Center for American Progress

Methodology for 'The Cost of Child Care During the Coronavirus Pandemic'

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Summary

The interactive tool is intended to demonstrate the increased costs faced by providers who have remained open during the coronavirus pandemic. The calculator allows users to modify several data points but also includes default data to simplify the process of estimating the cost. This methodology details the default data assumptions, provides references for these data, and offers further guidance on the quality options that users can select in the calculator.

Child care centers

The calculator allows users to estimate costs in different child care settings. After selecting one's state and choosing between the "Pre-coronavirus scenario" and the "Coronavirus scenario," users can click on the relevant tab to estimate costs in child care centers or in family child care homes.

Size of center

The default child care center in the calculator is set up with four classrooms: one for infants, one for toddlers, one for 3-year-old preschoolers, and one for 4-year-old preschoolers. The ratios and group sizes used for each classroom are based on the selected state. In the "Pre-coronavirus scenario," these data are sourced from child care licensing regulations and represent the minimum licensing standards in that state. When the "Coronavirus scenario" is selected, ratio and group size data are based on the emergency child care regulations that the chosen state put in place in response to the pandemic.[1] While some states have since modified or relaxed these regulations, the calculator uses the most restrictive requirements enacted during this period.

Users have the option to modify ratio and group size data under any of the scenarios to reflect current requirements or model future changes. Tables 1 and 2 below summarize the default data used in the calculator.

TABLE 1

Default ratio and group size data for the "Pre-coronavirus" scenario

State	Infant		Toddler		Preschool (3-year-olds)		Preschool (4-year-olds)	
	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size
Alabama	1-to-5	10	1-to-8	16	1-to-11	22	1-to-11	22
Alaska	1-to-5	10	1-to-6	12	1-to-10	20	1-to-10	20
Arizona	1-to-5	10	1-to-8	16	1-to-13	26	1-to-15	30
Arkansas	1-to-6	12	1-to-9	18	1-to-12	24	1-to-15	30
California	1-to-4	12	1-to-6	12	1-to-12	24	1-to-12	24
Colorado	1-to-5	10	1-to-7	10	1-to-10	20	1-to-12	24
Connecticut	1-to-4	8	1-to-4	8	1-to-10	20	1-to-10	20
Delaware	1-to-4	8	1-to-8	16	1-to-10	20	1-to-12	24
District of Columbia	1-to-4	8	1-to-4	12	1-to-8	16	1-to-10	20
Florida	1-to-4	12	1-to-11	22	1-to-15	30	1-to-20	40
Georgia	1-to-6	12	1-to-8	16	1-to-15	30	1-to-18	36
Hawaii	1-to-3	6	1-to-8	8	1-to-12	24	1-to-16	36
Idaho	1-to-5	15	1-to-6	18	1-to-10	30	1-to-12	36
Illinois	1-to-4	12	1-to-5	15	1-to-8	16	1-to-10	20
Indiana	1-to-4	8	1-to-5	10	1-to-10	20	1-to-12	24
Iowa	1-to-4	8	1-to-6	12	1-to-8	16	1-to-12	24
Kansas	1-to-3	9	1-to-5	10	1-to-12	24	1-to-12	24
Kentucky	1-to-5	10	1-to-6	12	1-to-12	24	1-to-14	28
Louisiana	1-to-6	12	1-to-8	16	1-to-14	28	1-to-16	32
Maine	1-to-4	8	1-to-5	10	1-to-10	20	1-to-10	20
Maryland	1-to-3	6	1-to-6	12	1-to-10	20	1-to-10	20
Massachusetts	1-to-3	6	1-to-4	8	1-to-10	20	1-to-10	20
Michigan	1-to-4	12	1-to-8	16	1-to-10	20	1-to-12	24
Minnesota	1-to-4	8	1-to-7	14	1-to-10	20	1-to-10	20
Mississippi	1-to-5	10	1-to-9	10	1-to-14	14	1-to-16	20
Missouri	1-to-4	8	1-to-8	16	1-to-10	20	1-to-10	20
Montana	1-to-4	8	1-to-8	16	1-to-10	20	1-to-10	20
Nebraska	1-to-4	8	1-to-6	12	1-to-10	20	1-to-12	24
Nevada	1-to-6	12	1-to-9	18	1-to-12	24	1-to-13	26
New Hampshire	1-to-4	12	1-to-6	18	1-to-8	24	1-to-12	24
New Jersey	1-to-4	20	1-to-6	20	1-to-10	20	1-to-12	20
New Mexico	1-to-6	12	1-to-6	12	1-to-12	24	1-to-12	24
New York	1-to-4	8	1-to-5	12	1-to-7	18	1-to-8	21
North Carolina	1-to-5	10	1-to-6	12	1-to-15	25	1-to-20	25
North Dakota	1-to-4	8	1-to-5	10	1-to-7	14	1-to-10	20
Ohio	1-to-6	12	1-to-8	16	1-to-12	24	1-to-14	28

