Center for American Progress

Methodology for 'The True Cost of High-Quality Child Care Across the United States'

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Summary

The interactive tool has several defaults built into its calculations to simplify the process of estimating the cost of child care. This methodology contains information on the default data assumptions, provides references for these data, and offers further guidance on the quality options that users can select as they navigate the tool.

Base model

When users begin their scenario, the tool is populated with base data, which are customized for the selected state, age group, and setting.[1] These data are largely drawn from state licensing regulations as well as from defaults in the Provider Cost of Quality Calculator—a tool developed for the U.S. Department of Health and Human Services' Office of Child Care.[2]

Program characteristics

- In the licensed child care center scenarios, the following assumptions are embedded in the tool: The base scenario for a child care center is modeled on a program with four classrooms.[3] There is one infant class with children up to 18 months old; one toddler class with children between the ages of 18 months and 36 months; and two preschool classes for three- and four-year-olds.
- State licensing regulations determine default ratios and group size. The tool assumes that each classroom has one lead teacher and one assistant teacher, with the maximum number of children in the classroom determined by the ratios.
- In states without group size regulations, the ratio is multiplied by two to remain consistent with the assumption in the tool that there are two adults per classroom.
- For each classroom, the tool includes 20 percent additional staffing time, the equivalent of eight hours per week. This ensures that ratios are maintained for all hours during which the program is open, usually more than the typical 40-hour employee work week. This additional staffing is calculated using assistant teacher salary data.

- In addition to teaching staff, the program is assumed to have a full-time director, a full-time administrative assistant, and a part-time education coordinator or deputy director.
- Table 1 details licensing ratios and maximum group sizes for each state.

For licensed family child care homes, the following assumptions are embedded in the tool:

- The base scenario for a family child care home is modeled on a program with no assistant. The maximum group size is determined by state licensing regulations for a small family child care home with only one adult present.
- In states with no specified regulation, a default of six children is used as a maximum.
- Table 1 details the maximum group size for the family child care home scenario used for each state.

TABLE 1
State licensing minimum teacher-child ratios and maximum group size

	Infants		Toddlers		Preschoolers		Family child care home
	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Maximum group size
Alabama	1:5	10*	1:8	16*	1:11	22*	6
Alaska	1:5	10	1:6	12	1:10	20	8
Arizona	1:5	10*	1:8	16*	1:13	26*	6
Arkansas	1:5	10	1:8	16	1:12	24	6
California	1:4	8*	1:6	12	1:12	24*	6
Colorado	1:5	10	1:7	14	1:10	20	6
Connecticut	1:4	8	1:4	8	1:10	20	6
Delaware	1:4	8	1:8	16	1:10	20	5
District of Columbia	1:4	8	1:4	8	1:8	16	6
Florida	1:4	8*	1:11	22*	1:15	30*	6
Georgia	1:6	12	1:10	20	1:15	30	6
Hawaii	1:4	8	1:6	12*	1:12	24*	6
Idaho	1:6	12	1:8	16	1:12	24	6
Illinois	1:4	12	1:8	16	1:10	20	6
Indiana	1:4	8	1:7	14	1:10	20	6
Iowa	1:4	8*	1:6	12*	1:8	16*	6
Kansas	1:3	9	1:7	14	1:12	24	6
Kentucky	1:5	10	1:10	20	1:12	24	6
Louisiana	1:5	15	1:11	22	1:15	30	6
Maine	1:4	8	1:5	10	1:10	20	6
Maryland	1:3	6	1:6	12	1:10	20	8
Massachusetts	1:3	7	1:4	9	1:10	20	6

TABLE 1

State licensing minimum teacher-child ratios and maximum group size

	Infants		Toddlers		Preschoolers		Family child care home
	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Maximum group size
Michigan	1:4	12	1:8	16	1:10	20*	6
Minnesota	1:4	8	1:7	14	1:10	20	6
Mississippi	1:5	10	1:12	14	1:10	20	8
Missouri	1:4	8	1:8	16	1:10	20*	10
Montana	1:4	12	1:8	16	1:10	24	6
Nebraska	1:4	12	1:6	12*	1:10	20*	8
Nevada	1:6	12	1:9	18	1:12	24	6
New Hampshire	1:4	12	1:6	18	1:12	24	6
New Jersey	1:4	12	1:6	12	1:10	20	6
New Mexico	1:6	12	1:10	20	1:12	24	6
New York	1:4	8	1:6	12	1:12	20	6
North Carolina	1:5	10	1:6	12	1:15	25	5
North Dakota	1:4	10	1:5	15	1:10	30	7
Ohio	1:5	12	1:7	14	1:12	24	6
Oklahoma	1:4	8	1:8	16	1:12	24	7
Oregon	1:4	8	1:5	10	1:10	20	6
Pennsylvania	1:4	8	1:6	12	1:10	20	6
Rhode Island	1:4	8	1:6	12	1:9	18	8
South Carolina	1:5	10*	1:8	16*	1:12	24*	6
South Dakota	1:5	20	1:5	20	1:10	20	6
Tennessee	1:4	8	1:6	12	1:9	18	7
Texas	1:4	10	1:11	22	1:15	30	6
Utah	1:4	8	1:7	14	1:12	24	8
Vermont	1:4	8	1:5	10	1:10	20	6
Virginia	1:4	8*	1:8	16*	1:10	20*	8
Washington	1:4	8	1:7	14	1:10	20	6
West Virginia	1:4	8	1:8	16	1:10	20	6
Wisconsin	1:4	8	1:6	12	1:10	20	8
Wyoming	1:4	10	1:8	10	1:10	24	10
Guam	1:4	8*	1:10	20*	1:15	30*	6
Puerto Rico	1:4	10	1:7	14	1:11	22	6
Virgin Islands	1:5	10	1:8	16	1:9	18	6
United States	**1:4**	**10**	**1:7**	**14**	**1:11**	**22**	**6**

