Center for
Early Learning
Funding Equity
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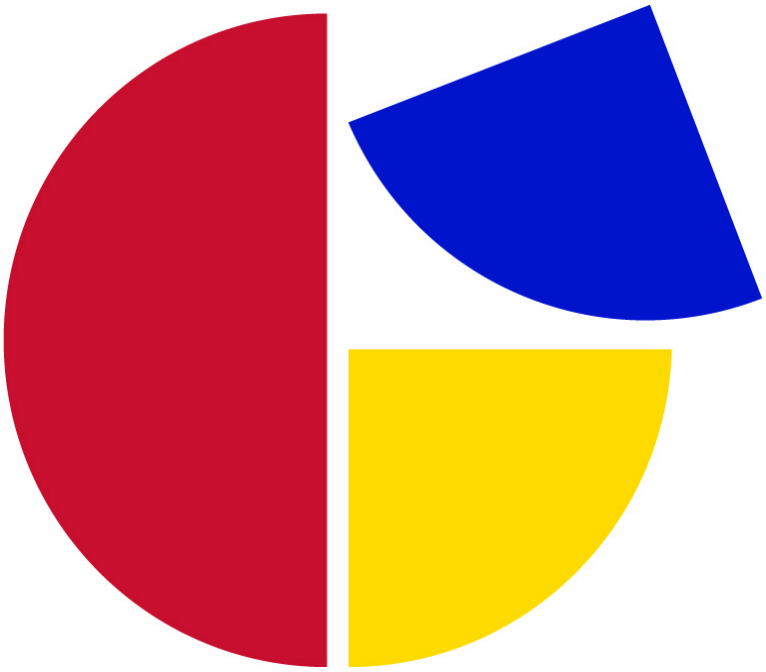

SHORTCHANGED

TRACKING PUBLIC INVESTMENT IN EARLY LEARNING

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SHORTCHANGED

The United States Chronically Underinvests in Young Children. Decades of research show that children develop long-lasting social-emotional, gross motor, and learning skills during their first five years of life. As Nobel Prize winning economist James Heckman's work demonstrates, dollars spent on children in their youngest years are the most cost-effective human capital investment available.[1] Yet those are the very years in the United States when federal, state, and local governments spend the least on children's education and development, mere fractions of what they'll expend the moment a child enters kindergarten. The American underinvestment in early childhood is unique in the world: Early care and education investments and enrollment trail all but four developed countries.[2]

Early care and education (ECE) cannot be high quality, affordable, and equitably accessible without significant further public investment. It also cannot adequately meet the needs of children and families without funding mechanisms that work together as a coherent system. The Shortchanged Project aims to analyze all early learning funding streams together and chronicle how much – or little – we spend on the care and education of children before they enter elementary school nationally, state-by-state, and over time.

Tracking early learning funding is no small task. Though politicians and media often talk about "preschool" or "child care" as one cohesive birth-to-five policy system – and in an ideal world it would be – the way early learning is funded in the U.S. has created a fractured system that is exceptionally hard to capture in raw numbers. Child care is funded and administered differently than public Pre-K. Public Pre-K is funded and administered differently than Head Start. Early Head Start is funded and administered differently than home visiting, and so on. These publicly funded programs are run by different federal and state agencies, with separate goals, rules, and reporting systems that do not translate easily to one another, even though children are frequently served by multiple funding streams simultaneously.

The fractured nature of early care and education public funding makes tracking spending on the birth to kindergarten-entry age group particularly difficult. One can easily find reliable analyses on federal, state, and local spending for children in the K-12 system through the U.S. Department of Education. This is not the case for early care and education, where government agencies and research and advocacy organizations track specific programs by funding stream.[3] No one agency is tasked with tracking public spending on the early care and education system as a whole. In this initial report, the Shortchanged Project takes a significant step towards creating an accurate account of the sum total of public funding spent on early care and education in the U.S.

We invest 85% less per year on children before they enter kindergarten than after.