continues

State	Infant		Toddler		Preschool (3-year-olds)		Preschool (4-year-olds)	
	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size
Oklahoma	1-to-4	8	1-to-8	16	1-to-12	24	1-to-15	30
Oregon	1-to-4	8	1-to-5	10	1-to-10	20	1-to-10	20
Pennsylvania	1-to-4	8	1-to-6	12	1-to-10	20	1-to-10	20
Rhode Island	1-to-4	8	1-to-6	12	1-to-9	18	1-to-10	20
South Carolina	1-to-5	10	1-to-8	16	1-to-12	24	1-to-17	34
South Dakota	1-to-5	20	1-to-5	20	1-to-10	20	1-to-10	20
Tennessee	1-to-4	8	1-to-6	12	1-to-9	18	1-to-13	20
Texas	1-to-4	10	1-to-9	18	1-to-15	30	1-to-18	35
Utah	1-to-4	8	1-to-7	14	1-to-12	24	1-to-15	30
Vermont	1-to-4	8	1-to-5	10	1-to-10	20	1-to-10	20
Virginia	1-to-4	12	1-to-8	30	1-to-10	30	1-to-10	30
Washington	1-to-4	8	1-to-7	14	1-to-10	20	1-to-10	20
West Virginia	1-to-4	8	1-to-8	16	1-to-10	20	1-to-12	24
Wisconsin	1-to-4	8	1-to-8	16	1-to-10	20	1-to-13	24
Wyoming	1-to-4	10	1-to-8	18	1-to-10	24	1-to-12	30
United States	1-to-5	10	1-to-7	14	1-to-10	20	1-to-12	24

Source: U.S. Office of Child Care, "National Database of Child Care Licensing Regulations," available at https://childcareta.acf.hhs.gov/licensing (last accessed July 2020).

TABLE 2

Default ratio and group size data for the "Coronavirus" scenario

State	Infant		Toddler		Preschool (3-year-olds)		Preschool (4-year-olds)	
	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size
Alabama	1-to-5	10	1-to-8	11	1-to-11	11	1-to-11	11
Alaska	1-to-5	10	1-to-6	10	1-to-10	10	1-to-10	10
Arizona	1-to-5	8	1-to-8	8	1-to-9	9	1-to-9	9
Arkansas	1-to-6	10	1-to-9	10	1-to-10	10	1-to-10	10
California	1-to-4	10	1-to-6	10	1-to-10	10	1-to-10	10
Colorado	1-to-4	8	1-to-6	8	1-to-9	9	1-to-9	9
Connecticut	1-to-4	8	1-to-4	8	1-to-10	10	1-to-10	10
Delaware	1-to-4	8	1-to-8	10	1-to-10	10	1-to-10	10
District of Columbia	1-to-4	8	1-to-4	12	1-to-8	16	1-to-10	20
Florida	1-to-4	8	1-to-9	9	1-to-9	9	1-to-9	9
Georgia	1-to-6	8	1-to-8	8	1-to-9	9	1-to-9	9
Hawaii	1-to-3	6	1-to-8	8	1-to-12	12	1-to-16	16
Idaho	1-to-5	15	1-to-6	18	1-to-10	30	1-to-12	36
Illinois	1-to-4	10	1-to-5	10	1-to-8	10	1-to-10	10

continues

State	Infant		Toddler		Preschool (3-year-olds)		Preschool (4-year-olds)	
	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size	Minimum teacher-child ratio	Maximum group size
Indiana	1-to-4	8	1-to-5	10	1-to-10	20	1-to-12	20
Iowa	1-to-4	8	1-to-6	8	1-to-8	8	1-to-9	9
Kansas	1-to-3	9	1-to-5	10	1-to-12	24	1-to-12	24
Kentucky	1-to-5	10	1-to-6	10	1-to-10	10	1-to-10	10
Louisiana	1-to-6	8	1-to-8	9	1-to-9	9	1-to-9	9
Maine	1-to-4	8	1-to-5	10	1-to-10	10	1-to-10	20
Maryland	1-to-3	6	1-to-6	8	1-to-9	9	1-to-9	9
Massachusetts	1-to-3	6	1-to-4	8	1-to-10	20	1-to-10	20
Michigan	1-to-4	10	1-to-8	10	1-to-10	10	1-to-10	10
Minnesota	1-to-4	8	1-to-7	8	1-to-9	9	1-to-9	9
Mississippi	1-to-5	10	1-to-9	10	1-to-14	14	1-to-16	20
Missouri	1-to-4	8	1-to-8	16	1-to-10	20	1-to-10	20
Montana	1-to-4	8	1-to-8	10	1-to-10	10	1-to-10	10
Nebraska	1-to-4	8	1-to-6	10	1-to-10	10	1-to-10	10
Nevada	1-to-6	12	1-to-9	18	1-to-12	24	1-to-13	26
New Hampshire	1-to-4	8	1-to-6	8	1-to-8	8	1-to-9	9
New Jersey	1-to-4	8	1-to-6	8	1-to-9	9	1-to-9	9
New Mexico	1-to-6	8	1-to-6	8	1-to-9	9	1-to-9	9
New York	1-to-4	8	1-to-5	10	1-to-7	10	1-to-8	10
North Carolina	1-to-5	10	1-to-6	12	1-to-15	25	1-to-20	25
North Dakota	1-to-4	8	1-to-5	8	1-to-7	8	1-to-9	9
Ohio	1-to-6	6	1-to-6	6	1-to-9	9	1-to-9	9
Oklahoma	1-to-4	8	1-to-8	10	1-to-10	10	1-to-10	10
Oregon	1-to-4	8	1-to-5	10	1-to-10	10	1-to-10	10
Pennsylvania	1-to-4	8	1-to-6	12	1-to-10	20	1-to-10	20
Rhode Island	1-to-4	8	1-to-6	10	1-to-6	9	1-to-9	10
South Carolina	1-to-5	10	1-to-8	16	1-to-12	24	1-to-17	34
South Dakota	1-to-5	20	1-to-5	20	1-to-10	20	1-to-10	20
Tennessee	1-to-4	8	1-to-6	10	1-to-9	9	1-to-10	10
Texas	1-to-4	10	1-to-9	18	1-to-15	30	1-to-18	35
Utah	1-to-4	8	1-to-7	14	1-to-12	20	1-to-15	20
Vermont	1-to-4	8	1-to-5	10	1-to-10	20	1-to-10	20
Virginia	1-to-4	8	1-to-8	8	1-to-9	9	1-to-9	9
Washington	1-to-4	8	1-to-7	8	1-to-9	9	1-to-9	9
West Virginia	1-to-4	8	1-to-8	16	1-to-10	20	1-to-12	24
Wisconsin	1-to-4	8	1-to-8	16	1-to-10	20	1-to-13	24
Wyoming	1-to-4	8	1-to-8	8	1-to-9	9	1-to-9	9
United States	1-to-4	8	1-to-6	8	1-to-10	10	1-to-10	10

