

COST OF QUALITY CARE STUDY

A Survey of Recipients, 2023

Prepared by

LeAnn Luna
Professor, BCBER

Emily Pratt
Research Associate, BCBER

Rev. November 2023



BOYD CENTER FOR BUSINESS &
ECONOMIC RESEARCH

Haslam College of Business
The University of Tennessee
716 Stokely Management Center
Knoxville, Tennessee 37996
Phone: (865) 974-5441
Fax: (865) 974-3100
<http://cber.haslam.utk.edu/>

1. Introduction	1
2. Methodology.....	1
3. Sample.....	3
Figure 1: Star Ratings for the Sample (N=178).....	3
Table 1a: Star Rating by Type of Provider (N=178).....	3
Table 1b: Star Rating by Ownership Category - Child Care Center (N=86)	4
Table 2a: Star Rating by Grand Division (N=178).....	4
Table 2b: Star Rating by Tier (N=178)	4
4. Expenditures	4
Figure 2: Share of Total Key Expenditures by Category	5
Table 3a: Statistics for Key Expenditures by Provider Type (2021)	8
Table 3b: Statistics for Key Expenditures by Market Tier.....	9
Table 3c: Non-Classroom Costs by Tier.....	9
Table 4: Per Child Expenditures by Star Rating and Market Tier	10
Table 5a: Total Salary and Benefit Expense by Star Rating.....	11
Table 5b: Classroom Staff Education by Provider Type	11
Table 5c: Mean and Median Educator Salaries by Presence of Degree Holders	11
Table 6a: Staff Benefits by Star Rating	12
Table 6b: Staff Benefits by Market Tier	13
Table 7: Teacher Salaries and Rent Expense by Market Tier	13
Table 8: Teacher Salaries and Rent Expense by Grand Division	14
Table 9a: Reported Enrollment by Provider Type, Star Rating, and Market Tier	15
Table 9b: Enrollment Categories Based on Size.....	15
Table 10: Selected Expenditures by Star Rating and Enrollment Size	17
Table 11: Volunteer Hours by Star Rating.....	17
5. Estimates of Total Expenditures	18
Table 12: Average Per Child Total Expenses (Reported) by Provider Type, Star Rating and Tier.....	18
6. PCQC Estimates of Total Expenditures	18
Table 13a:.....	21
Total Costs by Classroom Age and Total Salary and Benefits by Star Rating, per child (Tier 1)	21
Table 13b:	21
Total Costs by Classroom Age and Total Salary and Benefits by Star Rating, per child (Tier 2)	21
Table 13c: Total Costs for Group and Family Home Providers by Star Rating and Tier, per child.....	23
Table 14a: Subsidy Rates by Age Group and Market for Centers (2021)	23
Table 14b: PCQC Estimate Weekly Cost (Per Child) by Age Group and Market for Centers	24
Table 14c: Estimated Gap between Subsidy Rates and PCQC Cost for Centers	24
Table 15a: Subsidy Rates by Age Group and Market for Group Homes (2021).....	24
Table 15b: Subsidy Rates by Age Group and Market for Family Homes (2021)	24
Table 15c: PCQC Estimate Weekly Cost (Per Child) for Group and Family Homes.....	24
7. Tuition	25
Table 16: Weekly Tuition Per Child by Age and by Star Rating	25
8. Impact of COVID	25
9. Conclusion.....	26
Appendix A: Quality Care Survey Instrument	28
Appendix B: PCQC Input Values and Assumptions	37

1. Introduction

The purpose of the Cost of Quality Care Study is to determine the cost drivers for quality child care agencies.¹ The State of Tennessee's Department of Human Services (TDHS) evaluates all child care agencies quarterly under the Quality Rating and Improvement System (QRIS). Agencies that exceed minimum licensing standards earn one to three stars based upon quality indicators, with three stars indicating the highest quality and zero stars indicating minimum standards. All agencies receive and must post a report card, and agencies that earn one, two or three stars may elect to participate in the Star-Quality portion of the QRIS and earn bonus payments based on the rating earned. Indicators of quality child care include, but are not limited to, meeting minimum staffing requirements and performing necessary background checks on all employees, minimum space requirements, food and facility safety standards, and best practices for play and enrichment. There are costs associated with meeting the standards for these indicators. The purpose of this study is to determine the cost drivers for providing quality care by exploring how costs vary across the spectrum of QRIS ratings.