Note: The United States category is based on the average across all 50 states.

* In states without group size regulations for child care centers, the author doubled the ratio so that there are two teachers per classroom.

Source: U.S. Department of Health and Human Services, "Data Explorer and State Profiles," available at https://childcareta.acf.hhs.gov/data (last accessed April 2021); Group size data for child care family homes are based on the author's analysis of state licensing regulations conducted for Simon Workman and Steven Jessen-Howard, "Understanding the True Cost of Child Care for Infants and Toddlers" (Washington: Center for American Progress, 2018), available at https://www.americanprogress.org/issues/early-childhood/reports/2018/11/15/460970/understanding-true-cost-child-care-infants-toddlers/. If state regulation data were not available, the default of six children was used.

Compensation

- Default employee salaries are based on mean annual wage state data from the U.S. Bureau of Labor Statistics (BLS).[4] The BLS job categories and their associated categories in the tool are listed in Table 2.
- In family child care homes, the tool includes a salary for the owner/lead educator that is commensurate with the hourly wage of a lead teacher in a child care center. This is converted into an annual amount based on a 55-hour work week for the provider. While few home-based providers pay themselves a set salary, the tool includes this expense in order to model a financially sustainable program and to provide a direct comparison to center-based care.

TABLE 2

U.S. Bureau of Labor Statistics (BLS) job titles and categories

Job title	BLS category name	BLS category ID
Program director	Education administrators, preschool and child care center/program	11-9031
Educational coordinator	Education administrators, preschool and child care center/program	11-9031
Administrative assistant	Office clerks, general	43-9061
Lead teacher	Preschool teachers, except special education	25-2011
Assistant teacher	Child care workers	39-9011
Family child care owner/ lead educator	Preschool teachers, except special education	25-2011

Note: No data were available for education administrator salaries in the U.S. Virgin Islands or Guam, so the tool uses the national average education administrator salary.

Source: U.S. Bureau of Labor Statistics, "May 2020 National Occupational Employment and Wage Estimates United States," available at https://www.bls.gov/oes/tables.htm (last accessed May 2021).

- Minimum wage data are used to calculate the cost of substitutes who cover for teaching staff taking paid planning time and paid time off. The higher of either state or federal minimum wage is used.[5]
- Table 3 summarizes the default salaries used in the tool.