Source: The Hunt Institute, "COVID-19 Resources & Policy Considerations," available at http://www.hunt-institute.org/covid-19-resources/state-child-care-actions-covid-19/ (last accessed July 2020).

Salaries and staffing

The calculator includes two default salary levels. The "Current salaries" scenario uses 2019 mean annual wage state data from the U.S. Bureau of Labor Statistics (BLS) for lead teachers, assistant teachers, and program directors.[2] The assistant director is calculated at 80 percent of the director salary, and the administrative assistant and floaters are paid at state minimum wage.[3] In states without a state minimum wage, the federal minimum wage is used.

Table 3 shows the association between BLS job categories and the staff positions. Table 4 details the default salary data used in the "Current salaries" scenario.

TABLE 3

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

Job title	Source of default salary data	BLS category name and ID	BLS category ID
Program director	BLS category	Education and child care administrators, preschool and day care	11-9031
Assistant director	80 percent of program director salary	N/A	N/A
Lead teacher	BLS category	Preschool teachers, except special education	25-2011
Assistant teacher	BLS category	Child care worker	39-9011
Administrative assistant	State minimum wage	N/A	N/A
Classroom assistant	State minimum wage	N/A	N/A
Kindergarten teacher	BLS category	Kindergarten teachers, except special education	25-2012

Sources: U.S. Bureau of Labor Statistics, "Occupational Employment Statistics," available at https://www.bls.gov/oes/current/oessrcst.htm (last accessed July 2020); U.S. Department of Labor, "State Minimum Wage Laws," available at https://www.dol.gov/agencies/whd/minimum-wage/state (last accessed July 2020).

TABLE 4

Default data for "Current salaries" scenario

State	Program director	Assistant director	Lead teacher	Assistant teacher	Administrative assistant and floater
Alabama	$46,910	$37,528	$24,470	$20,770	$15,080
Alaska	$54,490	$43,592	$35,580	$28,680	$21,195
Arizona	$44,380	$35,504	$32,150	$26,520	$24,960
Arkansas	$43,640	$34,912	$31,890	$21,870	$20,800
California	$58,170	$46,536	$37,990	$30,190	$24,960
Colorado	$52,410	$41,928	$34,440	$30,280	$24,960
Connecticut	$61,470	$49,176	$43,080	$28,060	$22,880
Delaware	$59,010	$47,208	$27,820	$23,440	$19,240
District of Columbia	$67,469*	$53,975	$42,160	$34,140	$29,120
Florida	$45,060	$36,048	$28,790	$24,350	$17,805
Georgia	$42,780	$34,224	$32,540	$21,510	$15,080
Hawaii	$56,540	$45,232	$42,160	$27,710	$21,008
Idaho	$46,330	$37,064	$26,150	$21,910	$15,080
Illinois	$57,070	$45,656	$32,780	$25,440	$20,800
Indiana	$45,180	$36,144	$28,340	$22,470	$15,080
Iowa	$43,910	$35,128	$28,550	$21,170	$15,080
Kansas	$44,780	$35,824	$31,650	$22,250	$15,080
Kentucky	$39,840	$31,872	$34,730	$22,160	$15,080
Louisiana	$44,790	$35,832	$29,100	$20,320	$15,080
Maine	$51,250	$41,000	$37,400	$28,100	$24,960
Maryland	$57,090	$45,672	$38,550	$26,010	$22,880
Massachusetts	$56,520	$45,216	$40,640	$31,280	$26,520
Michigan	$47,980	$38,384	$34,790	$24,580	$20,072
Minnesota	$63,660	$50,928	$39,800	$26,780	$16,952
Mississippi	$45,670	$36,536	$30,910	$19,320	$15,080
Missouri	$51,510	$41,208	$30,760	$23,230	$19,656
Montana	$46,680	$37,344	$32,620	$23,510	$17,992
Nebraska	$52,510	$42,008	$39,140	$24,340	$18,720
Nevada	$64,760	$51,808	$32,000	$23,190	$16,640
New Hampshire	$49,030	$39,224	$31,360	$25,200	$15,080
New Jersey	$74,840	$59,872	$43,360	$27,740	$22,880
New Mexico	$50,940	$40,752	$33,160	$23,470	$18,720
New York	$75,790	$60,632	$42,330	$29,880	$24,544
North Carolina	$45,330	$36,264	$28,320	$23,550	$15,080
North Dakota	$46,510	$37,208	$28,350	$25,380	$15,080
Ohio	$48,110	$38,488	$30,240	$23,780	$18,096
Oklahoma	$43,130	$34,504	$30,300	$20,430	$15,080
Oregon	$46,580	$37,264	$32,430	$27,990	$24,960