2. Methodology

The Boyd Center for Business and Economic Research at the University of Tennessee worked with TDHS to develop a survey instrument that collected financial and other operating information from a sample of identified agencies.² Prior to conducting this study, TDHS consulted 2,334 licensed child care providers, the state's Child Care Resource and Referral Network (CCR&R) and other CCDF Quality Child Care Partners, TDHS child care service staff, and the state's Advisory Council on Early Childhood Education and Care (Tennessee Young Child Wellness Council). We received thirty-three responses, and the most common concerns were related to the cost and difficulty of hiring and retaining qualified staff. After consultation, the final survey instrument included questions relating to staff levels, salary levels, and the cost of benefits. Several respondents also mentioned the difficulty maintaining profitability due to cost increases and enrollment drops post-COVID. We believe the cost analyses made possible by the survey will assist state agencies in establishing subsidy rates going forward.

The Boyd Center collaborated with Social Work Office of Research and Public Service (SWORPS) at the University and TDHS to identify the sample and administer the survey. A copy of the survey instrument is included in the Appendix. We asked participating agencies about calendar year 2021 expenditures. To provide guidance and consistency, we linked selected major expenditures to lines on IRS tax forms.³

¹ This report is in compliance with Section 658E(c)(4) of the Child Care and Development Block Grant (CCDBG) Act, 42 U.S.C. §9858c(c)(4).

² This is the second time we have prepared this report, and we relied extensively on the work performed in 2021.

³ We provide links to specific tax forms to assist with completing the expenditure portion of the survey. Because many taxpayers choose to extend their tax return and may not have their 2022 return filed when the survey was

All agencies that participated in QRIS from Program Year (PY) 19 through PY21 are defined as the population for this study.⁴ Quotas were developed to ensure adequate representation from child care centers, group homes, and family homes, with different star ratings, and from rural and urban counties and grand divisions. Based on the above criteria, SWORPS identified a representative sample of 445 child care centers and invited those centers by email to participate in the web survey. Our target of completed surveys was 300. The final sample is substantially smaller, as SWORPS was not able to reach this target within the 3-month required window.

Researchers at SWORPS administered the survey. Data collection took place between April 27 – July 3, 2023. Participating centers received a \$100 incentive for their participation. The child care centers participating in the study did so voluntarily. We did not audit the information, but the Boyd Center reviewed responses for reasonableness and internal consistency as surveys were submitted. In addition, the SWORPS help desk and the Tennessee Child Care Resource and Referral (CCR&R) coaches performed additional outreach when we identified problems with responses. Outreach focused on providers whose surveys were more than 50 percent complete but contained errors or inconsistencies, and many surveys were returned a second time with similar or new errors.

Many of the reporting agencies are very small businesses that may classify expenditures differently than other agencies, and persons completing the survey are frequently not financial experts. Even with the help desk and CCR&R outreach, we continued to receive incomplete surveys and/or surveys with inconsistent responses. We supplemented our data with the Provider Cost of Quality Calculator (PCQC) maintained by the US Department of Health and Human Services Administration for Children and Families. As described more fully in Section 6, the PCQC uses a variety of external data sources and input by users to estimate costs by category for a hypothetical enrollment of children at a child care agency. The output can serve as a comprehensive guide of costs matching the requirements for the Narrow Cost Analysis. The PCQC provides default values for each input (e.g., salaries by function and education level, costs of food and classroom supplies, rent) based on national- and state-level values obtained from national surveys of child care providers, but we replace these default values with survey responses when available and relevant. Therefore, the PCQC should enhance the quality of our cost analysis when survey responses are missing or inaccurate.

administered, we initially asked for 2021 expenditures. However, we also allowed centers to report 2022 expenditures.

⁴ Starting October 1, 2022, TDHS began transitioning to a redesigned QRIS, which changes the approach to monitoring and assigns a numeric score rather than a star rating. For the purposes of this study, star ratings assigned under the previous QRIS approach were used.

3. Sample

Our final sample consists of 178 child care agencies, with 86 (48 percent) licensed child care centers (13+ children), 44 (24.7 percent) family child care homes (5-7 children), and 48 (27 percent) group child care homes (8-12 children). Of the 86 child care centers, 69 (80.2 percent) are independently operated and 6 (7.0 percent) are franchises. Hereafter we may refer to child care providers of any size as an agency, unless otherwise noted.

We measure quality using the agency's star rating. Approximately 83 percent of our sample have a 3-star rating, 12 percent have a 2-star rating, 1 percent have a 1-star rating and 4 percent have a 0-star rating (See Figure 1). The distribution of ratings in our sample is representative of the underlying population of all agencies in the state. Because our sample includes only 10 agencies rated 0 and 1 star, and 21 rated 2 stars, we generally compare 3-star agencies to all other agencies not rated 3 stars (i.e., 0-2 stars). We present star ratings by provider size and then further analyze the larger child care centers by ownership category in Tables 1a and 1b below.