TABLE 3

Default annual salaries used in the 'Cost of Child Care' interactive, by state

	Lead teacher	Assistant teacher	Program director	Education coordinator	Administrative assistant	Family child care provider	Minimum wage
Alabama	$23,580	$20,910	$52,520	$52,520	$25,850	$23,580	$7.25
Alaska	$36,930	$29,950	$59,610	$59,610	$44,380	$36,930	$9.84
Arizona	$33,360	$28,590	$45,870	$45,870	$41,370	$33,360	$10.50
Arkansas	$32,930	$23,050	$44,210	$44,210	$32,880	$32,930	$8.50
California	$40,450	$33,840	$58,890	$58,890	$42,100	$40,450	$11.00
Colorado	$37,850	$31,600	$58,680	$58,680	$44,630	$37,850	$10.20
Connecticut	$40,470	$28,570	$64,610	$64,610	$40,420	$40,470	$10.10
Delaware	$29,370	$23,430	$64,890	$64,890	$31,440	$29,370	$8.25
District of Columbia	$45,890	$37,760	$62,260	$62,260	$47,690	$45,890	$12.50
Florida	$29,820	$26,000	$44,830	$44,830	$35,690	$29,820	$8.25
Georgia	$34,720	$21,100	$42,900	$42,900	$34,980	$34,720	$7.25
Hawaii	$41,910	$27,840	$56,940	$56,940	$37,250	$41,910	$10.10
Idaho	$26,310	$24,400	$42,220	$42,220	$35,320	$26,310	$7.25
Illinois	$35,140	$27,230	$54,340	$54,340	$39,150	$35,140	$8.25
Indiana	$28,880	$22,790	$45,220	$45,220	$35,610	$28,880	$7.25
Iowa	$30,860	$22,260	$46,690	$46,690	$37,080	$30,860	$7.25
Kansas	$37,930	$22,670	$48,010	$48,010	$28,300	$37,930	$7.25
Kentucky	$37,220	$23,130	$43,950	$43,950	$33,480	$37,220	$7.25
Louisiana	$30,750	$21,030	$40,160	$40,160	$27,120	$30,750	$7.25
Maine	$37,780	$29,770	$48,590	$48,590	$36,830	$37,780	$10.00
Maryland	$42,650	$27,190	$53,910	$53,910	$37,180	$42,650	$9.25
Massachusetts	$43,120	$33,120	$57,550	$57,550	$42,820	$43,120	$11.00
Michigan	$34,580	$25,580	$50,330	$50,330	$37,640	$34,580	$9.25
Minnesota	$40,280	$28,710	$62,810	$62,810	$40,990	$40,280	$9.65
Mississippi	$30,510	$20,040	$44,760	$44,760	$31,380	$30,510	$7.25
Missouri	$34,470	$25,150	$55,730	$55,730	$36,060	$34,470	$7.85
Montana	$32,650	$23,810	$51,200	$51,200	$34,650	$32,650	$8.30
Nebraska	$40,500	$25,030	$59,010	$59,010	$33,700	$40,500	$9.00
Nevada	$32,850	$23,940	$60,650	$60,650	$38,730	$32,850	$8.25
New Hampshire	$32,830	$25,910	$49,910	$49,910	$41,510	$32,830	$7.25
New Jersey	$47,190	$29,930	$86,470	$86,470	$37,870	$47,190	$8.60
New Mexico	$34,800	$23,800	$49,110	$49,110	$27,290	$34,800	$7.50
New York	$44,760	$31,500	$79,530	$79,530	$38,980	$44,760	$10.40
North Carolina	$30,680	$24,600	$47,060	$47,060	$34,970	$30,680	$7.25
North Dakota	$28,260	$25,510	$45,770	$45,770	$43,540	$28,260	$7.25
Ohio	$31,380	$24,090	$50,580	$50,580	$37,810	$31,380	$8.30
Oklahoma	$33,870	$21,480	$46,010	$46,010	$31,400	$33,870	$7.25
Oregon	$33,360	$29,750	$48,890	$48,890	$39,000	$33,360	$10.25
Pennsylvania	$31,850	$24,070	$51,810	$51,810	$38,360	$31,850	$7.25
Rhode Island	$35,220	$28,650	$52,290	$52,290	$41,250	$35,220	$10.10

TABLE 3

Default annual salaries used in the 'Cost of Child Care' interactive, by state

	Lead teacher	Assistant teacher	Program director	Education coordinator	Administrative assistant	Family child care provider	Minimum wage
South Carolina	$30,950	$22,510	$46,710	$46,710	$30,430	$30,950	$7.25
South Dakota	$32,490	$22,730	$59,590	$59,590	$28,210	$32,490	$8.85
Tennessee	$34,180	$22,950	$47,310	$47,310	$33,670	$34,180	$7.25
Texas	$41,670	$23,370	$54,260	$54,260	$37,340	$41,670	$7.25
Utah	$31,050	$24,210	$51,520	$51,520	$35,780	$31,050	$7.25
Vermont	$38,870	$33,990	$52,530	$52,530	$40,510	$38,870	$10.50
Virginia	$39,710	$26,350	$58,590	$58,590	$37,310	$39,710	$7.25
Washington	$35,630	$33,330	$56,120	$56,120	$43,440	$35,630	$11.50
West Virginia	$34,760	$22,580	$42,670	$42,670	$30,670	$34,760	$8.75
Wisconsin	$28,910	$24,620	$53,110	$53,110	$37,830	$28,910	$7.25
Wyoming	$32,060	$26,350	$52,200	$52,200	$40,550	$32,060	$7.25
Guam	$26,220	$20,390	$44,145	$44,145	$23,640	$26,220	$8.75
Puerto Rico	$23,530	$19,280	$40,470	$40,470	$22,150	$23,530	$10.50
Virgin Islands	$36,260	$27,160	$54,185	$54,185	$35,060	$36,260	$7.25
United States	$36,550	$26,790	$54,940	$54,940	$37,770	$36,550	$7.25

Source: U.S. Bureau of Labor Statistics, "May 2020 National Occupational Employment and Wage Estimates United States," available at https://www.bls.gov/oes/tables.htm (last accessed May 2021); U.S. Department of Labor, "Consolidated Minimum Wage Table," available at https://www.dol.gov/agencies/whd/mw-consolidated#footnote2 (last accessed May 2021).