continues

State	Program director	Assistant director	Lead teacher	Assistant teacher	Administrative assistant and floater
Pennsylvania	$53,580	$42,864	$31,380	$23,610	$15,080
Rhode Island	$51,030	$40,824	$31,930	$27,880	$21,840
South Carolina	$44,780	$35,824	$28,380	$21,000	$15,080
South Dakota	$56,550	$45,240	$31,040	$21,940	$19,344
Tennessee	$51,720	$41,376	$32,600	$22,270	$15,080
Texas	$49,730	$39,784	$37,030	$23,100	$15,080
Utah	$42,390	$33,912	$30,930	$23,270	$15,080
Vermont	$51,280	$41,024	$35,920	$30,880	$22,797
Virginia	$58,530	$46,824	$38,170	$25,210	$15,080
Washington	$52,230	$41,784	$34,410	$31,380	$28,080
West Virginia	$38,810	$31,048	$31,360	$22,380	$18,200
Wisconsin	$47,150	$37,720	$27,190	$23,650	$15,080
Wyoming	$47,660	$38,128	$33,360	$24,840	$15,080
United States	$53,690	$42,952	$34,650	$25,510	$15,080

* Child care program director salary data for the District of Columbia were missing for 2017 through 2019. The authors imputed 2016 data—the most recent year for which these data were available—and adjusted for inflation.
Source: U.S. Bureau of Labor Statistics, "Occupational Employment Statistics," available at https://www.bls.gov/oes/current/oessrcst.htm (last accessed July 2020).

The "Higher salaries" scenario increases salaries to a midway point between the current salaries and kindergarten parity. This is calculated by estimating the percentage increase between current child care teacher salaries and kindergarten salaries in each state and then applying half of this percentage to the current salary data for the program director, assistant director, lead teacher and assistant teacher in order to calculate the "Higher salaries" number. The administrative assistant and floater positions are paid at a rate of $15 per hour.

Table 5 details the default salary data used in the "Higher salaries" scenario. All salary data can be overridden by the user to model the estimated cost at different salary levels, and users can either enter an annual salary or an hourly wage.

TABLE 5

Default data for "Higher salaries" scenario

State	Program director	Assistant director	Lead teacher	Assistant teacher	Administrative assistant and floater
Alabama	$67,729	$54,183	$35,330	$29,988	$21,773
Alaska	$77,340	$61,872	$50,500	$40,707	$30,083
Arizona	$53,463	$42,770	$38,730	$31,948	$30,068
Arkansas	$54,731	$43,785	$39,995	$27,428*	$26,086
California	$85,341	$68,273	$55,735	$44,292	$36,619
Colorado	$64,949	$51,960	$42,680	$37,525	$30,932
Connecticut	$86,897	$69,518	$60,900	$39,667	$32,344
Delaware	$94,242	$75,394	$44,430	$37,435	$30,727
District of Columbia	$80,784	$64,627	$50,480	$40,877	$34,867
Florida	$67,113	$53,690	$42,880	$36,267	$26,519
Georgia	$59,181	$47,345	$45,015	$29,756	$20,861
Hawaii	$61,396	$49,117	$45,781**	$30,090	$22,812
Idaho	$65,509	$52,407	$36,975	$30,980	$21,322
Illinois	$78,859	$63,087	$45,295	$35,153	$28,741
Indiana	$63,824	$51,059	$40,035	$31,743	$21,303
Iowa	$61,728	$49,382	$40,135	$29,760	$21,199
Kansas	$58,539	$46,832	$41,375	$29,087	$19,714
Kentucky	$50,824	$40,659	$44,305	$28,269	$19,238
Louisiana	$57,180	$45,744	$37,150	$25,941	$19,252
Maine	$62,117	$49,693	$45,330	$34,058	$30,252
Maryland	$80,555	$64,444	$54,395	$36,701	$32,284
Massachusetts	$82,478	$65,983	$59,305	$45,646	$38,700
Michigan	$65,585	$52,468	$47,555	$33,599	$27,437
Minnesota	$81,742	$65,394	$51,105	$34,387	$21,767
Mississippi	$56,456	$45,165	$38,210	$23,883	$18,641
Missouri	$69,855	$55,884	$41,715	$31,503	$26,656
Montana	$60,475	$48,380	$42,260	$30,458	$23,309
Nebraska	$66,523	$53,218	$49,585	$30,835	$23,716
Nevada	$89,116	$71,293	$44,035	$31,912	$22,898
New Hampshire	$69,879	$55,903	$44,695	$35,916	$21,492
New Jersey	$96,795	$77,436	$56,080	$35,878	$29,592
New Mexico	$65,634	$52,507	$42,725	$30,240*	$24,120
New York	$107,848	$86,278	$60,235	$42,519	$34,926
North Carolina	$61,640	$49,312	$38,510	$32,024	$20,506
North Dakota	$68,608	$54,887	$41,820	$37,439	$22,245
Ohio	$70,956	$56,765	$44,600	$35,072	$26,689
Oklahoma	$53,848	$43,079	$37,830	$25,507	$18,828
Oregon	$76,937	$61,549	$53,565	$46,231	$41,227

