22,033	\$13.42	\$14.91	\$27,910	\$31,011	\$19.07	\$21.19	\$39,670	\$44,078
Hawaii	\$10.64	\$7.94	\$22,130	\$16,515	\$17.94	\$13.39	\$37,310	\$27,843	\$23.29	\$17.38	\$48,430	\$36,142
Idaho	\$9.04	\$10.46	\$18,800	\$21,759	\$10.75	\$12.44	\$22,350	\$25,868	\$17.96	\$20.79	\$37,360	\$43,241
Illinois	\$10.77	\$10.72	\$22,410	\$22,299	\$13.64	\$13.57	\$28,380	\$28,239	\$24.02	\$23.90	\$49,960	\$49,711
Indiana	\$9.62	\$11.11	\$20,000	\$23,095	\$11.65	\$13.45	\$24,240	\$27,991	\$18.99	\$21.93	\$39,490	\$45,600
Iowa	\$9.20	\$10.34	\$19,130	\$21,494	\$11.12	\$12.49	\$23,130	\$25,989	\$17.05	\$19.16	\$35,470	\$39,854
Kansas	\$9.25	\$10.24	\$19,240	\$21,307	\$12.94	\$14.33	\$26,920	\$29,812	\$19.50	\$21.59	\$40,560	\$44,917
Kentucky	\$9.28	\$11.00	\$19,300	\$22,867	\$15.49	\$18.35	\$32,220	\$38,175	\$20.81	\$24.66	\$43,280	\$51,280
Louisiana	\$8.95	\$9.93	\$18,610	\$20,655	\$17.07	\$18.95	\$35,510	\$39,412	\$19.20	\$21.31	\$39,940	\$44,329
Maine	\$11.18	\$10.11	\$23,250	\$21,022	\$14.92	\$13.49	\$31,040	\$28,065	\$22.59	\$20.42	\$46,980	\$42,477
Maryland	\$11.29	\$9.83	\$23,480	\$20,435	\$14.16	\$12.32	\$29,450	\$25,631	\$22.25	\$19.36	\$46,280	\$40,279
Massachusetts	\$12.74	\$10.34	\$26,510	\$21,518	\$15.71	\$12.75	\$32,680	\$26,526	\$27.11	\$22.00	\$56,400	\$45,779
Michigan	\$10.09	\$11.62	\$20,990	\$24,182	\$13.94	\$16.06	\$28,990	\$33,399	\$21.78	\$25.09	\$45,300	\$52,189
Minnesota	\$11.27	\$11.83	\$23,450	\$24,607	\$14.93	\$15.67	\$31,060	\$32,592	\$24.36	\$25.56	\$50,660	\$53,158
Mississippi	\$8.84	\$10.79	\$18,380	\$22,442	\$13.14	\$16.04	\$27,330	\$33,370	\$16.56	\$20.22	\$34,440	\$42,051
Missouri	\$9.96	\$11.31	\$20,730	\$23,530	\$12.03	\$13.65	\$25,020	\$28,400	\$20.69	\$23.48	\$43,040	\$48,854
Montana	\$9.84	\$10.59	\$20,460	\$22,024	\$13.90	\$14.96	\$28,910	\$31,119	\$18.30	\$19.70	\$38,060	\$40,969
Nebraska	\$10.33	\$11.55	\$21,480	\$24,027	\$17.37	\$19.43	\$36,120	\$40,403	\$22.51	\$25.18	\$46,820	\$52,371
Nevada	\$10.39	\$10.40	\$21,610	\$21,632	\$12.01	\$12.02	\$24,980	\$25,005	\$21.47	\$21.49	\$44,660	\$44,705
New Hampshire	\$10.79	\$9.37	\$22,430	\$19,470	\$13.75	\$11.94	\$28,610	\$24,835	\$21.56	\$18.72	\$44,840	\$38,924
New Jersey	\$11.51	\$10.11	\$23,930	\$21,028	\$15.57	\$13.68	\$32,380	\$28,453	\$26.27	\$23.08	\$54,650	\$48,023
New Mexico	\$9.66	\$10.18	\$20,080	\$21,159	\$12.89	\$13.58	\$26,820	\$28,261	\$19.87	\$20.94	\$41,330	\$43,551

APPENDIX TABLE 3.3

Median Hourly Wages, Actual & Adjusted for Cost of Living, for ECE Occupations by State, 2017 *(continued)*