- The model includes mandatory benefits equal to 7.2 percent of salary for the Federal Insurance Contributions Act, Social Security, unemployment insurance, and workers' compensation. This figure is based on the service-providing industry standard, as detailed by BLS.[6]
- By default, the tool includes additional benefits of $500 per employee for employer contributions to health insurance or for the family child care provider.[7]
- In center-based classrooms, the tool also includes 10 paid holidays and five days of paid time off by default. The cost of a substitute, paid at minimum wage, is included in the calculations to cover these five days off for the teaching staff and for the program director.
- The cost of nonteaching personnel is allocated equally across all children in the program.[8]

Nonpersonnel program expenses

In the tool, nonpersonnel expenses are primarily based on defaults in the Provider Cost of Quality Calculator, with some additions, as noted below. Table 4 identifies the nonpersonnel expenses and the default annual values for each expense that is included in the tool for center-based classrooms. Table 5 identifies the same data for home-based settings. Specific assumptions related to nonpersonnel expenses ae detailed below:

- Several expenses were adjusted in order to account for each state's cost of living. These adjustments are based on the U.S. Bureau of Economic Analysis' 2019 regional price parity data.[9] For territories not listed in the dataset, the tool uses cost-of-living allowances data from the Office of Personnel Management.[10] Table 4 and Table 5 identify which expenses are adjusted for cost of living.
- The average cost per square foot determines occupancy costs. The total square footage is based on state licensing regulation requirements for minimum square footage of floor space per child, plus an additional 30 square feet per child to account for shared spaces, such as hallways, kitchens, and offices. Table 9 details state licensing regulations related to square footage as of 2017, the last date for which state-by-state data are available.[11]
- The tool includes an additional 15 percent of total expenses as a contribution to the program's operating reserve. This is intended to account for uncollected revenue—including tuition and parent copays—and enrollment inefficiency, which accounts for staffed enrollment versus actual enrollment. It also aims to provide the program with some profit at a level in line with good financial management.
- In the child care center-based scenarios, any office and administrative costs calculated on a per-site basis are allocated equally across all children in the program.

TABLE 4

Default nonpersonnel expenses for child care centers

Nonpersonnel expenses	Annual expenses	Cost-of-living adjustment
Occupancy		
Rent	$14.95 per sf	✓
Utilities	$3.30 per sf	✓
Building insurance	$1.80 per sf	✓
Maintenance, repairs, and/or cleaning	$3.70 per sf	✓
Office and administration		
Office supplies and equipment	$100 per child	
Insurance (liability, accident, etc.)	$110 per child	✓
Advertising	$20 per child	✓
Miscellaneous	$25 per child	
Training and/or consultants	$250 per staff member	
Telephone and/or internet	$4,500 per site	✓
Audit	$3,000 per site	✓
Fees and/or permits	$500 per site	✓
Contribution to operating reserve (bad debt, enrollment efficiency, and/or profit)	15% of total expenses	
Classroom materials and food		
Food and food prep	$1,300 per child	✓
Kitchen supplies	$50 per child	✓
Education supplies and equipment	$100 per child	
Child assessment	$25 per child	

Source: U.S. Office of Child Care, "Provider Cost of Quality Calculator," available at www.ecequalitycalculator.com (last accessed May 2021).

TABLE 5

Default nonpersonnel expenses for family child care homes

Nonpersonnel expenses	Annual expenses	Cost-of-living adjustment
Occupancy		
Mortgage interest, property taxes, and depreciation or rent/lease	$13,181 per home	✓
Homeowners/renters insurance	$740 per home	✓
Utilities (heat, lights, water, sanitation, security, snow removal, yard service)	$1980 per home	✓
Home repairs and maintenance	$550 per home	✓
Repairs and maintenance (directly for child care including cleaning and exterminating fees)	$495 per home	✓
Supplies (household supplies, paper products, cleaning supplies)	$265 per home	✓
Office and administration		
Depreciation (equipment)	$265 per home	
Advertising	$150 per home	✓
Vehicle expenses	$275 per home	✓
Interest (paid on business debt)	$130 per home	
Legal and professional fees (accountant, payroll service, tax preparation, credit card processing)	$660 per home	✓
Office supplies (pens, postage, printing, paper, computer software)	$200 per home	
Training/professional development	$250 per educator	
Telephone/internet (exclusively for business use)	$1,000 per home	✓
Professional membership dues and subscriptions	$110 per home	✓
License and permits	$110 per home	✓
Insurance (liability, accident)	$330 per home	✓
Classroom materials and food		
Child assessment	$25 per child	
Food and food-related costs	$1,083 per child	✓
Educational materials	$150 per child	

Source: U.S. Office of Child Care, "Provider Cost of Quality Calculator," available at www.ecequalitycalculator.com (last accessed May 2021).

Adjustments for quality

The interactive allows users to adjust certain defaults in the tool in order to model a higher-quality program. The following elements can be adjusted in the tool.