1 Heckman, J. (2000) Invest in the Very Young. Chicago: Ounce for Prevention Fund.
2 Organization for Economic Cooperation and Development/UIS/Eurostat (2023), Table B2.1. For more information see Source section and Education at a Glance 2023 Sources, Methodologies and Technical Notes, (OECD, 2023[6]).
3 The National Institute for Early Education Research (NIEER) tracks spending on preschool and the Children's Funding Project is building a database of all funding streams dedicated to children and youth.

In the present analysis, the Center for Early Learning Funding Equity (CELFE) at Northern Illinois University defined and tracked public spending on early care and education and disaggregated these dollars by age group—infants & toddlers, preschoolers, and school-age children. We then compared public care and education spending for the younger age groups to public spending on older children to measure how close – or how far apart – these investments are. We define public early care and education funding as federal, state, and local dollars that are dedicated for children birth to kindergarten-entry including: home visiting, child care, preschool, Pre-K, and Head Start, Child and Dependent Care Tax Credits, and early intervention and special education services. (See Appendix for a list of the funding streams we included in our analysis and age disaggregation methodology.)

We found that our nation invests far less per child in the years before kindergarten than in the K-12 years, and it spends even less on infants and toddlers than on preschool-aged children.[4] This comparison is not meant to argue against further investment in school-aged children or to imply that enough public dollars are spent on K-12 education. Instead, it is meant to highlight the degree to which our country is missing the opportunity to invest in our youngest children's development – an investment research shows will pay dividends down the road.[5] Access to high quality learning opportunities matters every bit as much at age two as it does at age nine.

What We Did

How we defined public early care and education spending: Our focus in this report is early care and education funding. We analyzed federal, state, and local funding streams that support home visiting, child care, preschool, and early intervention and special education services for children birth to kindergarten entry. To isolate early care and education, we excluded from our analyses other essential funding for children's development like nutrition, housing, and healthcare. We also excluded COVID relief dollars used to support the early care and education field from our analysis as these funds were temporary in most cases. *(See Appendix Table 1 for each funding source broken out by investment and age group)*

Why we used per child spending: We analyzed funding streams by the number of children living in each state in each age group, rather than by the number of children served by each program. This analytical choice reflects CELFE's belief that every child born in the U.S. should have access to appropriate early learning environments like every child has access to public education. Though not every family chooses public school, every child can enroll. The same should be true for families with young children.

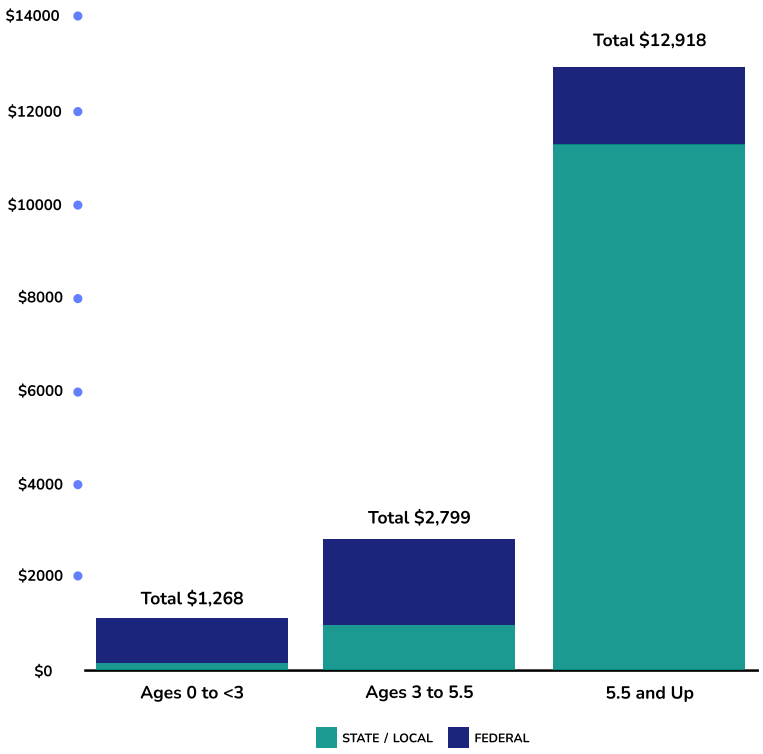
How we designated age groups: We disaggregated funding streams based on the following age groupings: infants and toddlers (birth to third birthday), preschoolers (ages three to five years, six months, and children in the K-12 system (ages five years, six months to eighteen years, six months). Rather than assume all five-year-olds – or no five-year-olds – are served in the early childhood system, we split this birth cohort in half to more accurately represent when children enter kindergarten and are therefore served by different funding systems.