State	Child Care Worker				Preschool Teacher				Preschool/Child Care Center Director			
	Median Hourly Wage	Median Hourly Wage (adjusted)	Annual Median Wage	Annual Median Wage (adjusted)	Median Hourly Wage	Median Hourly Wage (adjusted)	Annual Median Wage	Annual Median Wage (adjusted)	Median Hourly Wage	Median Hourly Wage (adjusted)	Annual Median Wage	Annual Median Wage (adjusted)
New York	\$12.38	\$9.46	\$25,760	\$19,679	\$16.64	\$12.71	\$34,620	\$26,448	\$30.54	\$23.33	\$63,520	\$48,526
North Carolina	\$9.86	\$10.93	\$20,510	\$22,738	\$12.44	\$13.79	\$25,880	\$28,692	\$20.97	\$23.25	\$43,610	\$48,348
North Dakota	\$10.56	\$11.09	\$21,960	\$23,067	\$13.58	\$14.26	\$28,250	\$29,674	\$18.96	\$19.92	\$39,430	\$41,418
Ohio	\$9.86	\$11.12	\$20,500	\$23,112	\$11.80	\$13.30	\$24,550	\$27,678	\$18.60	\$20.97	\$38,680	\$43,608
Oklahoma	\$9.10	\$10.52	\$18,930	\$21,884	\$13.86	\$16.02	\$28,830	\$33,329	\$18.04	\$20.86	\$37,520	\$43,376
Oregon	\$11.45	\$10.96	\$23,810	\$22,785	\$13.70	\$13.11	\$28,500	\$27,273	\$22.12	\$21.17	\$46,010	\$44,029
Pennsylvania	\$9.71	\$9.66	\$20,190	\$20,090	\$12.99	\$12.93	\$27,020	\$26,886	\$20.82	\$20.72	\$43,300	\$43,085
Rhode Island	\$11.82	\$10.30	\$24,580	\$21,411	\$14.57	\$12.69	\$30,320	\$26,411	\$27.21	\$23.70	\$56,590	\$49,294
South Carolina	\$9.15	\$9.85	\$19,030	\$20,484	\$11.08	\$11.93	\$23,060	\$24,822	\$16.46	\$17.72	\$34,230	\$36,846
South Dakota	\$9.68	\$10.16	\$20,130	\$21,123	\$13.84	\$14.52	\$28,790	\$30,210	\$26.70	\$28.02	\$55,530	\$58,269
Tennessee	\$9.28	\$10.72	\$19,290	\$22,275	\$12.30	\$14.20	\$25,580	\$29,538	\$20.54	\$23.72	\$42,720	\$49,330
Texas	\$9.46	\$10.35	\$19,670	\$21,521	\$13.10	\$14.33	\$27,240	\$29,803	\$20.57	\$22.51	\$42,780	\$46,805
Utah	\$9.55	\$10.29	\$19,870	\$21,412	\$12.78	\$13.77	\$26,590	\$28,653	\$18.44	\$19.87	\$38,360	\$41,336
Vermont	\$12.71	\$11.28	\$26,440	\$23,461	\$14.57	\$12.93	\$30,310	\$26,894	\$22.14	\$19.65	\$46,050	\$40,861
Virginia	\$9.82	\$10.01	\$20,430	\$20,826	\$15.59	\$15.89	\$32,440	\$33,068	\$24.90	\$25.38	\$51,800	\$52,803
Washington	\$12.32	\$11.62	\$25,620	\$24,170	\$14.69	\$13.86	\$30,550	\$28,821	\$22.17	\$20.92	\$46,110	\$43,500
West Virginia	\$9.52	\$10.61	\$19,790	\$22,062	\$12.67	\$14.12	\$26,350	\$29,376	\$16.09	\$17.94	\$33,460	\$37,302
Wisconsin	\$10.03	\$10.74	\$20,850	\$22,323	\$11.64	\$12.46	\$24,200	\$25,910	\$19.53	\$20.91	\$40,630	\$43,501
Wyoming	\$11.14	\$11.60	\$23,180	\$24,146	\$14.33	\$14.93	\$29,810	\$31,052	\$23.75	\$24.74	\$49,400	\$51,458

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

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

APPENDIX TABLE 3.4

Median Hourly Wages, Actual & Adjusted for Cost of Living, for Kindergarten & Elementary School Teachers by State, 2017