Employee salaries

Users can increase salaries for the early childhood workforce in the following two ways:

1. Kindergarten parity. Users can increase salaries so that early childhood lead teacher salaries and family child care provider salaries align with kindergarten teacher salaries in the selected state—based on the BLS mean, category 25-2012—and assistant teacher salaries align with the BLS teacher assistant salaries, category 25-9041.[12]

2. Midway increase. To account for the large gap that currently exists between early childhood teacher salaries and kindergarten teacher salaries, the tool gives users the option to increase lead teacher salaries so that they are midway between the current early childhood teacher salary and the kindergarten teacher salary. This increase varies by state, ranging from 11 percent to 65 percent, with an average increase of approximately 34 percent.[13]

In both options, salaries for nonteaching staff at the model child care center increase by the same percentage as the lead teacher increase. For example, if the lead teacher's increase from current salary to kindergarten salary is equivalent to 30 percent, the director will also see a 30 percent increase in salary to align with the teachers' salary increases.

Table 6 details the percentage increases to the base salaries outlined in Table 3 for both the kindergarten parity option and the midway increase option.

TABLE 6

Percentage increases to default salaries used in the 'Cost of Child Care' interactive based on user selected scenario

	Increased salaries option	Kindergarten parity salaries option
Alabama	55%	109%
Alaska	48%	95%
Arizona	21%	41%
Arkansas	24%	48%
California	44%	89%
Colorado	17%	34%
Connecticut	48%	96%
Delaware	57%	115%
District of Columbia	11%	21%
Florida	47%	94%
Georgia	35%	69%
Hawaii	-6%	-11%
Idaho	35%	71%
Illinois	42%	83%
Indiana	40%	80%
Iowa	36%	72%
Kansas	24%	49%
Kentucky	21%	42%
Louisiana	25%	50%
Maine	21%	43%
Maryland	27%	55%
Massachusetts	44%	87%
Michigan	36%	72%
Minnesota	28%	56%
Mississippi	24%	47%
Missouri	28%	56%
Montana	28%	56%
Nebraska	26%	52%
Nevada	37%	75%
New Hampshire	44%	88%
New Jersey	26%	52%
New Mexico	30%	59%
New York	39%	78%
North Carolina	31%	61%
North Dakota	50%	101%
Ohio	39%	79%
Oklahoma	20%	41%
Oregon	65%	130%

TABLE 6

Percentage increases to default salaries used in the 'Cost of Child Care' interactive based on user selected scenario

	Increased salaries option	Kindergarten parity salaries option
Pennsylvania	54%	108%
Rhode Island	62%	125%
South Carolina	27%	55%
South Dakota	17%	34%
Tennessee	22%	44%
Texas	17%	34%
Utah	45%	89%
Vermont	21%	43%
Virginia	36%	71%
Washington	47%	94%
West Virginia	24%	48%
Wisconsin	51%	102%
Wyoming	42%	84%
Guam	39%	78%
Pueto Rico	18%	35%
Virgin Islands	29%	59%
United States	**34%**	**67%**

Source: Author's calculations based on U.S. Bureau of Labor Statistics, "May 2020 National Occupational Employment and Wage Estimates United States," available at https://www.bls.gov/oes/tables.htm (last accessed May 2021).

Employee benefits

The tool allows users to provide increased benefits for the early childhood workforce in the form of retirement contributions and health insurance.

Retirement benefits

Users can opt to provide employer retirement contributions based on a percentage of employee salary. Employer contributions are based on state-by-state average retirement contributions that K-12 public school teachers receive.[14] Table 7 shows the percentage used in the tool for each state. Specific assumptions related to retirement benefits are detailed below:

- In states with multiple pension plan policies, the tool used the defined benefits plan.
- For territories not included in this dataset, the tool uses the national average percentage employer retirement contribution.
- While many child care programs do not provide an employee retirement plan—especially family child care homes—the tool includes the cost of making retirement contributions in the program budget, acknowledging that the form these contributions take will vary but ensuring that the cost of the contribution is captured.

Health insurance

Users can also adjust the tool so that employers provide an annual contribution to employee health insurance. This feature uses the state average employer contribution for a single coverage plan to determine this amount.[15] Table 7 details the annual contribution amount used in the tool for each state.

- For territories not included in this dataset, the authors used the national average annual employer contribution to health insurance.
- While many child care programs do not provide an employer-sponsored health insurance plan—especially family child care homes—the tool includes the cost of an employer contribution toward health insurance, acknowledging that the form these contributions take will vary, but ensuring that the cost of the contribution is captured.