Figure 1: Star Ratings for the Sample (N=178)

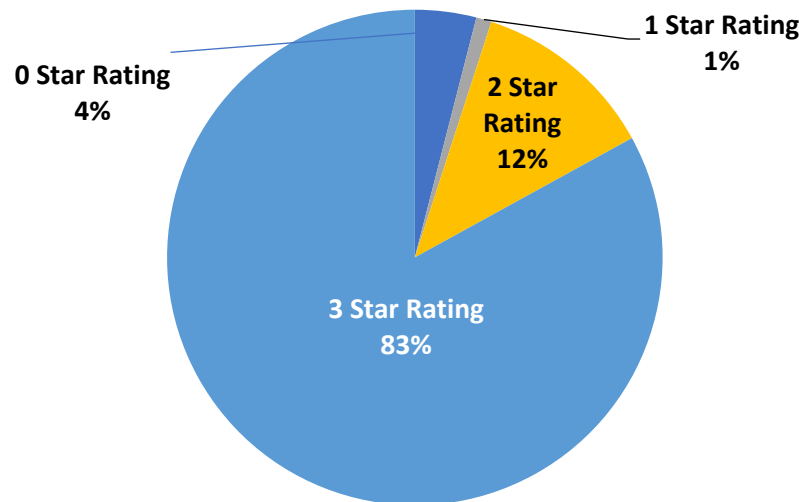


Table 1a: Star Rating by Type of Provider (N=178)

	Child Care Center		Family Child Care Home		Group Child Care Home	
STAR Rating	N	Percent	N	Percent	N	Percent
0 Star	4	4.6%	1	2.3%	3	6.2%
1 Star	1	1.2%	1	2.3%		
2 Star	16	18.6%	1	2.3%	4	8.3%
3 Star	65	75.6%	41	93.1%	41	85.5%
TOTAL	86	100.0%	44	100.0%	48	100.0%

Table 1b: Star Rating by Ownership Category - Child Care Center (N=86)

	Independent		Franchise		Other	
STAR Rating	N	Percent	N	Percent	N	Percent
0 Star	2	2.9%			2	18.2%
1 Star	1	1.4%				
2 Star	13	18.8%			3	27.3%
3 Star	53	76.9%	6	100.0%	6	54.5%
TOTAL	69	100.0%	6	100.0%	11	100.0%

The sample represents agencies across urban and rural counties of Tennessee with approximately 26 percent from East Tennessee, 38 percent from Middle Tennessee, and 35 percent from West Tennessee. Child care agencies located in one of the state's 20 largest counties are classified as Tier 1 in this report, and all others Tier 2. About three-fourths (74 percent) of the sample are located in Tier 1 markets. Table 2a reports star ratings by grand division and Table 2b reports star ratings by market tier. We do not believe the small differences in quality rating by grand division or tier reflect underlying differences in quality.

Table 2a: Star Rating by Grand Division (N=178)

	East		Middle		West	
STAR Rating	N	Percent	N	Percent	N	Percent
0 Star	3	6.4%	3	4.4%	2	3.0%
1 Star	1	2.1%	1	1.5%		
2 Star	7	14.9%	7	10.3%	7	11.0%
3 Star	36	76.6%	57	83.8%	54	86.0%
TOTAL	47	100.0%	68	100.0%	63	100.0%

Table 2b: Star Rating by Tier (N=178)

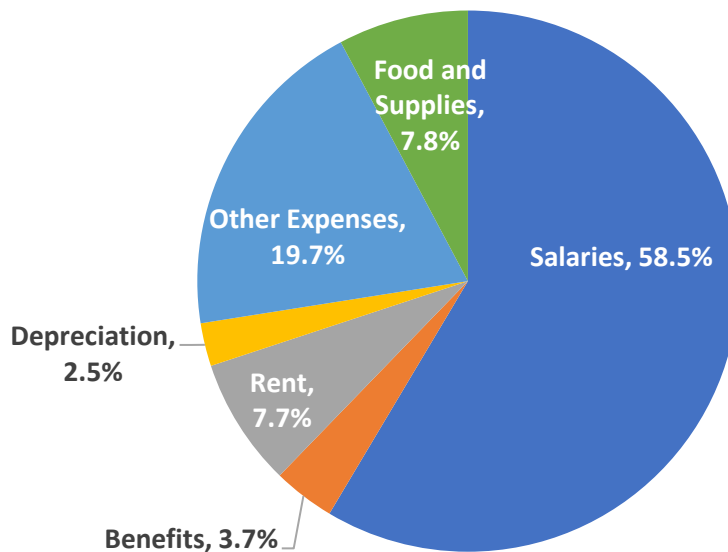
	Tier 1		Tier 2		Total	
STAR Rating	N	Percent	N	Percent	N	Percent
0 Star	7	5.3%	1	2.2%	8	4.5%
1 Star	1	0.8%	1	2.2%	2	1.1%
2 Star	13	9.8%	8	17.4%	21	11.8%
3 Star	111	84.1%	36	78.2%	147	82.6%
TOTAL	132	100.0%	46	100.0%	178	100.0%