continues

State	Program director	Assistant director	Lead teacher	Assistant teacher	Administrative assistant and floater
Pennsylvania	$83,273	$66,618	$48,770	$36,694	$23,437
Rhode Island	$87,988	$70,390	$55,055	$48,072	$37,657
South Carolina	$65,553	$52,442	$41,545	$30,742	$22,075
South Dakota	$67,499	$53,999	$37,050	$26,188	$23,089
Tennessee	$65,832	$52,666	$41,495	$28,346	$19,195
Texas	$62,025	$49,620	$46,185	$28,811	$18,808
Utah	$65,538	$52,430	$47,820	$35,977	$23,315
Vermont	$66,570	$53,256	$46,630	$40,087	$29,594
Virginia	$81,953	$65,562	$53,445	$35,299	$21,115
Washington	$74,467	$59,573	$49,060	$44,740	$40,035
West Virginia	$48,475	$38,780	$39,170	$27,954	$22,733
Wisconsin	$73,916	$59,133	$42,625	$37,075	$23,640
Wyoming	$64,847	$51,877	$45,390	$33,798	$20,518
United States	$73,493	$58,794	$47,430	$34,919	$20,642

* According to 2019 BLS data, the salary for this kindergarten position was lower than the salary for the equivalent position in early childhood. The authors used 98 percent—the pay differential between child care and kindergarten assistant teachers in these two states in 2018—to impute a new value for kindergarten parity, which was then used as the basis for calculating the midpoint.

** According to 2019 BLS data, the salary for this kindergarten position was lower than the salary for the equivalent position in early chlidhood. The authors used 85 percent—the pay differential between child care and kindergarten lead teachers in 2017—to impute a new value for kindergarten parity, which was used as the basis for the midpoint.

Source: Author's calculations based on U.S. Bureau of Labor Statistics, "Occupational Employment Statistics," available at https://www.bls.gov/oes/current/oessrcst.htm (last accessed July 2020).

Staffing patterns

The default program, with four classrooms, includes three full-time nonclassroom staff: a program director, an assistant director, and an administrative assistant. This remains constant between the pre-coronavirus and coronavirus scenarios on the assumption that reduction in total program enrollment due to lower group size requirements is a temporary measure, so programs will not terminate employees and these nonclassroom staff will likely be redeployed to assist with new requirements such as modified pickup and drop-off procedures as well as health checks.

The number of teachers in each classroom is based on the ratio requirements. Where more than one teacher is required to maintain ratios, the first teacher is a lead teacher and additional teachers are assistant teachers.

The calculator includes an additional 20 percent staffing time per classroom teacher—the equivalent of eight hours per week—in the form of a floater. This provides additional coverage to maintain ratios during all hours for which the program is open and to provide additional support as needed.

The number and type of staff can be modified by the user within the calculator. Additional staff, such as a mental health specialist or a cook, can also be added by clicking on the "Add custom staff member" icon. This can allow the calculator to be customized as part of the process of adjusting for quality and operation expenses during the COVID-19 pandemic.

Benefits

The calculator automatically includes mandatory benefits equal to 10.65 percent of salary in order to account for the Federal Insurance Contributions Act, Social Security, unemployment, and workers' compensation. This figure is based on the service-providing industry standard, as detailed by the BLS.

