

University of Kentucky, Human Development Institute

Kentucky Child Care Narrow Cost Analysis 2022

In support of the Kentucky Division of Child Care

Joanne P. Rojas, Ph.D. & Bethany Davis, M.A.Ed.
1-27-2023

Kentucky Child Care Narrow Cost Analysis

In support of the Kentucky Division of Child Care, the Human Development Institute at the University of Kentucky is evaluating the gap between costs and payment rates in order to provide data to assist DCC. Promoting equal access to high quality child care for all families is a strategic goal of the division based on stakeholder feedback around the difference between cost and reimbursement rates. This report provides a more accurate estimate of how current payment rates compare to the actual cost of providing care.

In order to conduct this narrow cost analysis, we used the Center for American Progress' Cost of Child Care calculator (<https://costofchildcare.org>). This online interactive cost estimation tool illustrates the state-level economics of child care based on local licensing regulations and the defaults used in the U. S. Department of Health and Human Services' Office of Child Care Provider Cost of Quality Calculator. Its base model provides a monthly figure per child broken down by age of child (infant, toddler, preschool). This figure can be modified by turning on or off seven elements of the program including compensation levels and adult-child ratios. See Table 1 for the list of elements and underlying assumptions.

Table 1. Calculator Elements and Assumptions

Calculator elements	Assumptions of element
Fewer children per teacher	Based on NAEYC Standards
Increase salaries	Midway point between early childhood teacher and kindergarten teacher
Pay teachers the same as kindergarten teachers	Parity with kindergarten teacher salary based on Bureau of Labor Statistics state averages
Provide retirement benefits	Based on K-12 teacher retirement contributions
Increase contribution to health insurance	State average employee contribution to insurance
Provide more time for teachers to plan lessons	Increase to 12 hours from 8 hours for center teacher, and to 10 hours from 5 for child care home.
Make the classroom bigger	Increase licensed default square footage by 20%
Increase resources for classroom materials	Increase allocations by 30%

The calculator produces a monthly cost estimate per child. In order to compare cost estimates with daily rates as collected by the Market Rate Study and used to calculate the Child Care Assistance Program (CCAP) subsidy rate, this monthly cost is divided by 22, the average number of working days per month.

First, we used the calculator to model three levels of child care: Compliant, High Quality, and High Quality (Enhanced Salary). Compliant child care means a licensed or certified setting that meets all health and safety, regulatory, and licensing requirements; it is modelled as the base level of costs without turning on any of the seven elements. High Quality adds six of the seven elements in the calculator except for kindergarten salary parity. This includes an increase in compensation package for teachers (salary, health benefits, and retirement), more planning time for instruction, more physical space for children, as well as a decrease in ratios and group sizes. High Quality (Enhanced Salary) switches out the mid-range salary increase and replaces it with kindergarten parity. Table 2 details these differences in cost.

Table 2. Cost of Child Care by Classroom/Family Child Care Home

Classroom/Facility Type	Compliant	High Quality	High Quality (Enhanced Salary)
Licensed Center			
Infant	\$54.05	\$95.55	\$105.23
Toddler	\$36.95	\$73.09	\$80.27
Preschool	\$34.09	\$55.14	\$60.27
Family Child Care Home			
	\$52.05	\$93.23	\$110.45

Table 3 shows the cost differentials between models. When examining the cost differentials between the three levels of the model, the highest cost increase in centers falls on infant classrooms. This is likely because of the required lower ratios for this age group. In addition, many centers “subsidize” infant rooms with the fees from the classrooms for older children. Family child care homes also experience a larger cost differential, perhaps in part because these are often sole proprietorships who sometimes do not take a proper salary. Finally, we compared the actual costs of care to the 2020 Market Rate and the most recent CCAP subsidy (see Table 4). This table makes it clear that cost of high quality care is not covered by the full fees that families pay or the CCAP subsidy, most especially in areas of infant care.