Why we used 2021 data: This is the latest consistently available data for every federal funding stream we analyze. The CELFE team will update these analyses as soon as more recent data becomes available. *(See Appendix for a more detailed explanation of our methodology)*

4 K-12 public expenditures are a useful benchmark because the comparison helps to account for variations across in populations, political environments, and cost of living across states.

5 For example, see: Bailey, Martha J., Shuqiao Sun, and Brenden Timpe. 2021. "Prep School for Poor Kids: The Long-Run Impacts of Head Start on Human Capital and Economic Self-Sufficiency." American Economic Review, 111 (12): 3963–4001.

Per Child Public Spending by Age Group (2021)

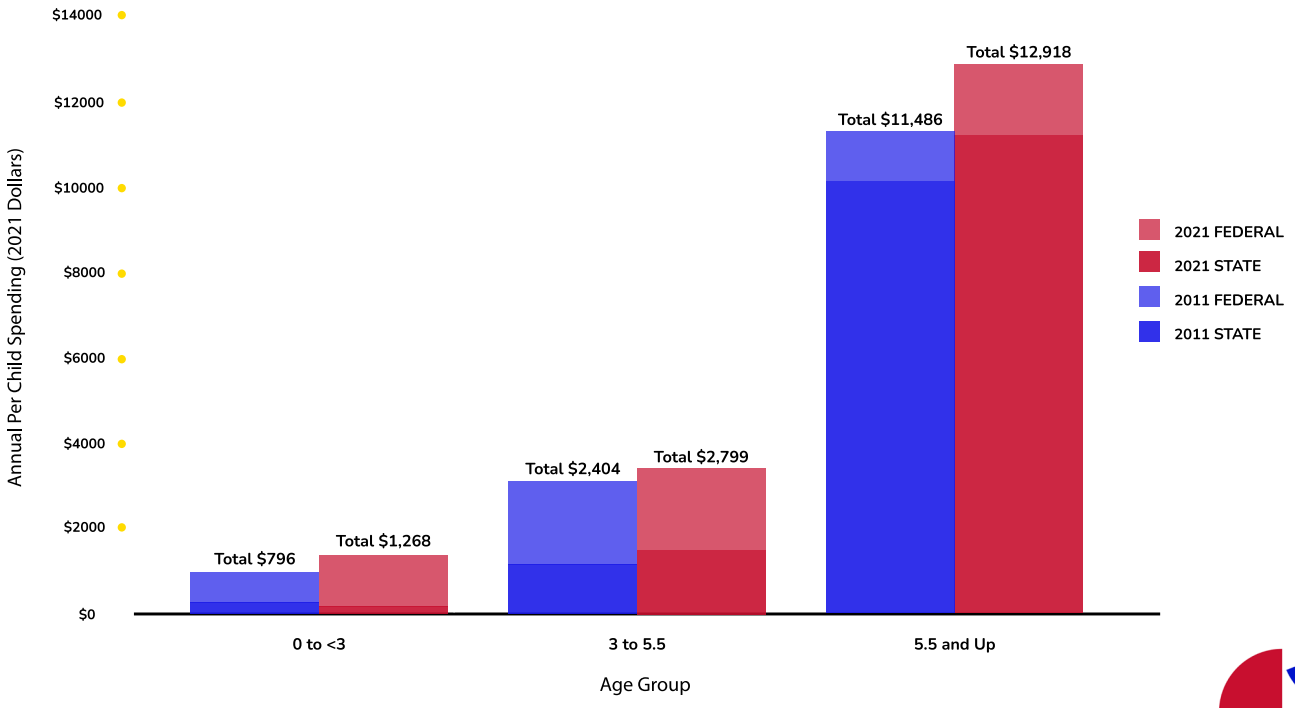


What We Found

The differences we found in investments in children before and after they entered kindergarten were stark. At the national level, for every dollar spent on a child during their K-12 years, only 10 cents were spent on infants and toddlers and 22 cents were spent on preschoolers[6] (See Appendix Table 2). The graph to the left shows wide disparities in public care and education spending by age group.