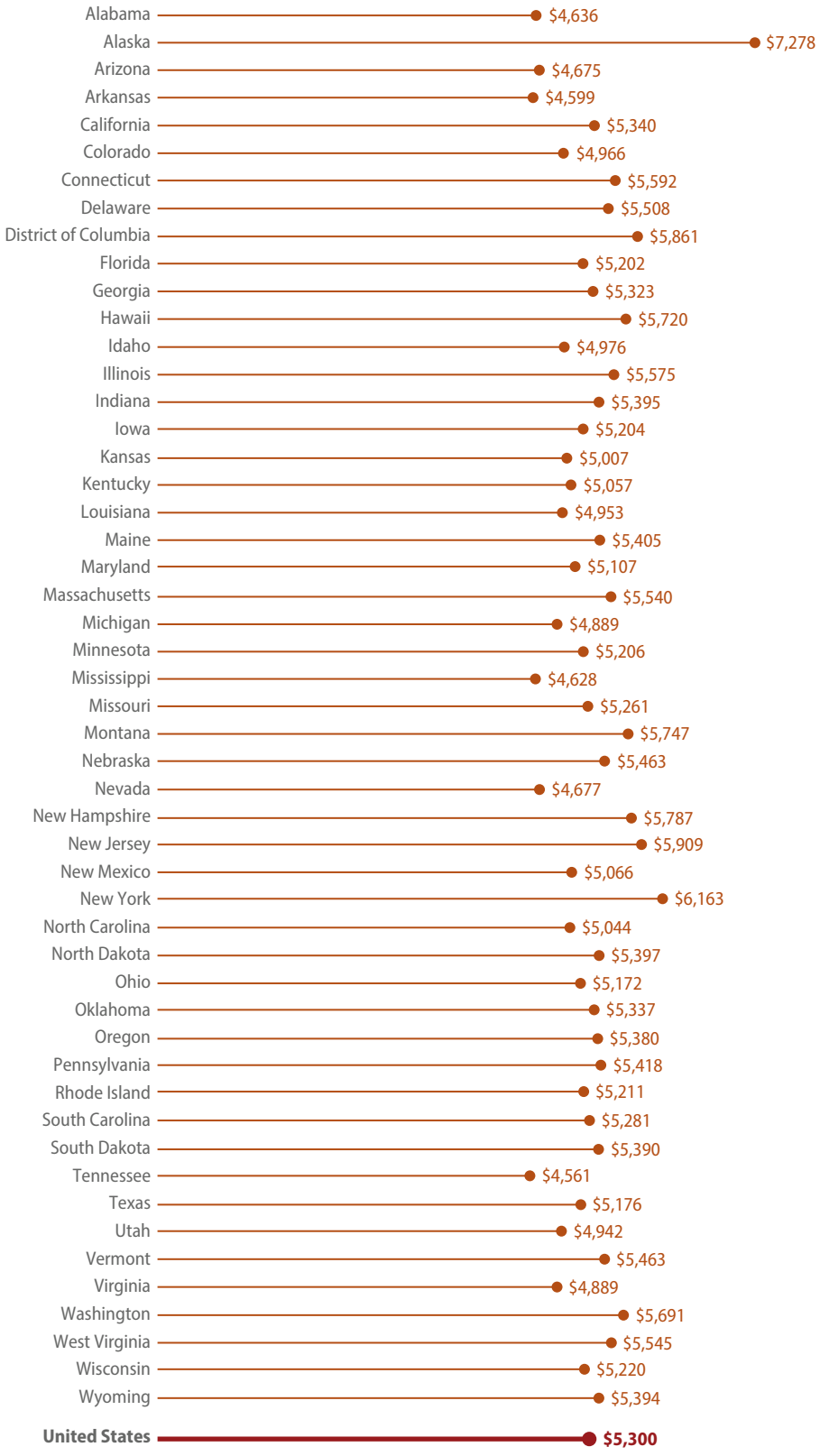
By default, the tool includes 10 paid sick days and 10 days of paid leave. The cost of a substitute, paid at minimum wage, is included in the calculations to cover these paid days off for classroom staff.

Users can select whether to include health insurance to employees of the program. If the "Health insurance" check box is selected, the "Cost per full time employee" value is included in the calculations. This value is based on the average employer contribution for a single member health insurance plan in each state, as shown in Figure 1.[4]

FIGURE 1

Employer contribution to health insurance

Annual employer contribution



Source: Kaiser Family Foundation, "Average Annual Single Premium per Enrolled Employee For Employer-Based Health Insurance," 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 July 2020).

Additional expenses

Nonpersonnel program expenses: Nonpersonnel expenses related to the operation of the child care center are based on the defaults in the Provider Cost of Quality Calculator (PCQC), with some additions—as noted below. The PCQC is a tool provided by the U.S. Office of Child Care to help states estimate the cost of high-quality child care; it includes data based on the experiences of multiple states.[5] Table 6 details the nonpersonnel expenses and the default annual values for each expense included in the calculator. The calculator also includes an additional expense of 5 percent of total expenses as a contribution to the program's operating reserve. This is intended to ensure that the program has some reserves available to survive unexpected fluctuations in revenue.

TABLE 6

Child care center nonpersonnel expenses

Annual program expenses

Program management	Expenses	
Office supplies and equipment	$100	per child
Insurance	$110	per child
Telephone/internet	$4,500	per program
Legal and professional fees	$3,000	per program
Fees/permits	$500	per program
Occupancy		
Rent, lease, or mortgage	$14.95	per square foot
Other occupancy (including utilities)	$5.10	per square foot
Maintenance, repairs, and cleaning	$3.70	per square foot
Education and program		
Food and food-related items	$1,350	per child
Classroom supplies	$125	per child
Medical supplies	$50	per child
Educational supplies	$100	per child
Advertising	$20	per child
Miscellaneous	$25	per child
Training and professional development	$250	per staff member

Source: Figures are based on default data in U.S. Office of Child Care, "Provider Cost of Quality Calculator," available at www.ecequalitycalculator.org (last accessed July 2020).