Table 3. Cost Differential between Compliant, High Quality, and High Quality (Enhanced Salary)

Classroom/Facility Type	Compliant	Cost Differential from Compliant to High Quality	High Quality	Cost Differential from High Quality to High Quality (Enhanced Salary)	High Quality (Enhanced Salary)	Cost Differential from Compliant to High Quality (Enhanced Salary)
Licensed Center						
Infant	\$54.05	\$41.50	\$95.55	\$9.68	\$105.23	\$51.18
Toddler	\$36.95	\$36.14	\$73.09	\$7.18	\$80.27	\$43.32
Preschool	\$34.09	\$21.05	\$55.14	\$5.13	\$60.27	\$26.18
Family Child Care Home						
	\$52.05	\$41.18	\$93.23	\$17.22	\$110.45	\$58.40

Calculator Notes:

- Compliant – all calculator items turned off
- High Quality – all calculator items turned on except “pay teachers the same as kindergarten teachers”
- High Quality (Enhanced Salary) – all calculator items turned on except “increase salaries”
- Divided monthly cost based on calculator by 22 to figure daily rate

Table 4. Comparison of Cost vs. Market Rate vs. Average Max CCAP Reimbursement Rate

Classroom/Facility Type	Cost based on Calculator	Cost Differential between Cost and Market Rate	Market Rate	Cost Differential between Market Rate and Average Max CCAP Reimbursement Rate	Average Max CCAP Reimbursement Rate (not based on quality)	Cost Differential between Cost and Average Max CCAP Reimbursement Rate
Licensed Center - Compliant						
Infant	\$54.05	\$14.05	\$40.00	\$6.37	\$33.63	\$20.42
Toddler	\$36.95	-\$0.45	\$37.40	\$3.77	\$33.63	\$3.32
Preschool	\$34.09	\$0.09	\$34.00	\$2.76	\$31.24	\$2.85
Licensed Center - High Quality						
Infant	\$95.55	\$60.05	\$35.50	\$1.87	\$33.63	\$61.92
Toddler	\$73.09	\$38.95	\$34.14	\$0.51	\$33.63	\$39.46
Preschool	\$55.14	\$23.14	\$32.00	\$0.76	\$31.24	\$23.90
Family Child Care Home - Compliant						
	\$52.05	\$23.97	\$28.08	\$1.23	\$26.85	\$25.20
Family Child Care Home - High Quality						
	\$93.23	\$67.56	\$25.67	-\$1.18	\$26.85	\$66.38

Market Rate data taken from Table 13 in Market Rate Report (Statewide HQ and RC) for Licensed Type I. Used same table for FCC but averaged Infant, Toddler, and Preschool rates (Statewide HQ and RC) since calculator does not break FCC into age groups.

Average Max CCAP Reimbursement Rate taken from DCC-300 KY Child Care Maximum Payment Rate Chart. Averaged full day reimbursement rates based on max reimbursement for all counties for each age group (Infant/Toddler – \$33.63 and Preschool - \$31.24). Averaged full day reimbursement rates based on max reimbursement for all counties for Infant/Toddler and Preschool for FCC since calculator does not break FCC into age groups (FCC - \$26.85).

The ratios and age groups assumed in the calculator do not exactly match Kentucky regulations and practice. A few of the important differences are detailed in Table 5. Overall, however, this cost modeling tool provides us with a good estimate of the actual cost of care in Kentucky.

Table 5. Kentucky Regulations v. Calculator Assumptions

Child Category	Kentucky		Calculator Assumption	
	Age	Ratio	Age	Ratio
Infant	0-12 months	1:5	0-18 months	1:5
Toddler	12-24 months	1:6	12-36 months	1:5
	24-36 months	1:10		1:10
Preschool	3-4 years	1:12	3-5 years	1:12
	4-5 years	1:14		1:12
School Age	5-7 years	1:15	n/a	n/a
School Age-Out of School Time	7 & older	1:25		
School Age-Full Day	7 & older	1:20		

This narrow cost analysis provides the baseline for our future work. The current state-level estimates do not reflect any potential regional differences in the cost of care because of the limitations of the calculator used. In contrast, Kentucky’s current Market Rate Study (<https://www.childcareawareky.org/research/>) very clearly addresses regional differences in price of child care (urban v. rural, which of eight service regions, and Western, Central, or Eastern Kentucky). Kentucky’s next phase of cost modeling will gather data to assess whether or not there are also regional differences in cost. By growing this research, we will better be able to reflect the uniqueness and nuance of the Kentucky child care landscape.