



# Methodology for 'During the Summer Months, Families Can Expect to Pay 20 Percent of Income on Child Care'

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## Summary

This memo describes the methods used to derive the expected amount a typical family in each state will spend on summer child care for 2018 as well as the affordability of providing this care. This analysis has several steps:

1. Calculate the average amount parents will spend per week on summer child care per child in 2018, by state.
2. Calculate the total expected cost of summer child care for a four-person family in 2018, by state.
3. Calculate the median family income of a four-person family for summer 2018, by state.
4. Calculate the affordability of summer child care, by state.

## Assumptions

- A typical family is defined as two adults and two children with a household income equal to the state median income for a four-person household.
- Parents will spend the same amount on summer child care per child for 2018 as they did in 2014, once adjusted for inflation.
- Families in 2018 will on average enroll children in summer programs for five weeks—the average number of weeks children in the United States were enrolled in 2014.
- Summer vacation lasts 10 weeks, based on a national average of how many weeks school districts close for the summer holidays.

## Data sources

The author used state-level data from the Afterschool Alliance’s America After 3PM survey.<sup>1</sup> Findings from America After 3PM are based on interviews with 13,709 households with children completed between February and April 2014.<sup>2</sup> Households in all 50 states and the District of Columbia were asked questions about their children’s participation in summer learning programs, including how much they spend per week on a summer learning program per child. At least 200 households in each state responded. To the author’s knowledge, this is the only survey that contains state-level data on spending on summer child care or learning programs for all 50 states and Washington, D.C.

The author notes that the survey asks about participation in summer learning programs rather than summer child care. These may include enrichment programs such as day camps as well as licensed year-round child care programs. As summer day camps and other specialized programs may be more expensive than regular family or center-based child care, America After 3PM data may overestimate the cost of summer child care. Where possible, the author cross-checked her estimates with findings from Child Care Aware of America’s 2017 report, “Parents and the High Costs of Child Care.”<sup>3</sup> This report contains data from several states reporting full-time and part-time summer child care costs. For most states, the author’s estimates for costs of part-time center-based care were similar to Child Care Aware of America’s estimates, and there is no consistent evidence that the author’s calculations systematically overestimate the cost of summer care.

The author also used the estimated state median income for a four-person family for federal fiscal year 2018. This was taken from the U.S. Department of Health and Human Services which in turn derived its estimates from the 2011 through 2015 American Community Surveys.<sup>4</sup>

## Calculations

*Step 1: Calculate the average amount parents will spend per week on summer child care per child in 2018, by state.*

To calculate the average amount parents will spend per week on summer child care for one child in each state, the author adjusted 2014 state estimates from America After 3PM for inflation.

*Step 2: Calculate the total expected cost of summer child care for a four-person family in 2018, by state.*

Assuming that children will enroll in summer care for five weeks—the national average in 2014—and that a four-person family must pay for child care for two children, the author multiplied the cost of child care per child by two (for each child), then multiplied that figure by five (for five weeks).

*Step 3: Calculate the median family income of a four-person family for summer 2018, by state*

Assuming summer lasts 10 weeks, the author calculated the median summer income by dividing the annual state median income for a four-person family by 52 to derive weekly state median income, then multiplying that number by 10.

*Step 4: Calculate the affordability of summer child care, by state.*

Each year, Child Care Aware of America examines the impact of child care on the median household income. Drawing from Child Care Aware of America’s methodology, the author defines the affordability of child care by dividing the average cost of summer care in a state by the state’s median income. Recognizing that families often work with monthly rather than annual budgets, the author chose to focus solely the share of a family’s income during the summer months that was spent on child care. Once the author calculated the affordability of summer child care for each state, the states were ranked from most affordable to least affordable.

The author notes that the cost of summer child care only cover care for five weeks, or approximately half the summer. This reflects what, on average, parents spend on care. To pay for a full summer—10 weeks—of care at the same rates, parents would presumably have to pay twice as much. However, it is possible that longer programs have lower weekly rates.

**TABLE 2**  
**Ranking of least affordable states for summer learning programs, 5 weeks and 10 weeks, in 2018**

Rank	State	5 weeks of programming		Full summer, or 10 weeks of programming	
		Percentage of median summer income spent on summer learning programs	Total cost of summer learning programs for the average family	Percentage of median summer income spent on summer learning programs	Total cost of summer learning programs for the average family
1	Nevada	51%	\$6,763	101%	\$13,526
2	New York	35%	\$6,054	71%	\$12,107
3	Arizona	33%	\$4,382	66%	\$8,763
4	Alaska	32%	\$5,948	65%	\$11,896
5	Hawaii	29%	\$5,006	58%	\$10,012
6	Montana	29%	\$4,032	58%	\$8,065
7	Indiana	28%	\$4,001	56%	\$8,001
8	District of Columbia	28%	\$5,165	56%	\$10,329
9	Rhode Island	27%	\$4,890	55%	\$9,779
10	Florida	26%	\$3,376	51%	\$6,752
11	Colorado	25%	\$4,297	50%	\$8,594
12	New Mexico	24%	\$2,836	48%	\$5,673
13	West Virginia	24%	\$3,207	48%	\$6,414
14	Massachusetts	24%	\$5,027	47%	\$10,054
15	Georgia	24%	\$3,196	47%	\$6,392
16	Delaware	22%	\$3,884	45%	\$7,768