To understand how investments in children have changed over the past decade, CELFE reanalyzed 2011 data collected by the Build Initiative for its "Early Learning Left Out" report to align with the Shortchanged Project methodology.[7] After adjusting for inflation, we found only modest increases in early learning investments from 2011 to 2021. Federal investments in infants and toddlers nearly doubled from 2011 to 2021 (largely due to increased investments in Early Head Start and home visiting), but state-level investment merely kept pace with inflation. Significantly, public investments in preschoolers increased by only 16%. Neither infant-toddler nor preschool spending kept pace with the increase in per-child spending on school-agers over that decade. The below graph compares 2011 to 2021 inflation-adjusted spending per child, by age group to show increases in public spending over time, or lack thereof.

Per Child ECE Spending Increases Have Not Closed the Gap with K-12



6 These analyses are adjusted for the number of children in each age group.
7 Bruner, C. (2013) Early Learning Left Out: Building an Early Learning System to Secure America's Future. Boston: The Build Initiative.

When we drilled down to the state level in this preliminary analysis, we found wide variation in spending in 2021. There were differences in the amounts spent per child and, equally important, differences in how spending on youngest children compared to spending on school-age children. For example, Alaska spent only 7 cents on young children for every dollar spent on children when they entered elementary school. Conversely, the District of Columbia spent 37 cents on care and education on children before kindergarten for every dollar spent on older children. In D.C.'s case, 65 cents were spent per preschooler, while only 14 cents were spent on infants and toddlers before they entered the district's public Pre-K program. (See Appendix Table 2 for investments in care and education by age in each state.)

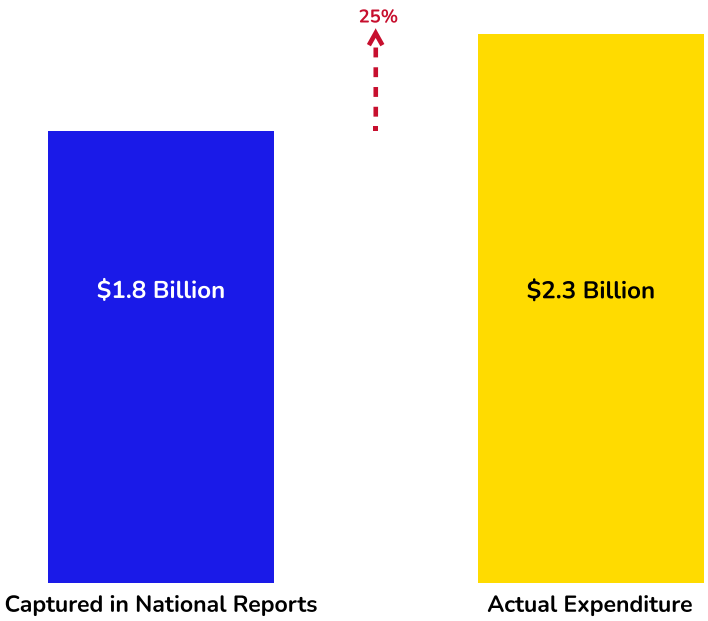
What it means

Analyzing the total amount spent on early care and education and comparing this to K-12 spending allowed us to draw three main conclusions. First, public investments in our youngest learners significantly lag investments in older children. Second, while federal investments in infants and toddlers increased during the 2010s, little significant increased investments were made for preschoolers from 2011 to 2021 after we adjusted for inflation. Third, states vary a great deal by how they invest in early learning, and by how much.