State	Kindergarten Teacher				Elementary School Teacher			
	Median Hourly Wage (10-month)	Median Hourly Wage (10-month, adjusted)	Annual Median Wage	Annual Median Wage (adjusted)	Median Hourly Wage (10-month)	Median Hourly Wage (10-month, adjusted)	Annual Median Wage	Annual Median Wage (adjusted)
NATIONAL	\$31.29	N/A	\$54,230	N/A	\$32.98	N/A	\$57,160	N/A
Alabama	\$25.04	\$28.79	\$43,410	\$49,897	\$28.61	\$32.88	\$49,590	\$57,000
Alaska	\$40.48	\$33.07	\$70,160	\$57,320	\$42.87	\$35.03	\$74,310	\$60,711
Arizona	\$24.83	\$25.10	\$43,030	\$43,509	\$24.97	\$25.25	\$43,280	\$43,761
Arkansas	\$26.62	\$31.13	\$46,140	\$53,965	\$27.29	\$31.92	\$47,300	\$55,322
California	\$38.33	\$29.88	\$66,440	\$51,785	\$45.17	\$35.20	\$78,290	\$61,021
Colorado	\$27.68	\$27.93	\$47,970	\$48,406	\$28.71	\$28.97	\$49,770	\$50,222
Connecticut	\$43.90	\$35.37	\$76,090	\$61,313	\$44.65	\$35.98	\$77,400	\$62,369
Delaware	\$31.73	\$31.99	\$55,000	\$55,444	\$34.05	\$34.32	\$59,020	\$59,496
District of Columbia	\$34.36	\$25.35	\$59,550	\$43,948	\$43.06	\$31.78	\$74,630	\$55,077
Florida	\$27.06	\$28.27	\$46,900	\$49,007	\$27.23	\$28.45	\$47,200	\$49,321
Georgia	\$30.92	\$34.35	\$53,590	\$59,544	\$31.73	\$35.26	\$55,000	\$61,111
Hawaii	\$26.20	\$19.55	\$45,410	\$33,888	\$34.58	\$25.80	\$59,930	\$44,724
Idaho	\$26.58	\$30.77	\$46,080	\$53,333	\$25.81	\$29.87	\$44,740	\$51,782
Illinois	\$30.77	\$30.62	\$53,340	\$53,075	\$33.93	\$33.77	\$58,820	\$58,527
Indiana	\$27.23	\$31.44	\$47,200	\$54,503	\$28.26	\$32.64	\$48,990	\$56,570
Iowa	\$29.93	\$33.63	\$51,880	\$58,292	\$30.73	\$34.53	\$53,270	\$59,854
Kansas	\$26.91	\$29.80	\$46,640	\$51,650	\$27.73	\$30.71	\$48,060	\$53,223
Kentucky	\$31.11	\$36.86	\$53,930	\$63,898	\$30.84	\$36.54	\$53,450	\$63,329
Louisiana	\$28.04	\$31.12	\$48,600	\$53,940	\$27.48	\$30.50	\$47,640	\$52,875
Maine	\$30.20	\$27.31	\$52,350	\$47,333	\$30.54	\$27.62	\$52,940	\$47,866
Maryland	\$35.45	\$30.85	\$61,450	\$53,481	\$37.93	\$33.01	\$65,740	\$57,215
Massachusetts	\$41.24	\$33.47	\$71,480	\$58,019	\$43.07	\$34.96	\$74,650	\$60,593
Michigan	\$32.04	\$36.91	\$55,530	\$63,975	\$35.49	\$40.88	\$61,510	\$70,864
Minnesota	\$32.39	\$33.99	\$56,140	\$58,909	\$35.00	\$36.73	\$60,670	\$63,662
Mississippi	\$24.83	\$30.31	\$43,030	\$52,540	\$25.04	\$30.57	\$43,400	\$52,991
Missouri	\$28.25	\$32.07	\$48,970	\$55,585	\$27.66	\$31.40	\$47,950	\$54,427
Montana	\$29.64	\$31.91	\$51,380	\$55,307	\$28.74	\$30.93	\$49,810	\$53,617
Nebraska	\$32.46	\$36.31	\$56,260	\$62,931	\$32.13	\$35.94	\$55,700	\$62,304
Nevada	\$31.36	\$31.39	\$54,360	\$54,414	\$32.07	\$32.10	\$55,580	\$55,636
New Hampshire	\$32.29	\$28.03	\$55,970	\$48,585	\$33.13	\$28.76	\$57,430	\$49,852
New Jersey	\$35.96	\$31.60	\$62,330	\$54,772	\$37.87	\$33.28	\$65,640	\$57,680
New Mexico	\$33.35	\$35.14	\$57,800	\$60,906	\$32.45	\$34.20	\$56,250	\$59,273
New York	\$41.19	\$31.47	\$71,400	\$54,545	\$44.60	\$34.07	\$77,300	\$59,053
North Carolina	\$25.37	\$28.13	\$43,980	\$48,758	\$26.03	\$28.86	\$45,120	\$50,022
North Dakota	\$27.29	\$28.67	\$47,310	\$49,695	\$28.47	\$29.90	\$49,340	\$51,828

APPENDIX TABLE 3.4

Median Hourly Wages, Actual & Adjusted for Cost of Living, for Kindergarten & Elementary School Teachers by State, 2017 *(continued)*

State	Kindergarten Teacher				Elementary School Teacher			
	Median Hourly Wage (10-month)	Median Hourly Wage (10-month, adjusted)	Annual Median Wage	Annual Median Wage (adjusted)	Median Hourly Wage (10-month)	Median Hourly Wage (10-month, adjusted)	Annual Median Wage	Annual Median Wage (adjusted)
Ohio	\$31.52	\$35.54	\$54,640	\$61,601	\$34.36	\$38.74	\$59,560	\$67,148
Oklahoma	\$21.91	\$25.33	\$37,980	\$43,908	\$22.17	\$25.62	\$38,420	\$44,416
Oregon	\$38.80	\$37.13	\$67,260	\$64,364	\$36.98	\$35.38	\$64,090	\$61,330
Pennsylvania	\$31.10	\$30.94	\$53,900	\$53,632	\$35.97	\$35.79	\$62,340	\$62,030
Rhode Island	\$38.45	\$33.49	\$66,640	\$58,049	\$41.02	\$35.73	\$71,100	\$61,934
South Carolina	\$29.67	\$31.94	\$51,430	\$55,361	\$28.43	\$30.60	\$49,270	\$53,036
South Dakota	\$22.84	\$23.97	\$39,590	\$41,542	\$23.53	\$24.69	\$40,780	\$42,791
Tennessee	\$27.23	\$31.44	\$47,200	\$54,503	\$28.33	\$32.72	\$49,110	\$56,709
Texas	\$31.99	\$35.00	\$55,450	\$60,667	\$32.34	\$35.38	\$56,050	\$61,324
Utah	\$23.23	\$25.04	\$40,270	\$43,394	\$30.61	\$32.99	\$53,060	\$57,177
Vermont	\$31.69	\$28.12	\$54,930	\$48,740	\$33.85	\$30.03	\$58,670	\$52,059
Virginia	\$37.18	\$37.90	\$64,440	\$65,688	\$36.98	\$37.69	\$64,090	\$65,331
Washington	\$35.37	\$33.36	\$61,300	\$57,830	\$36.92	\$34.83	\$64,000	\$60,377
West Virginia	\$28.05	\$31.27	\$48,620	\$54,203	\$26.23	\$29.24	\$45,470	\$50,691
Wisconsin	\$31.19	\$33.39	\$54,060	\$57,880	\$32.39	\$34.68	\$56,140	\$60,107
Wyoming	\$32.91	\$34.28	\$57,040	\$59,417	\$33.51	\$34.90	\$58,080	\$60,500