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17	North Carolina	22%	\$2,995	44%	\$5,990
18	Arkansas	21%	\$2,477	42%	\$4,953
19	California	21%	\$3,249	42%	\$6,498
20	Vermont	20%	\$3,291	40%	\$6,583
21	Virginia	20%	\$3,598	39%	\$7,197
22	Wyoming	19%	\$3,059	39%	\$6,117
23	Iowa	19%	\$2,985	38%	\$5,969
24	Oregon	18%	\$2,561	36%	\$5,122
25	Connecticut	18%	\$3,757	35%	\$7,514
26	Maine	18%	\$2,678	35%	\$5,355
27	Tennessee	17%	\$2,265	35%	\$4,530
28	New Hampshire	17%	\$3,313	34%	\$6,625
29	Nebraska	17%	\$2,582	34%	\$5,165
30	Mississippi	16%	\$1,884	33%	\$3,768
31	Texas	16%	\$2,170	31%	\$4,339
32	Maryland	15%	\$3,239	31%	\$6,477
33	South Carolina	15%	\$1,958	30%	\$3,916
34	Louisiana	15%	\$2,138	30%	\$4,276
35	Ohio	15%	\$2,223	29%	\$4,445
36	Washington	14%	\$2,434	29%	\$4,868
37	Pennsylvania	14%	\$2,360	28%	\$4,720
38	Alabama	14%	\$1,820	28%	\$3,641
39	Kentucky	14%	\$1,873	27%	\$3,747
40	Missouri	14%	\$1,990	27%	\$3,979
41	New Jersey	13%	\$2,720	26%	\$5,440
42	South Dakota	13%	\$1,873	25%	\$3,747
43	Michigan	12%	\$1,852	24%	\$3,704
44	Illinois	12%	\$1,990	24%	\$3,979
45	Minnesota	12%	\$2,201	24%	\$4,403
46	Oklahoma	11%	\$1,365	21%	\$2,731
47	Kansas	11%	\$1,609	21%	\$3,217
48	North Dakota	10%	\$1,810	21%	\$3,620
49	Utah	10%	\$1,450	20%	\$2,900
50	Idaho	10%	\$1,217	19%	\$2,434
51	Wisconsin	9%	\$1,418	17%	\$2,836
	<b>United States</b>	<b>20%</b>	<b>\$3,048</b>	<b>39%</b>	<b>\$6,096</b>

Source: Authors' calculations are based on Afterschool Alliance, "America After 3PM Survey" (2014), available at [http://www.afterschoolalliance.org/AA3PM/national.html#c/summer/p\\_family\\_child\\_summer\\_2013](http://www.afterschoolalliance.org/AA3PM/national.html#c/summer/p_family_child_summer_2013).

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## Endnotes

- 1 Author's analysis of survey data from Afterschool Alliance, "American After 3PM," available at [http://www.afterschoolalliance.org/AA3PM/national.html#c/summer/p\\_family\\_child\\_summer\\_2013](http://www.afterschoolalliance.org/AA3PM/national.html#c/summer/p_family_child_summer_2013) (last accessed June 2018).
- 2 Afterschool Alliance, "Summer Learning Programs Help Kids Succeed," available at <http://afterschoolalliance.org/documents/AA3PM-2015/National-AA3PM-Summer-Fact-Sheet-6.11.15.pdf>.
- 3 Child Care Aware of America, "Parents and the High Cost of Child Care" (2017), available at [http://usa.childcareaware.org/wp-content/uploads/2017/12/2017\\_CCA\\_High\\_Cost\\_Report\\_FINAL.pdf](http://usa.childcareaware.org/wp-content/uploads/2017/12/2017_CCA_High_Cost_Report_FINAL.pdf).
- 4 Office of Community Services, "LIHEAP IM2017-03 State Median Income Estimates for Optional Use in FY 2017 LIHEAP Programs and Mandatory Use in FY 2018 LIHEAP Programs," July 25, 2017, available at [https://www.acf.hhs.gov/ocs/resource/liheap-im2017-03#\\_edn1](https://www.acf.hhs.gov/ocs/resource/liheap-im2017-03#_edn1).