What's next?

The national snapshot of early childhood investments might be discouraging, but increased state and city spending in this area provides a reason for optimism. We know that many states and local governments began investing more in their early childhood systems following the Covid-19 pandemic in new and innovative ways. Yet these new investments are rarely fully captured in national analyses.

Illinois Spends Significantly More on ECE than is Captured in Current National Reports



In forthcoming Shortchanged analyses, CELFE is working to analyze state-level early childhood education expenditures. Our preliminary research shows that many states spend more on their early care and education systems than is currently being tracked at the national level (and thus more than what we have reported here from our first analysis of this nationally available data). Because states use their own funding streams for these programs, these dollars frequently aren't captured in federal or nationally compiled reports.

For example, in 2021, Illinois spent 25 percent more on early care and education than is captured in the above analysis, including significant state general revenue funding that is invested in the state's Child Care Assistance Program that is not included in federal reporting on Child Care Development Fund and Temporary Assistance for Needy Families. We know that Illinois is not alone. Future Shortchanged analyses will detail these differences in state-level early learning expenditures.

Center for Early Learning Funding Equity

About CELFE

The Center for Early Learning Funding Equity (CELFE) at Northern Illinois University works with states, philanthropy, and other partners to redesign early learning financing strategies in a way that better focuses equitable funding on the needs of children and families. Our work is data-driven, informed by over 30 years of experience working inside and outside of government and thinking creatively about how to design and implement meaningful change. As the only university-based organization focused specifically on strategic early childhood education and care financing, CELFE believes how much money is invested matters. Further, CELFE contends that how those funds are distributed is the greatest policy lever available to ensure an equitable ECE system for children ages 0-5.

Learn more at **celfe.org**.

In addition to analyzing state reported expenditures, the CELFE team hopes to incorporate city and local spending, tribal-specific funding, state-level child tax credits, and flexible savings accounts in future analyses.

While these additional state level investments are meaningful and should be accurately captured and accounted for, they do not change the overall picture presented above. Young children's education and development in this country remains shortchanged.

Acknowledgements

The Center for Early Learning Funding Equity would like to thank the Build Initiative and Charlie Bruner for allowing us to build on their groundbreaking 2013 Early Learning Left Out report. We also thank the Saul Zaentz Foundation for their generous support and partnership in building the Shortchanged website. Thank you to the members of our advisory committee and to those who participated in our user design sessions.[8]

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8 Our advisory committee includes: Chad Aldeman, Charlie Bruner, Danielle Ewen, Carlise King, Hannah Matthews, Karen Schulman, Marcia Stoll, Amelia Vaughn, Albert Wat, GG Weisenfeld, Michelle Stover Wright.

Appendix

Table 1: Funding Stream by Age

	Ages 0 to < 3			Ages 3 to K Entry			K Entry & Up		
	State/Local	Federal	**Total**	State/Local	Federal	**Total**	State/Local	Federal	**Total**
Child Care Tax Credit		$ 3,221,399,680	$ 3,221,399,680		$ 4,051,788,505	$ 4,051,788,505		$ 5,022,107,645	$ 5,022,107,645
CCDBG	$ 546,057,033	$ 2,733,186,748	$ 3,279,243,781	$ 607,695,133	$ 2,964,394,743	$ 3,572,089,876	$ 654,889,779	$ 3,036,080,335	$ 3,690,970,114
SSBG		$ 66,177,077	$ 66,177,077		$ 76,045,980	$ 76,045,980		$ 119,726,332	$ 119,726,332
TANF	$ 707,034,225	$ 875,497,497	$ 1,582,531,722	$ 756,664,272	$ 874,538,678	$ 1,631,202,950	$ 956,335,309	$ 894,485,338	$ 1,850,820,647
CAC Food Program		$ 1,272,376,408	$ 1,272,376,408		$ 1,437,961,863	$ 1,437,961,863		$ 778,943,327	$ 778,943,327
Head Start					$ 6,224,356,779	$ 6,224,356,779			
Early Head Start		$ 3,014,718,839	$ 3,014,718,839						
State Preschool				$ 9,420,332,442		$ 9,420,332,442			
IDEA Part B					$ 592,697,263	$ 592,697,263			
IDEA Part C*		$ 673,033,103	$ 673,033,103						
MIECHV		$ 289,855,629	$ 289,855,629		$ 47,185,800	$ 47,185,800			
PDG		$ 138,486,345	$ 138,486,345		$ 125,855,560	$ 125,855,560			
CCAMPIS		$ 14,920,816	$ 14,920,816		$ 16,391,974	$ 16,391,974		$ 18,352,932	$ 18,352,932
K-12 Public Spending							$ 688,479,856,189		$ 688,479,856,189
Total	**$ 1,253,091,258**	**$ 12,299,652,141**	**$ 13,552,743,399**	**$ 10,784,691,847**	**$ 16,411,217,145**	**$ 27,195,908,993**	**$ 690,091,081,277**	**$ 9,869,695,910**	**$ 699,960,777,187**
Number of Children	10,685,332	10,685,332		9,715,578	9,715,578		54,914,082	54,914,082	
Per Child Spending	$ 117	$ 1,151	$ 1,268	$ 1,110	$ 1,689	$ 2,799	$ 12,567	$ 180	$ 12,746