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

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

APPENDIX TABLE 3.5

Median Hourly Wages for ECE Occupations by State, 2015-2017

State	Child Care Worker				Preschool Teacher				Preschool/Child Care Center Director			
	2015 Median Hourly Wage	2015 Adjusted Median Wage in 2017 Dollars	2017 Median Hourly Wage	Percent Change	2015 Median Hourly Wage	2015 Adjusted Median Wage in 2017 Dollars	2017 Median Hourly Wage	Percent Change	2015 Median Hourly Wage	2015 Adjusted Median Wage in 2017 Dollars	2017 Median Hourly Wage	Percent Change
NATIONAL	\$9.77	\$10.05	\$10.72	7%	\$13.74	\$14.14	\$13.94	-1%	\$21.96	\$22.60	\$22.54	0%
Alabama	\$8.75	\$9.00	\$8.93	-1%	\$12.78	\$13.15	\$10.98	-17%	\$19.48	\$20.04	\$16.36	-18%
Alaska	\$11.80	\$12.14	\$11.99	-1%	\$17.51	\$18.02	\$14.82	-18%	\$27.17	\$27.96	\$28.86	3%
Arizona	\$9.65	\$9.93	\$11.24	13%	\$11.33	\$11.66	\$13.42	15%	\$18.45	\$18.99	\$18.05	-5%
Arkansas	\$8.80	\$9.06	\$9.32	3%	\$13.55	\$13.94	\$14.25	2%	\$21.44	\$22.06	\$19.94	-10%
California	\$11.61	\$11.95	\$12.29	3%	\$15.25	\$15.69	\$16.19	3%	\$24.79	\$25.51	\$23.91	-6%
Colorado	\$11.47	\$11.80	\$12.60	7%	\$13.11	\$13.49	\$13.88	3%	\$20.76	\$21.36	\$22.73	6%
Connecticut	\$10.77	\$11.08	\$11.87	7%	\$15.20	\$15.64	\$16.58	6%	\$24.49	\$25.20	\$24.71	-2%
Delaware	\$9.95	\$10.24	\$10.21	0%	\$12.24	\$12.59	\$12.54	0%	\$23.17	\$23.84	\$24.44	3%
District of Columbia	\$11.06	\$11.38	\$14.33	26%	\$19.20	\$19.76	\$18.02	-9%	\$29.00	\$29.84	Not available	Not available
Florida	\$9.53	\$9.81	\$10.09	3%	\$11.65	\$11.99	\$11.70	-2%	\$27.87	\$28.68	\$22.89	-20%
Georgia	\$9.16	\$9.43	\$9.53	1%	\$13.56	\$13.95	\$13.42	-4%	\$18.01	\$18.53	\$19.07	3%
Hawaii	\$9.07	\$9.33	\$10.64	14%	\$16.20	\$16.67	\$17.94	8%	\$21.87	\$22.50	\$23.29	3%
Idaho	\$8.79	\$9.04	\$9.04	0%	\$10.54	\$10.85	\$10.75	-1%	\$18.06	\$18.58	\$17.96	-3%
Illinois	\$10.50	\$10.80	\$10.77	0%	\$13.79	\$14.19	\$13.64	-4%	\$22.60	\$23.26	\$24.02	3%
Indiana	\$9.36	\$9.63	\$9.62	0%	\$11.79	\$12.13	\$11.65	-4%	\$17.83	\$18.35	\$18.99	4%
Iowa	\$8.89	\$9.15	\$9.20	1%	\$11.56	\$11.90	\$11.12	-7%	\$17.48	\$17.99	\$17.05	-5%
Kansas	\$9.09	\$9.35	\$9.25	-1%	\$11.81	\$12.15	\$12.94	6%	\$18.72	\$19.26	\$19.50	1%
Kentucky	\$9.09	\$9.35	\$9.28	-1%	\$18.10	\$18.62	\$15.49	-17%	\$18.71	\$19.25	\$20.81	8%
Louisiana	\$8.82	\$9.08	\$8.95	-1%	\$19.21	\$19.77	\$17.07	-14%	\$19.02	\$19.57	\$19.20	-2%
Maine	\$10.37	\$10.67	\$11.18	5%	\$14.24	\$14.65	\$14.92	2%	\$18.00	\$18.52	\$22.59	22%
Maryland	\$10.64	\$10.95	\$11.29	3%	\$13.45	\$13.84	\$14.16	2%	\$22.72	\$23.38	\$22.25	-5%
Massachusetts	\$12.01	\$12.36	\$12.74	3%	\$15.18	\$15.62	\$15.71	1%	\$27.78	\$28.59	\$27.11	-5%
Michigan	\$9.43	\$9.70	\$10.09	4%	\$13.34	\$13.73	\$13.94	2%	\$19.75	\$20.32	\$21.78	7%
Minnesota	\$10.81	\$11.12	\$11.27	1%	\$15.45	\$15.90	\$14.93	-6%	\$24.85	\$25.57	\$24.36	-5%
Mississippi	\$8.72	\$8.97	\$8.84	-1%	\$12.01	\$12.36	\$13.14	6%	\$19.13	\$19.68	\$16.56	-16%
Missouri	\$9.06	\$9.32	\$9.96	7%	\$12.05	\$12.40	\$12.03	-3%	\$19.80	\$20.37	\$20.69	2%
Montana	\$9.18	\$9.45	\$9.84	4%	\$12.45	\$12.81	\$13.90	9%	\$17.64	\$18.15	\$18.30	1%
Nebraska	\$9.43	\$9.70	\$10.33	6%	\$15.31	\$15.75	\$17.37	10%	\$21.78	\$22.41	\$22.51	0%
Nevada	\$10.15	\$10.44	\$10.39	-1%	\$11.85	\$12.19	\$12.01	-2%	\$21.15	\$21.76	\$21.47	-1%
New Hampshire	\$10.47	\$10.77	\$10.79	0%	\$13.23	\$13.61	\$13.75	1%	\$19.94	\$20.52	\$21.56	5%
New Jersey	\$10.61	\$10.92	\$11.51	5%	\$16.90	\$17.39	\$15.57	-10%	\$23.66	\$24.35	\$26.27	8%
New Mexico	\$9.10	\$9.36	\$9.66	3%	\$12.82	\$13.19	\$12.89	-2%	\$19.75	\$20.32	\$19.87	-2%
New York	\$12.24	\$12.59	\$12.38	-2%	\$14.95	\$15.38	\$16.64	8%	\$27.23	\$28.02	\$30.54	9%
North Carolina	\$9.45	\$9.72	\$9.86	1%	\$12.48	\$12.84	\$12.44	-3%	\$21.52	\$22.14	\$20.97	-5%
North Dakota	\$9.23	\$9.50	\$10.56	11%	\$17.02	\$17.51	\$13.58	-22%	\$18.09	\$18.61	\$18.96	2%