Sanitation expenses: To account for additional expenses related to cleaning the child care program and purchasing additional supplies such as masks, hand sanitizer, and gloves, when a user selects the "Coronavirus scenario," the calculator includes by default four deep cleanings per month, at $500 per cleaning, and sanitation supplies at the amount of $720 per classroom per month.[6] The cost of personal protective equipment and sanitation supplies can vary widely, so these defaults can be modified by the user to reflect actual costs experienced in their state or by their program.

Miscellaneous: Given the variance in expenses faced by providers as they respond to the pandemic, the calculator includes the option to include additional expenses in the miscellaneous cell. These expenses should be added as a monthly figure.

Results: Cost per child

The calculator estimates the annual, monthly, and weekly cost per child based on the data inputs. Specific classroom costs—such as the classroom staff, occupancy costs, and cleaning costs—are allocated to a classroom and then evenly divided between the children in that classroom. Other costs, including administrator salaries and any additional miscellaneous expenses added by the user, are divided evenly across all children in the program.

Family child care homes

The calculator for family child care homes follows the same pattern as the child care center scenario detailed above with some minor variations to account for differences in how home-based programs operate.

Enrollment

By default, the family child care home enrolls six children, including two infants. Users can override this default but should be aware of state-specific regulations regarding program size for family child care. The tool allows users to model a program serving up to 12 children.

Salaries and staffing

Users can select to run a scenario using either "Current salaries" or "Higher salaries." While many home-based child care providers do not pay themselves a salary but rather receive whatever money is left over at the end of the month after paying all expenses, for the purposes of this calculator and in order to model best practice, the calculator includes a salary for the provider or owner of the home-based child care. The owner's salary is equivalent to a lead teacher salary in a child care center, based on the state selected and the salary level selected.

If a user runs a "Pre-coronavirus scenario" with the default six children, no assistant teacher is included. Under the "Coronavirus scenario," one assistant teacher is included in order to support the additional requirements related to pickup and drop-off schedules and health monitoring. In addition, if the scenario includes more than two infants, an additional assistant teacher is added. This reflects many state licensing regulations that require additional teachers when more than two infants are present in the program.

The salaries for the provider or owner and the assistant teacher are detailed in Tables 3 and 4 above.

Benefits

Benefits are included in line with benefits offered in a child care center, including 10 paid sick days and 10 days of paid leave for both the provider or owner and the assistant teacher, if present. If health insurance is selected, the cost per full time employee value is included for all employees, including the owner or provider.

While, in reality, the home-based provider is unlikely to offer an employer-sponsored plan, the calculator includes this value as an employer contribution to purchase health insurance through another means, such as a state or federal health exchange.

Additional expenses

Nonpersonnel program expenses: As in the default child care center scenario, nonpersonnel expenses related to the operation of family child care homes are based on the defaults in the PCQC.

Table 7 details the nonpersonnel expenses and the default annual values for each expense included in the calculator.

Sanitation expenses: To account for additional expenses related to cleaning the family child care home and purchasing additional supplies such as masks, hand sanitizer, and gloves, when a user selects the "Coronavirus scenario," the calculator includes by default four deep cleanings per month, at $250 per cleaning, and sanitation supplies at the amount of $720 per month.[6] The cost of personal protective equipment and sanitation supplies can vary widely, so these defaults can be modified by the user to reflect actual costs experience in their state or by their program.

Miscellaneous: Given the variance in expenses faced by providers as they respond to the pandemic, the calculator includes the option to include additional expenses in the miscellaneous cell. These expenses should be added as a monthly figure.

TABLE 7

Family child care home nonpersonnel expenses

Annual program expenses

Program	Expenses
Supplies	$500
Food	$6,500
Telephone	$1,000
Training and professional development	$250
Office supplies	$200
Professional memberships	$110
Advertising	$150
Vehicle expense	$275
Classroom repairs and maintenance	$265
Depreciation	$330
Insurance	$495
Legal and professional fees	$660
License/permits	$110
Interest on business debt	$130
Occupancy	
Mortgage/rent	$13,180
Insurance	$740
Home repairs and maintenance	$550
Utilities	$1,980
Household supplies	$265

Source: Figures are based on default data in U.S. Office of Child Care, "Provider Cost of Quality Calculator," available at www.ecequalitycalculator.org (last accessed July 2020).

Results: Cost per child

The calculator estimates the annual, monthly, and weekly cost per child based on the data inputs. All expenses are divided equally across all children in the program. While providers likely charge different rates to families based on the age of the child, given that family child care homes operate as one single classroom, the calculator does not provide an estimate for different age children.

Statewide costs

To help policymakers and advocates understand the cost of supporting child care throughout the pandemic, the "Statewide costs" tab provides a way to calculate two specific costs: 1) the total cost to cover fixed costs of a certain percentage of all providers in the state; and 2) the total cost to cover operating costs of a certain percentage of all providers in the state.

Child care landscape

To estimate statewide costs, the calculator includes the total number of licensed child care centers and family child care homes as well as their total capacity. These data are drawn from the Center for American Progress' child care deserts database, which is informed by state licensing databases.[7] These data can be updated or modified to estimate the cost of covering a community or region rather than a state.

Table 8 shows the default data included in the calculator.