TABLE 7

Default employer contribution to retirement and health care benefits used in the 'Cost of Child Care' interactive, by state

	Retirement contribution as a percentage of annual salary	Health care contribution per employee, per year
Alabama	12.1%	$4,881
Alaska	22.8%	$7,368
Arizona	11.9%	$5,002
Arkansas	15.0%	$4,666
California	20.3%	$5,637
Colorado	23.6%	$4,989
Connecticut	32.0%	$5,725
Delaware	12.0%	$6,429
District of Columbia	11.7%	$5,961
Florida	6.8%	$5,220
Georgia	21.1%	$5,407
Hawaii	20.4%	$5,953
Idaho	12.0%	$5,118
Illinois	30.9%	$5,545
Indiana	7.5%	$5,359
Iowa	9.4%	$5,115
Kansas	12.6%	$5,038
Kentucky	29.8%	$4,910
Louisiana	25.9%	$4,960
Maine	19.9%	$6,035
Maryland	15.6%	$5,357
Massachusetts	18.2%	$5,747

TABLE 7

Default employer contribution to retirement and health care benefits used in the 'Cost of Child Care' interactive, by state

	Retirement contribution as a percentage of annual salary	Health care contribution per employee, per year
Michigan	6.2%	$5,355
Minnesota	7.9%	$5,455
Mississippi	17.4%	$4,722
Missouri	19.0%	$5,365
Montana	11.5%	$5,690
Nebraska	9.0%	$5,094
Nevada	22.2%	$5,217
New Hampshire	15.2%	$5,572
New Jersey	20.9%	$6,163
New Mexico	20.8%	$4,967
New York	10.6%	$6,207
North Carolina	14.2%	$5,312
North Dakota	12.9%	$5,294
Ohio	14.0%	$5,705
Oklahoma	17.0%	$5,311
Oregon	19.2%	$5,496
Pennsylvania	15.8%	$5,677
Rhode Island	26.2%	$5,635
South Carolina	5.0%	$5,275
South Dakota	6.6%	$5,580
Tennessee	13.9%	$5,066
Texas	9.5%	$5,455
Utah	9.0%	$4,806
Vermont	16.3%	$5,807
Virginia	13.4%	$5,160
Washington	15.5%	$5,927
West Virginia	26.4%	$5,643
Wisconsin	6.8%	$5,495
Wyoming	11.6%	$5,883
Guam	15.8%	$5,466
Puerto Rico	15.8%	$5,466
Virgin Islands	15.8%	$5,466
United States	**15.8%**	**$5,466**

Note: The United States category is based on the average across all 50 states. No data were available for Guam, Puerto Rico, and the U.S. Virgin Islands, so the tool uses the national average. The author also used the national average for the state of Pennsylvania due to the complexity of the state's teacher retirement contribution policy.

Source: TeacherPensions.org, "Teacher Retirement Plans," available at https://www.teacherpensions.org/states (last accessed May 2021); The Henry J. Kaiser Family Foundation, "Average Annual Single Premium per Enrolled Employee For Employer-Based Health Insurance (2019)," available at https://www.kff.org/other/state-indicator/single-coverage/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D (last accessed May 2021).

Ratios and group sizes

Users can adjust the number of children and the number of teachers in center-based classrooms and the number of children in a home-based scenario by selecting the "fewer children per teacher" toggle within the tool. Making this selection decreases ratios and group size as detailed below.

Center-based classrooms

Users have the option to change the ratios and group size in the classrooms so that they go beyond the state licensing standards. The tool uses best-practice ratios from the National Association for the Education of Young Children (NAEYC) as the quality option.[16] In cases where the NAEYC teacher-child ratio or group size might be higher than the state licensing minimum, the lower state ratio is used instead. In the tool, each classroom is staffed with two teachers, so the group size is limited both by NAEYC maximums and by the maximum teacher-child ratio for a two-teacher classroom.

TABLE 8

National Association for the Education of Young Children's standards for teacher-child ratios and maximum group sizes

Age group	Teacher-child ratio	Maximum group size
Infant	1:4	8
Toddler	1:6	12
Preschool	1:10	20

Source: National Association for the Education of Young Children, "The 10 NAEYC Program Standards," available at https://www.naeyc.org/our-work/families/10-naeyc-program-standards#9 (last accessed May 2021).

Home-based scenario

In the family child care home scenario, selecting the option to decrease ratios and group size adjusts the number of children in the program down to four, with one teacher, which is in line with the center-based ratios for infants and toddlers.

Teacher planning time

The base model program includes time for the lead teacher or family child care provider to be relieved from classroom responsibilities in order to engage in lesson planning, data analysis, family engagement, and other noninstructional core activities. By default, the child care center scenario includes eight hours of planning time per week, and the family child care home includes five hours per week.

Users have the option to increase this planning time to provide additional support for the lead teacher or home-based provider to engage in these activities. Selecting this option increases planning time for a center-based lead teacher to 12 hours per week and planning time for a home-based child care provider to 10 hours per week.

When users select this increased planning time option, the tool accounts for the increased cost of paying a substitute to maintain ratios in the classroom or coverage for the home-based program. Substitute costs are calculated based on the higher of the state or federal minimum wage.