APPENDIX TABLE 3.5

Median Hourly Wages for ECE Occupations by State, 2015-2017

(continued)

State	Child Care Worker				Preschool Teacher				Preschool/Child Care Center Director			
	2015 Median Hourly Wage	2015 Adjusted Median Wage in 2017 Dollars	2017 Median Hourly Wage	Percent Change	2015 Median Hourly Wage	2015 Adjusted Median Wage in 2017 Dollars	2017 Median Hourly Wage	Percent Change	2015 Median Hourly Wage	2015 Adjusted Median Wage in 2017 Dollars	2017 Median Hourly Wage	Percent Change
Ohio	\$9.55	\$9.83	\$9.86	0%	\$11.39	\$11.72	\$11.80	1%	\$17.77	\$18.29	\$18.60	2%
Oklahoma	\$8.90	\$9.16	\$9.10	-1%	\$15.40	\$15.85	\$13.86	-13%	\$19.29	\$19.85	\$18.04	-9%
Oregon	\$10.69	\$11.00	\$11.45	4%	\$13.31	\$13.70	\$13.70	0%	\$17.89	\$18.41	\$22.12	20%
Pennsylvania	\$9.42	\$9.69	\$9.71	0%	\$12.49	\$12.85	\$12.99	1%	\$20.43	\$21.02	\$20.82	-1%
Rhode Island	\$9.48	\$9.75	\$11.82	21%	\$15.82	\$16.28	\$14.57	-10%	\$28.36	\$29.18	\$27.21	-7%
South Carolina	\$8.83	\$9.09	\$9.15	1%	\$11.84	\$12.18	\$11.08	-9%	\$18.18	\$18.71	\$16.46	-12%
South Dakota	\$9.30	\$9.57	\$9.68	1%	\$13.80	\$14.20	\$13.84	-3%	\$25.93	\$26.68	\$26.70	0%
Tennessee	\$8.93	\$9.19	\$9.28	1%	\$11.46	\$11.79	\$12.30	4%	\$17.68	\$18.19	\$20.54	13%
Texas	\$9.12	\$9.38	\$9.46	1%	\$14.90	\$15.33	\$13.10	-15%	\$21.73	\$22.36	\$20.57	-8%
Utah	\$9.47	\$9.74	\$9.55	-2%	\$11.07	\$11.39	\$12.78	12%	\$18.16	\$18.69	\$18.44	-1%
Vermont	\$11.25	\$11.58	\$12.71	10%	\$14.13	\$14.54	\$14.57	0%	\$21.15	\$21.76	\$22.14	2%
Virginia	\$9.38	\$9.65	\$9.82	2%	\$15.62	\$16.07	\$15.59	-3%	\$26.10	\$26.86	\$24.90	-7%
Washington	\$11.31	\$11.64	\$12.32	6%	\$13.37	\$13.76	\$14.69	7%	\$19.23	\$19.79	\$22.17	12%
West Virginia	\$9.08	\$9.34	\$9.52	2%	\$14.73	\$15.16	\$12.67	-16%	\$17.96	\$18.48	\$16.09	-13%
Wisconsin	\$9.81	\$10.09	\$10.03	-1%	\$11.48	\$11.81	\$11.64	-1%	\$20.57	\$21.17	\$19.53	-8%
Wyoming	\$10.02	\$10.31	\$11.14	8%	\$12.56	\$12.92	\$14.33	11%	\$23.84	\$24.53	\$23.75	-3%

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

Notes: Figures for 2015 were adjusted for inflation using the CPI Inflation Calculator of the Bureau of Labor Statistics.

APPENDIX TABLE 3.6

Median Hourly Wages for Kindergarten & Elementary School Teachers by State, 2015-2017