TABLE 8
State-by-state child care landscape

	Child care centers		Family child care homes	
State	Number of programs	Capacity	Number of programs	Capacity
Alabama	1643	98,597	866	6,928
Alaska	235	15,349	303	2,595
Arizona	2135	208,931	285	2,771
Arkansas	1722	139,252	363	4,327
California	12863	658,092	13024	164,864
Colorado	2019	131,988	1952	14,382
Connecticut	1183	82,207	2363	14,353
Delaware	468	42,629	679	5,985
District of Columbia	479	32234	112	745
Florida	7375	724,395	2649	24,950
Georgia	3470	338,061	1759	10,532
Hawaii	468	22,251	379	2,246
Idaho	657	45,317	679	6,062
Illinois	2873	230,870	7210	57,321
Indiana	1793	133,609	2738	34,631
Iowa	1585	121,875	2962	31,091
Kansas	870	52,028	4003	34,915
Kentucky	1662	133,477	258	1,556
Louisiana	2108	155,616	236	1,416
Maine	823	36,920	982	10,610
Maryland	1564	106,834	5381	41,044
Massachusetts	1872	132,626	2316	19,275
Michigan	3747	256,252	4880	39,515
Minnesota	1756	130,120	8162	95,809
Mississippi	1267	108,511	30	531
Missouri	1912	130,677	1077	11,946
Montana	267	13,461	620	6,062

State	Child care centers		Family child care homes	
	Number of programs	Capacity	Number of programs	Capacity
Nebraska	872	64,208	2129	22,160
Nevada	412	39,512	243	1,683
New Hampshire	427	28,355	169	1,907
New Jersey	3110	273,856	2	13
New Mexico	732	55,233	226	2,083
New York	3719	247,739	10547	105,395
North Carolina	4109	314,577	1628	12,574
North Dakota	419	22,642	1266	12,922
Ohio	5453	435,011	3077	20,023
Oklahoma	1303	90,903	1683	15,095
Oregon	1065	62,600	2608	29,665
Pennsylvania	4614	363,455	2396	18,292
Rhode Island	323	21,900	488	3,264
South Carolina	1641	166,022	891	5,840
South Dakota	220	17,379	544	6,960
Tennessee	2783	197,413	619	6,148
Texas	7934	833,836	5286	61,779
Utah	491	39,219	1320	14,251
Vermont	476	14,535	321	2,114
Virginia	2860	268,148	2358	21,570
Washington	1651	112,959	3306	32,606
West Virginia	410	28,260	1244	8,073
Wisconsin	1859	123,220	2226	14,637
Wyoming	274	15,641	397	4,515
United States	105,973	8,118,802	111,242	1,070,031

Source: 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/.

System coverage

Users can enter the percentage of providers for which they want to model systemwide costs. The fixed costs calculation includes those costs that providers incur, whether or not children are present. This does not include personnel expenses, as the expectation is that these costs are covered by other programs, such as Paycheck Protection Program loans or unemployment insurance. Table 8 shows the fixed costs included in this calculation.

Operating costs are based on the selections chosen in the "Child Care Centers" or "Family Child Care Homes" tabs of the calculator. The number of child care slots is multiplied by the percentage entered under "System coverage," which is then multiplied by the number of children in each setting.

Results: Statewide monthly costs

The results table details the total monthly statewide cost of the selected scenarios. Fixed costs are shown as a total statewide amount and are broken out separately for child care centers and family child care homes. Operating costs are similarly displayed.

These results allow users to estimate the cost of supporting providers throughout periods of closure as well as the cost to cover the full cost of child care for a certain number of children—for example, covering the cost of care for children of essential workers.

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Endnotes

1 These data were collected from the Hunt Institute COVID-19 tracker and reflect the most stringent or restrictive regulations on group size that states implemented at any point prior to July 1, 2020. For example, if a state had limited group sizes to 10 in April but returned to normal group sizes in June, this option would allow users to use the more restrictive limit in place during the spring. In the 10 states that issued no clear guidance on group size prior to July 1, the default group size is used. COVID-19-related group size regulations—including whether maximum group size accounted for a teacher—were then used in conjunction with state regulations on child care ratios to determine ratios for COVID-19. See Hunt Institute, "COVID-19 Resources & Policy Considerations," available at http://www.hunt-institute.org/covid-19-resources/state-child-care-actions-covid-19 (last accessed July 2020).

2 U.S. Bureau of Labor Statistics, "Occupational Employment Statistics," available at https://www.bls.gov/oes/current/oessrcst.htm (last accessed July 2020).

3 U.S. Department of Labor, "State Minimum Wage Laws," available at https://www.dol.gov/agencies/whd/minimum-wage/state (last accessed July 2020).

4 Kaiser Family Foundation, "Average Annual Single Premium per Enrolled Employee For Employer-Based Health Insurance," 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 July 2020).

5 U.S. Office of Child Care, "Provider Cost of Quality Calculator," available at https://www.ecequalitycalculator.com/Main.aspx (last accessed July 2020).

6 This estimate is based on the average cost across classrooms; it accounts for the purchasing of sanitation supplies such as hand sanitizer, gloves, and wipes from retail stores and assumes that these items are replaced weekly. If states have engaged in bulk purchasing, these costs may be lower.

7 See 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/.