Classroom size

Users have the option to increase the physical space required for each child in the program. This increases the size of the program without increasing the number of children served, thus providing a larger learning environment for each child. Selecting this option in the interactive increases the default square footage per child by 20 percent, resulting in increased occupancy costs.

TABLE 9

Classroom physical space requirements by state, in square feet (sf)

	Basic licensing requirement, per child	Total minimum requirement per child, including shared space	Total space per child, plus 20 percent
Alabama	32 sf	62 sf	74 sf
Alaska	35 sf	65 sf	78 sf
Arizona	35 sf	65 sf	78 sf
Arkansas	35 sf	65 sf	78 sf
California	35 sf	65 sf	78 sf
Colorado	30 sf	60 sf	72 sf
Connecticut	35 sf	65 sf	78 sf
District of Columbia	35 sf	65 sf	78 sf
Delaware	35 sf	65 sf	78 sf
Florida	35 sf	65 sf	78 sf
Georgia	35 sf	65 sf	78 sf
Hawaii	35 sf	65 sf	78 sf
Idaho	35 sf	65 sf	78 sf
Illinois	35 sf	65 sf	78 sf
Indiana	35 sf	65 sf	78 sf
Iowa	35 sf	65 sf	78 sf
Kansas	35 sf	65 sf	78 sf
Kentucky	35 sf	65 sf	78 sf
Louisiana	35 sf	65 sf	78 sf
Maine	35 sf	65 sf	78 sf
Maryland	35 sf	65 sf	78 sf
Massachusetts	35 sf	65 sf	78 sf
Michigan	35 sf	65 sf	78 sf
Minnesota	35 sf	65 sf	78 sf
Mississippi	35 sf	65 sf	78 sf
Missouri	35 sf	65 sf	78 sf
Montana	35 sf	65 sf	78 sf
Nebraska	35 sf	65 sf	78 sf
Nevada	35 sf	65 sf	78 sf
New Hampshire	40 sf	70 sf	84 sf
New Jersey	35 sf	65 sf	78 sf
New Mexico	35 sf	65 sf	78 sf

TABLE 9

Classroom physical space requirements by state, in square feet (sf)

	Basic licensing requirement, per child	Total minimum requirement per child, including shared space	Total space per child, plus 20 percent
New York	35 sf	65 sf	78 sf
North Carolina	25 sf	55 sf	66 sf
North Dakota	35 sf	65 sf	78 sf
Ohio	35 sf	65 sf	78 sf
Oklahoma	35 sf	65 sf	78 sf
Oregon	35 sf	65 sf	78 sf
Pennsylvania	40 sf	70 sf	84 sf
Rhode Island	45 sf	75 sf	90 sf
South Carolina	35 sf	65 sf	78 sf
South Dakota	35 sf	65 sf	78 sf
Tennessee	30 sf	60 sf	72 sf
Texas	30 sf	60 sf	72 sf
Utah	35 sf	65 sf	78 sf
Vermont	35 sf	65 sf	78 sf
Virginia	35 sf	65 sf	78 sf
Washington	35 sf	65 sf	78 sf
West Virginia	35 sf	65 sf	78 sf
Wisconsin	35 sf	65 sf	78 sf
Wyoming	35 sf	65 sf	78 sf
Guam	35 sf	65 sf	78 sf
Puerto Rico	35 sf	65 sf	78 sf
Virgin Islands	35 sf	65 sf	78 sf
United States	35 sf	65 sf	78 sf

Note: The United States category is based on the average across all 50 states.

Source: These data are no longer publically available. The author used data from a previous Center for American Progress report. See Simon Workman, "Where Does Your Child Care Dollar Go?" (Washington: Center for American Progress, 2018), available at https://www.americanprogress.org/issues/early-childhood/reports/2018/02/14/446330/child-care-dollar-go/.

Education supplies and equipment

When users select the option to increase resources available for education supplies and equipment, the interactive calculates a 30 percent increase to the base model allocation for these supplies. These additional resources can be used to purchase additional classroom materials—such as books, arts and crafts, and toys—or developmentally appropriate educational technology, such as tablets and computers.

Limitations

The interactive is intended to illustrate the cost of providing high-quality early learning in a child care center or family child care home and to highlight the various components that make up that cost. It enables users to model the impact of different cost drivers on the per-child cost of care, yet it is not intended to replicate the exact budget of any one child care center or to replace the need for in-depth cost modeling. Rather, the tool can be used to illustrate the impact of paying higher teacher salaries, increasing benefits, compensating family child care providers at parity with center-based teachers, and making other changes that affect the quality of a program. It also helps the public to better understand the actual expenses related to child care. Tools such as the Provider Cost of Quality Calculator can be used for more in-depth cost modeling, and states can also engage in a detailed cost-of-quality study.[17]

In order to model these costs and impacts at the state level, it is necessary to make several assumptions and to limit the number of options from which users can choose. The assumptions used in the tool are based on the best data available, the professional judgment of several experts, and prior cost-of-quality studies.