State	Kindergarten Teacher				Elementary School Teacher			
	2015 Median Hourly Wage	2015 Adjusted Median Wage in 2017 Dollars	2017 Median Hourly Wage	Percent Change	2015 Median Hourly Wage	2015 Adjusted Median Wage in 2017 Dollars	2017 Median Hourly Wage	Percent Change
NATIONAL	\$29.79	\$30.66	\$31.29	2%	\$31.67	\$32.59	\$32.98	1%
Alabama	\$27.59	\$28.39	\$25.04	-12%	\$29.07	\$29.91	\$28.61	-4%
Alaska	\$38.55	\$39.67	\$40.48	2%	\$41.24	\$42.44	\$42.87	1%
Arizona	\$23.21	\$23.88	\$24.83	4%	\$22.67	\$23.33	\$24.97	7%
Arkansas	\$26.19	\$26.95	\$26.62	-1%	\$25.71	\$26.46	\$27.29	3%
California	\$36.89	\$37.96	\$38.33	1%	\$42.06	\$43.28	\$45.17	4%
Colorado	\$26.65	\$27.42	\$27.68	1%	\$27.77	\$28.57	\$28.71	0%
Connecticut	\$40.99	\$42.18	\$43.90	4%	\$43.81	\$45.08	\$44.65	-1%
Delaware	\$33.77	\$34.75	\$31.73	-9%	\$33.96	\$34.94	\$34.05	-3%
District of Columbia	\$30.01	\$30.88	\$34.36	11%	\$38.71	\$39.83	\$43.06	8%
Florida	\$26.34	\$27.11	\$27.06	0%	\$26.57	\$27.34	\$27.23	0%
Georgia	\$31.06	\$31.96	\$30.92	-3%	\$31.03	\$31.93	\$31.73	-1%
Hawaii	\$25.59	\$26.33	\$26.20	0%	\$32.32	\$33.26	\$34.58	4%
Idaho	\$25.43	\$26.16	\$26.58	2%	\$25.93	\$26.68	\$25.81	-3%
Illinois	\$28.10	\$28.92	\$30.77	6%	\$31.92	\$32.84	\$33.93	3%
Indiana	\$25.94	\$26.70	\$27.23	2%	\$28.10	\$28.92	\$28.26	-2%
Iowa	\$28.86	\$29.70	\$29.93	1%	\$29.51	\$30.37	\$30.73	1%
Kansas	\$25.89	\$26.64	\$26.91	1%	\$26.03	\$26.78	\$27.73	4%
Kentucky	\$30.21	\$31.09	\$31.11	0%	\$29.91	\$30.78	\$30.84	0%
Louisiana	\$27.31	\$28.10	\$28.04	0%	\$27.38	\$28.17	\$27.48	-2%
Maine	\$28.82	\$29.66	\$30.20	2%	\$29.52	\$30.38	\$30.54	1%
Maryland	\$32.25	\$33.19	\$35.45	7%	\$35.55	\$36.58	\$37.93	4%
Massachusetts	\$38.75	\$39.88	\$41.24	3%	\$41.10	\$42.29	\$43.07	2%
Michigan	\$30.27	\$31.14	\$32.04	3%	\$36.65	\$37.71	\$35.49	-6%
Minnesota	\$30.64	\$31.53	\$32.39	3%	\$33.21	\$34.17	\$35.00	2%
Mississippi	\$22.96	\$23.63	\$24.83	5%	\$23.54	\$24.23	\$25.04	3%
Missouri	\$26.00	\$26.76	\$28.25	6%	\$27.71	\$28.51	\$27.66	-3%
Montana	\$25.52	\$26.26	\$29.64	13%	\$28.01	\$28.82	\$28.74	0%
Nebraska	\$27.64	\$28.44	\$32.46	14%	\$29.19	\$30.04	\$32.13	7%
Nevada	\$28.10	\$28.91	\$31.36	8%	\$30.58	\$31.47	\$32.07	2%
New Hampshire	\$29.58	\$30.44	\$32.29	6%	\$32.13	\$33.06	\$33.13	0%
New Jersey	\$35.39	\$36.42	\$35.96	-1%	\$36.90	\$37.97	\$37.87	0%
New Mexico	\$30.50	\$31.39	\$33.35	6%	\$32.74	\$33.69	\$32.45	-4%
New York	\$34.68	\$35.69	\$41.19	15%	\$39.54	\$40.69	\$44.60	10%
North Carolina	\$23.04	\$23.70	\$25.37	7%	\$24.33	\$25.03	\$26.03	4%
North Dakota	\$25.59	\$26.33	\$27.29	4%	\$26.64	\$27.41	\$28.47	4%
Ohio	\$30.27	\$31.15	\$31.52	1%	\$34.40	\$35.39	\$34.36	-3%
Oklahoma	\$22.36	\$23.00	\$21.91	-5%	\$22.66	\$23.31	\$22.17	-5%

APPENDIX TABLE 3.6

Median Hourly Wages for Kindergarten & Elementary School Teachers by State, 2015-2017 *(continued)*

State	Kindergarten Teacher				Elementary School Teacher			
	2015 Median Hourly Wage	2015 Adjusted Median Wage in 2017 Dollars	2017 Median Hourly Wage	Percent Change	2015 Median Hourly Wage	2015 Adjusted Median Wage in 2017 Dollars	2017 Median Hourly Wage	Percent Change
Oregon	\$32.83	\$33.78	\$38.80	15%	\$33.36	\$34.33	\$36.98	8%
Pennsylvania	\$29.45	\$30.31	\$31.10	3%	\$34.49	\$35.49	\$35.97	1%
Rhode Island	\$40.31	\$41.48	\$38.45	-7%	\$41.09	\$42.28	\$41.02	-3%
South Carolina	\$29.51	\$30.37	\$29.67	-2%	\$28.07	\$28.89	\$28.43	-2%
South Dakota	\$22.25	\$22.89	\$22.84	0%	\$23.48	\$24.16	\$23.53	-3%
Tennessee	\$27.66	\$28.47	\$27.23	-4%	\$27.68	\$28.48	\$28.33	-1%
Texas	\$29.37	\$30.22	\$31.99	6%	\$30.24	\$31.11	\$32.34	4%
Utah	\$24.99	\$25.72	\$23.23	-10%	\$29.94	\$30.80	\$30.61	-1%
Vermont	\$30.62	\$31.51	\$31.69	1%	\$30.78	\$31.68	\$33.85	7%
Virginia	\$32.94	\$33.90	\$37.18	10%	\$34.15	\$35.14	\$36.98	5%
Washington	\$31.74	\$32.66	\$35.37	8%	\$35.83	\$36.87	\$36.92	0%
West Virginia	\$27.62	\$28.42	\$28.05	-1%	\$26.39	\$27.15	\$26.23	-3%
Wisconsin	\$28.10	\$28.91	\$31.19	8%	\$31.22	\$32.13	\$32.39	1%
Wyoming	\$32.42	\$33.36	\$32.91	-1%	\$33.20	\$34.16	\$33.51	-2%

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

Notes: Figures for 2015 were adjusted for inflation using the CPI Inflation Calculator of the Bureau of Labor Statistics. Kindergarten and elementary school teachers assume a 10-month year.