*While states do spend state resources on Part C, these expenditures are not captured in national reports. CELFE will capture these in Phase II of the Shortchanged Project.

Table 2: State by State Dollars to Cents

	2021			Spent for every $1 spent on ages 6 to 18		
State	Ages 0 to < 3	Ages 3 to 5.5	Ages 5.5 to 18	Ages 0 to < 3	Ages 3 to 5.5	Ages 0 to 5.5
Alabama	$ 1,597	$ 2,821	$ 9,532	$ 0.17	$ 0.30	$ 0.23
Alaska	$ 1,113	$ 1,775	$ 19,540	$ 0.06	$ 0.09	$ 0.07
Arizona	$ 1,048	$ 1,543	$ 8,643	$ 0.12	$ 0.18	$ 0.15
Arkansas	$ 1,619	$ 3,193	$ 10,233	$ 0.16	$ 0.31	$ 0.23
California	$ 1,289	$ 3,592	$ 13,636	$ 0.09	$ 0.26	$ 0.18
Colorado	$ 964	$ 1,749	$ 11,304	$ 0.09	$ 0.15	$ 0.12
Connecticut	$ 1,455	$ 3,106	$ 19,102	$ 0.08	$ 0.16	$ 0.12
Delaware	$ 1,651	$ 2,286	$ 15,270	$ 0.11	$ 0.15	$ 0.13
District of Columbia	$ 3,507	$ 16,589	$ 25,417	$ 0.14	$ 0.65	$ 0.37
Florida	$ 1,538	$ 2,738	$ 9,128	$ 0.17	$ 0.30	$ 0.23
Georgia	$ 1,209	$ 2,858	$ 11,107	$ 0.11	$ 0.26	$ 0.18
Hawaii	$ 993	$ 1,806	$ 13,223	$ 0.08	$ 0.14	$ 0.10
Idaho	$ 848	$ 1,261	$ 7,952	$ 0.11	$ 0.16	$ 0.13
Illinois	$ 1,652	$ 3,110	$ 16,355	$ 0.10	$ 0.19	$ 0.14
Indiana	$ 1,002	$ 1,633	$ 9,088	$ 0.11	$ 0.18	$ 0.14
Iowa	$ 1,242	$ 2,498	$ 11,714	$ 0.11	$ 0.21	$ 0.16
Kansas	$ 1,089	$ 2,655	$ 12,178	$ 0.09	$ 0.22	$ 0.15
Kentucky	$ 1,259	$ 2,719	$ 10,532	$ 0.12	$ 0.26	$ 0.19
Louisiana	$ 1,839	$ 3,123	$ 11,439	$ 0.16	$ 0.27	$ 0.21
Maine	$ 1,651	$ 3,008	$ 15,853	$ 0.10	$ 0.19	$ 0.15
Maryland	$ 1,061	$ 3,058	$ 14,163	$ 0.07	$ 0.22	$ 0.14
Massachusetts	$ 1,403	$ 2,914	$ 17,967	$ 0.08	$ 0.16	$ 0.12
Michigan	$ 1,095	$ 2,917	$ 11,752	$ 0.09	$ 0.25	$ 0.17
Minnesota	$ 1,534	$ 2,421	$ 12,871	$ 0.12	$ 0.19	$ 0.15
Mississippi	$ 1,561	$ 3,349	$ 8,993	$ 0.17	$ 0.37	$ 0.27
Missouri	$ 1,297	$ 1,939	$ 10,338	$ 0.13	$ 0.19	$ 0.15
Montana	$ 1,301	$ 1,783	$ 11,156	$ 0.12	$ 0.16	$ 0.14
Nebraska	$ 1,330	$ 2,001	$ 12,651	$ 0.11	$ 0.16	$ 0.13
Nevada	$ 870	$ 1,326	$ 9,560	$ 0.09	$ 0.14	$ 0.11
New Hampshire	$ 1,302	$ 1,917	$ 15,870	$ 0.08	$ 0.12	$ 0.10