Acknowledgments

This methodology builds on the original iteration of the "Where Does Your Child Care Dollar Go?" tool.[18] The authors continue to be grateful to the original reviewers who provided input into that methodology. In addition, the authors thank Natalie Renew, Jessica Sager, Christie Balka, and Janna Wagner for their input and guidance related to the family child care methodology included in this most recent update to the tool.

Endnotes

1 The interactive includes data for all 50 states plus Washington, D.C., Guam, Puerto Rico, and the U.S. Virgin Islands. Data for American Samoa and the Northern Mariana Islands were not available.

2 U.S. Office of Child Care, "Provider Cost of Quality Calculator," available at www.ecequalitycalculator.com (last accessed May 2021).

3 Program size is based on program capacity estimates from Rasheed Malik and others, "America's Child Care Deserts in 2018" (Washington: Center for American Progress, 2018), available at https://www.americanprogress.org/issues/early-childhood/reports/2018/12/06/461643/americas-child-care-deserts-2018/; National Center on Early Childhood Quality Assurance, "Early Care and Education Program Characteristics: Effects on Expenses and Revenues" (Washington: 2014), available at https://childcareta.acf.hhs.gov/sites/default/files/public/pcqc_ece_characteristics_final.pdf.

4 U.S. Bureau of Labor Statistics, "Occupational Employment and Wage Statistics, May 2020," available at https://www.bls.gov/oes/tables.htm (last accessed May 2021).

5 In Nevada, the minimum wage is one dollar lower if the employer offers health insurance. The tool uses the higher minimum wage for employees in Nevada who do not receive health coverage from their employers. See U.S. Department of Labor, "Consolidated Minimum Wage Table," available at https://www.dol.gov/agencies/whd/mw-consolidated#footnote2 (last accessed May 2021).

6 U.S. Bureau of Labor Statistics, "Economic News Release, Table 1. Employer Costs for Employee Compensation by Ownership," available at https://www.bls.gov/news.release/ecec.t01.htm (last accessed December 2017).

7 These contributions are consistent with defaults used in National Center on Early Childhood Quality Assurance, "Increasing Quality in Early Care and Education Programs: Effects on Expenses and Revenues" (Washington: 2015), available at https://childcareta.acf.hhs.gov/sites/default/files/public/pcqc_increase_quality_final.pdf.

8 Nonteacher personnel expenses can be allocated on a per-classroom basis and then on a per-child basis, or they can be allocated on a per-child basis across the whole program. Some personnel, such as the education coordinator, are more likely to have responsibilities that are shared equally across the four classrooms; others, such as the administrative assistant, are likely to work more directly with families or on child administrative issues. To account for the large gap that exists between classroom-level costs for infants and preschoolers, the developers of this tool chose to equally share nonteacher personnel costs across all children rather than on a classroom basis.

9 U.S. Bureau of Economic Analysis, "Real Personal Income for States and Metropolitan Areas, 2019," available at https://www.bea.gov/data/income-saving/real-personal-income-states-and-metropolitan-areas (last accessed May 2021).

10 Office of Personnel Management, "Nonforeign Area Cost-of-Living Allowances," available at https://www.opm.gov/policy-data-oversight/pay-leave/pay-systems/nonforeign-areas/#url=COLA-Rates (last accessed May 2021).

11 Simon Workman, "Methodology for 'Where Does Your Child Care Dollar Go?" (Washington: Center for American Progress, 2018), available at https://cdn.americanprogress.org/content/uploads/2018/02/14040126/ChildcareDollar-Methodology.pdf?_ga=2.106945475.1956092700.1621867963-574933790.1579099476.

12 U.S. Bureau of Labor Statistics, "Occupational Employment and Wage Statistics, May 2020."

13 BLS data for Hawaii reports kindergarten salaries lower than preschool teachers. For consistency, the model replicates this data in the calculator; however, Hawaii data are not included in the ranges and average calculations included in this section of the methodology.

14 TeacherPensions.org, "Teacher Retirement Plans," available at https://www.teacherpensions.org/states (last accessed May 2021).

15 The Henry J. Kaiser Family Foundation, "Average Annual Single Premium per Enrolled Employee For Employer-Based Health Insurance, 2019," available at https://www.kff.org/other/state-indicator/single-coverage/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D (last accessed May 2021).

16 National Association for the Education of Young Children, "The 10 NAEYC Program Standards," available at https://www.naeyc.org/our-work/families/10-naeyc-program-standards#9 (last accessed May 2021).

17 For more information on conducting a cost of quality study, see Simon Workman and Steven Jessen-Howard, "Conducting a Child Care Cost of Quality Study" (Washington: Center for American Progress, 2019), available at https://www.thencit.org/sites/default/files/2019-03/Cost%20of%20Quality%20Toolkit.pdf.

18 Workman, "Methodology for 'Where Does Your Child Care Dollar Go?'"