Endnotes

1. Executive Summary

- 1 National Academies of Sciences, Engineering, and Medicine (NASEM) (2018). *Transforming the Financing of Early Care and Education*. Washington, DC: The National Academies Press. Retrieved from <https://doi.org/10.17226/24984>.
- 2 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>.
- 3 Whitebook, M., Phillips, D., & Howes, C. (2014). *Worthy Work, STILL Unlivable Wages: The Early Childhood Workforce 25 Years after the National Child Care Staffing Study*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <http://cscce.berkeley.edu/files/2014/ReportFINAL.pdf>; Whitebook, M., McLean, C., & Austin, L.J.E. (2016). *Early Childhood Workforce Index – 2016*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <http://cscce.berkeley.edu/files/2016/Early-Childhood-Workforce-Index-2016.pdf>.
- 4 For the purposes of cross-state comparison, the District of Columbia may be referred to as a “state” in the *Index*, for a total of 51 “states.”
- 5 The NSECE estimates that 98 percent of center-based teaching staff are women; comparable data were not collected on the home-based workforce. The NSECE estimates that an additional 2.7 million unpaid home-based teachers and caregivers are regularly responsible for young children not their own for at least five hours each week. We have not included unlisted unpaid providers in this snapshot, focusing only on those who are paid to care for and educate young children, as explained above. We recognize, however, that unpaid individuals fulfill an important role in the lives of children and families and provide an essential service to our nation.
- 6 The 2016 *Index* reported 12 million children based on numbers from the U.S. Census Bureau Survey of Income and Program Participation. The estimate of 10 million comes from the National Survey of Early Care and Education and has been used in the 2018 *Index* to increase consistency with the rest of the analysis across data sources.
- 7 Whitebook, McLean, & Austin, 2016; McKelvey, L., Forsman, A., & Morrison-Ward, J. (2018). *Arkansas Workforce Study: Instructional Staff in Child Care & Early Childhood Education, 2017*. Little Rock, AR: University of Arkansas for Medical Sciences. Retrieved from https://familymedicine.uams.edu/wp-content/uploads/sites/57/2018/04/Staff-Workforce-Study-Report_FINAL.pdf; Schaack, D.D., & Le, V.N. (2017). *At the Heart of the Matter: The Compensation of Colorado's Early Educator Workforce*. Denver, CO: Early Milestones Colorado. Retrieved from http://earlymilestones.org/wpcontent/uploads/2017/09/Brief_3_CO_EC_Workforce_Survey.pdf; 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. Retrieved from <http://cscce.berkeley.edu/files/2016/2016-Alameda-SEQUAL-Report-FINAL-for-Dissemination-v2.pdf>.
- 8 Figures for 2015 were adjusted for inflation using the CPI Inflation Calculator from the Bureau of Labor Statistics. Median wages across all occupations increased by 1 percent over the same time period nationwide.
- 9 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.
- 10 Earnings for assistants employed in home-based settings are included in these overall child care numbers.
- 11 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).
- 12 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 shed light on typical pay for these workers and how it fluctuates over time.
- 13 McKelvey, Forsman, & Morrison-Ward, 2018; Schaack & Le, 2017; Whitebook, King, Philipp, & Sakai, 2016.
- 14 UC Berkeley Labor Center calculations using the 2014–2016 American Community Survey, the March 2015–2017 Current Population Survey (CPS), and program administrative data.
- 15 CSCCE analysis of the National Survey of Early Care and Education (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 $p < .05$.

2. About the Early Childhood Workforce

- 16 The NSECE estimates that an additional 2.7 million *unpaid* home-based teachers and caregivers are regularly responsible for young children not their own for at least five hours each week. We have not included unlisted unpaid providers in this snapshot, focusing only on those who are paid to care for and educate young children, as explained above. We recognize, however, that unpaid individuals fulfill an important role in the lives of children and families and provide an essential service to our nation.