New Jersey	$ 1,191	$ 4,991	$ 19,536	$ 0.06	$ 0.26	$ 0.15
New Mexico	$ 1,447	$ 3,319	$ 10,344	$ 0.14	$ 0.32	$ 0.23
New York	$ 1,134	$ 3,462	$ 22,063	$ 0.05	$ 0.16	$ 0.10
North Carolina	$ 1,343	$ 2,525	$ 9,348	$ 0.14	$ 0.27	$ 0.20
North Dakota	$ 1,225	$ 1,727	$ 13,537	$ 0.09	$ 0.13	$ 0.11
Ohio	$ 1,326	$ 2,215	$ 12,346	$ 0.11	$ 0.18	$ 0.14
Oklahoma	$ 1,462	$ 3,033	$ 9,738	$ 0.15	$ 0.31	$ 0.23
Oregon	$ 982	$ 2,790	$ 12,066	$ 0.08	$ 0.23	$ 0.15
Pennsylvania	$ 1,257	$ 2,912	$ 14,893	$ 0.08	$ 0.20	$ 0.14
Rhode Island	$ 1,737	$ 3,009	$ 15,974	$ 0.11	$ 0.19	$ 0.15
South Carolina	$ 1,409	$ 2,556	$ 11,758	$ 0.12	$ 0.22	$ 0.17
South Dakota	$ 1,097	$ 1,731	$ 9,760	$ 0.11	$ 0.18	$ 0.14
Tennessee	$ 1,190	$ 2,253	$ 9,145	$ 0.13	$ 0.25	$ 0.18
Texas	$ 1,136	$ 2,605	$ 10,720	$ 0.11	$ 0.24	$ 0.17
Utah	$ 663	$ 1,075	$ 8,740	$ 0.08	$ 0.12	$ 0.10
Vermont	$ 2,410	$ 6,336	$ 20,161	$ 0.12	$ 0.31	$ 0.21
Virginia	$ 945	$ 1,878	$ 12,387	$ 0.08	$ 0.15	$ 0.11
Washington	$ 1,091	$ 2,146	$ 13,684	$ 0.08	$ 0.16	$ 0.12
West Virginia	$ 1,167	$ 4,485	$ 12,041	$ 0.10	$ 0.37	$ 0.23
Wisconsin	$ 1,479	$ 2,787	$ 11,665	$ 0.13	$ 0.24	$ 0.18
Wyoming	$ 1,411	$ 1,860	$ 16,661	$ 0.08	$ 0.11	$ 0.10
US	**$ 1,296**	**$ 2,849**	**$ 12,996**	**$ 0.10**	**$ 0.22**	**$ 0.15**

Methodology

Data Collection

CELFE analyzed 2021 data – the latest consistently available – on federal ECE funding streams and state-reported matches from relevant federal agencies (Department of Health and Human Services, Department of Education, Internal Revenue Service, Department of Agriculture, Census Bureau). CELFE currently is working with state partners to access and analyze state-specific funding streams not accounted for in the federal reports. CELFE collects and analyzes expended dollars, not appropriated dollars, at the state level. For state preschool, CELFE uses data collected by the National Institute for Early Education Research (NIEER).[9] The CELFE team plans to analyze 2022 data as it becomes available.