- 17 The 2016 *Index* reported 12 million children based on numbers from the U.S. Census Bureau Survey of Income and Program Participation. The 10 million estimate comes from the National Survey of Early Care and Education and has been used in the 2018 *Index* to increase consistency across data sources with the rest of the analysis.
- 18 Whitebook, M., McLean, C., & Austin, L.J.E. (2016). *Early Childhood Workforce Index – 2016*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <http://cscce.berkeley.edu/files/2016/Early-Childhood-Workforce-Index-2016.pdf>.
- 19 McKelvey, L., Forsman, A., Morrison-Ward, J. (2018). *Arkansas Workforce Study: Instructional Staff in Child Care & Early Childhood Education, 2017*. Little Rock, AR: University of Arkansas for Medical Sciences. Retrieved from https://familymedicine.uams.edu/wp-content/uploads/sites/57/2018/04/Staff-Workforce-Study-Report_FINAL.pdf; Schaack, D.D., & Le, V.N. (2017). *At the Heart of the Matter: The Compensation of Colorado's Early Educator Workforce*. Denver, CO: Early Milestones Colorado. Retrieved from http://earlymilestones.org/wp-content/uploads/2017/09/Brief_3_CO_EC_Workforce_Survey.pdf; 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. Retrieved from <http://cscce.berkeley.edu/files/2016/2016-Alameda-SEQUAL-Report-FINAL-for-Dissemination-v2.pdf>.
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- 21 Additional information about the National Survey of Early Care and Education (NSECE) can be found at <https://www.acf.hhs.gov/opre/research/project/national-survey-of-early-care-and-education-nsece-2010-2014>.
- 22 Population Reference Bureau, analysis of data from the U.S. Census Bureau, 2008-2016 American Community Survey. Retrieved from <https://datacenter.kidscount.org/data>.
- 23 National Survey of Early Care and Education Project Team (2014). *Characteristics of Center-based Early Care and Education Programs: Initial Findings from the National Survey of Early Care and Education (NSECE)*. OPRE Report #2014-73a, 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.researchconnections.org/childcare/resources/28740/pdf>.
- 24 The common combinations of types of care can be found here: https://www.acf.hhs.gov/sites/default/files/opre/nsece_usage_and_cost_tabulations_081216_toopre_b508_2.pdf.
- 25 International Labour Office, Sectorial Activities Department (2014). *Meeting of Experts on Policy Guidelines on the Promotion of Decent Work for Early Childhood Education Personnel*. Geneva, Switzerland: International Labor Office. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/normativeinstrument/wcms_236528.pdf.
- 26 Whitebook, M., McLean, C., & Austin, L.J.E. (2018). *The Workforce Data Deficit: Who it Harms and How it Can Be Overcome*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley. Retrieved from <http://cscce.berkeley.edu/files/2018/04/The-Workforce-Data-Deficit.pdf>.
- 27 For more information, see: Administration for Children and Families, Office of Child Care (2015). *Research Brief #2: Trends in Family Child Care Home Licensing Regulations and Policies for 2014*. Retrieved from <https://childcareta.acf.hhs.gov/resource/research-brief-2-trends-family-child-care-home-licensing-regulations-and-policies-2014>; Administration for Children and Families, Office of Child Care (2015). *Research Brief #3: Trends in Group Child Care Home Licensing Regulations and Policies for 2014*. Retrieved from <https://childcareta.acf.hhs.gov/resource/research-brief-3-trends-group-child-care-home-licensing-regulations-and-policies-2014>.
- 28 While 27 percent of the center-based early childhood workforce speaks a language other than English (as documented in the NSECE), the U.S. Census reports that 14 percent of the U.S. adult population spoke a language other than English at home during the year that the NSECE was conducted. While these numbers are not directly comparable, they do suggest that the ECE workforce is more linguistically diverse than the overall U.S. adult population.
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- 33 The difference between the hourly wage of African American educators and white/Caucasian educators after controlling for educational attainment is statistically significant ($p < .01$).
- 34 This figure (\$1,622.40) is CSCCE's calculation based on working 40 hours per week and 52 weeks per year.
- 35 The most recent data on home-based providers' household income is from 2011. However, the 2019 NSECE will report 2018 household incomes and should be available in the fall of 2020.

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 programs 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/>.
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- 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 IJendoorn, 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>.
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- 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/childcare-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.
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- 182 "An ECE workforce registry is a database that stores and tracks a variety of information about the demographics, completed and ongoing education, and employment status of the ECE workforce," see Kipnis, F., & Whitebook, M. (2011). *Workforce Information: A Critical Component of Coordinated State Early Care and Education Data Systems*. Berkeley, CA: Center for the Study of Child Care Employment. Retrieved from http://www.irle.berkeley.edu/cscce/wp-content/uploads/2011/04/CSCCEPolicyBrief_WorkforceInformation_March2011.pdf. States develop registries for many purposes, including understanding the characteristics of the ECE workforce, tracking participation in professional development initiatives, and determining placement on a state's career ladder. The National Workforce Registry Alliance sets out specific recommendations for the implementation of ECE workforce registries, see National Workforce Registry Alliance (n.d.). *Alliance Resources*. Retrieved from <https://www.registryalliance.org/our-work/publications-and-resources>.
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- 184 The majority of these states also have registries. Indiana and Kansas are currently the only states that have conducted recent surveys without also implementing some form of registry.
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- 188 Our *Index* is focused primarily on ECE teaching staff and leadership, but from a broader perspective, an early childhood workforce data collection mechanism could include a wider variety of personnel, such as coaches, trainers, and home visitors.
- 189 Whitebook, McLean, & Austin, 2018.
- 190 Note that in some states pre-K and Head Start settings might also be required to participate in child care licensing, while in other states they are governed by separate regulations. Similarly, the types of settings considered "license-exempt" varies by state. We gave "licensed +" credit to states in which respondents said that teaching staff and directors (if applicable) in these types of settings were required to participate in their registry or sampled via their survey or if teaching staff and directors could be identified as participating in the state survey based on a published survey report.
- 191 States that do not meet the "licensed" or "licensed +" criteria via either their workforce registry or survey fall into several categories, including: states that do not have one of these data collection mechanisms; states that have workforce registries with voluntary rather than required participation for the "licensed" or "licensed +" settings described in the text; or states with either workforce registries or surveys that only include some defined sub-set of the ECE workforce (e.g., registries that require membership for all early educators participating in state-funded professional development initiatives or surveys of public pre-K teachers).
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