Age Group Definition and Disaggregation

Shortchanged provides an estimate of the dollars per child in the population that are expended for education and care, which requires clear definitions of age groups. Infant and toddlers are defined as ages 0, 1 and 2 years (3 birth cohorts); preschoolers are defined as age 3-5.5 years (2.5 birth cohorts); and school-age children are defined as 5.5-18.5 years (13 birth cohorts). Rather than assume that all (or none) of the 5-year-old children have entered the k-12 system, CELFE has divided this age group in half. This accounts for the fact that there is a full additional birth cohort of children in the ECEC age range the day before the kindergarten entry eligibility cut-off date.

ECE Funding Sources

CELFE analyzed the below funding streams:

Child Care Funding Streams

- Child Care and Development Fund/Block Grant (CCDF)
- Temporary Assistance to Needy Families (TANF) child care expenditures
- Social Services Block Grant (SSBG) child care expenditures
- Child Care Access Means Parents in School (CCAMPIS)
- Child and Dependent Care Tax Credit
- Child and Adult Care Food Program (CACFP)

Education and Child Development Funding Streams

- Early Head Start
- Head Start
- State Preschool
- Individuals with Disabilities Education Act (IDEA) Part B/Early Childhood Special Education (only what is federally reported)
- Individuals with Disabilities Education Act (IDEA) Part C/Early Intervention
- K-12 total expenditures as reported to the U.S. Department of Education

9 Friedman-Krauss, A. H., Barnett, W. S., Garver, K. A., Hodges, K. S., Weisenfeld, G., Gardiner, B. A., Jost, T. M. (2022). The State of Preschool 2021: State Preschool Yearbook. New Brunswick, NJ: National Institute for Early Education Research.

Home Visiting

- Maternal, Infant, and Early Childhood Home Visiting (MIECHV)

Other Investments

- Preschool Development Grant Birth to Five (PDG)

Age Disaggregation Methodology

Some of the funding sources we analyzed are already delineated for specific age groups (e.g., Head Start and Early Head Start). For the others, we have developed a methodology for disaggregating funding sources by age group. For funding streams related to child care, we base the percentage of funding that is expended on each age group on our analysis of the Administration of Children and Families reported CCDF data.

With ACF CCDBG reports we:

- Determined the number of children by age group served by CCDF in each state.
- Calculated the average cost per age group in each state.
- Determined the percent of funding that was spent on each age.
- Aggregated the percent of funding per age group (0->3, 3-5.5., Kindergarten-entry and up).

We applied these CCDF percentages of children in care to estimate the number of children served in each age group through the other child care funding sources and in state-specific child care funding. We have developed a separate methodology for disaggregating children by age served by MIECHV and in the K-12 system. For MIECHV, we estimate that 86% of children served are under 3 years old and 14% are between 3 and 5.5 years old. For K-12 expenditures, we rely on the National Center for Education Statistics school financing survey (F-33)[10] and subtract state preschool funding calculated by the National Institute for Early Education Research.[11]

10 Cornman, S.Q., Ampadu, O., Hanak, K.S. (2023). Documentation for the NCES Common Core of Data School District Finance Survey (F-33), School Year 2020–21 (Fiscal Year 2021), Provisional File Version 1a (NCES 2024-304). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved [date] from https://nces.ed.gov/ccd/pdf/2024304_FY21F33_Documentation.pdf.
11 Friedman-Krauss, A. H., Barnett, W. S., Garver, K. A., Hodges, K. S., Weisenfeld, G., Gardiner, B. A., Jost, T. M. (2022). The State of Preschool 2021: State Preschool Yearbook. New Brunswick, NJ: National Institute for Early Education Research.