4. Expenditures

To better understand the key drivers of child care expenditures, we asked agencies to report total spending for 2021 for several categories. For total salaries, employee benefits, rent expense, depreciation expense, and total expenditures we ask respondents to refer to specific lines on their federal income tax returns (Form 1065, Form 1120, Form 1120S, Form 990, Form 1040, Schedule C) or their financial system, if preferred. Where necessary, we impute “all other expenses” by using total reported expenditures per their tax return and subtracting the sum of the key expenditures (salaries, benefits, rent and depreciation) from the total.⁵ We chose these spending categories because they represent the largest spending categories for our sample that are separately reported on income tax returns and would ease comparisons between survey respondents.

We also asked respondents to estimate the amount of food expenses and classroom supplies and asked for a detailed listing of other expenses. In Figure 2, we total key expenditures and present each category’s share of that total. Salary expense is the largest cost for agencies, and on average, represents approximately 59 percent of the total reported expenditures. Other expense is approximately 20 percent of total expenditures. Rent (8 percent) and supplies for the classroom and food (8 percent) are the next largest spending categories, followed by employee benefits (4 percent) and depreciation expense (3 percent).

Figure 2: Share of Total Key Expenditures by Category



⁵ When respondents’ tax return components did not reconcile with their reported total, we also leveraged their responses about itemized classroom and non-classroom expenditures to impute this category.

We provide the mean and median by expense category, and then present the totals on a per-enrolled child basis using each agency's reported average weekly enrollment during 2021.⁶ We report these values by provider type and by market tier (see Tables 3a and 3b). We use reported enrollment to calculate per child expense amounts (see Table 9a for reported enrollment). We omit observations where enrollment was not reported or where enrollment or expense amounts were outliers.

Child care centers report paying salaries and employee benefits of \$5,555 per child, versus \$4,261 for family child care homes and \$4,071 for group child care homes (Table 3a). These differences may reflect in part services provided by owner operators. For example, 7 agencies (4 percent) report paying no salaries, and 9 others leave salaries paid blank, implying that all non-volunteer services are performed by owner-operators. Additionally, the vast majority of our sample are independently owned businesses, and owners who are also active in the day-to-day operations of the agency are typically compensated with the profits of the operations versus salary. For these agencies, the value of owner-provided services will not be reflected in salaries paid, and an involved owner's share of total services provided will be highest for those providers that care for the fewest children.

The differences in salaries per child by market tier are shown in Table 3b. On average, per-child salaries are \$4,988 for Tier 1 markets and \$4,120 for Tier 2 markets. These differences reflect the higher cost of living in the state's most populous counties or counties with highest per-capita personal income.

Mean and median rent is higher for child care centers versus group homes or family homes; however, child care centers pay a lower amount of rent per child compared to family homes (Table 3a). In addition, average rent and rent paid per child is higher in Tier 1 versus Tier 2 markets (Table 3b). Rent paid per child is \$570 for Tier 1 markets, and \$319 for Tier 2 markets. For our entire sample, 37 agencies reported \$0 in rent, and 40 agencies did not answer the question. Of the 37 that reported \$0 in rent expense for the year, 9 operated out of their personal residence, 8 reported that they own the commercial property, and 17 reported that they were provided space free of charge, such as by an affiliated church or other non-profit agency. Three agencies report \$0 rent but provide no explanation, or indicate they do rent the space, but reported rent paid that year of \$0. The 40 agencies that did not answer the question operate out of their personal residence or own their property.

Interestingly, child care centers pay only \$873 in food/supplies and classroom supplies per child, versus \$1,322 and \$1,282 for group homes and family homes, respectively (Table 3a). These differences may reflect economies of scale for larger operations. We examine the impact of enrollment size later in the report.

⁶ Note that all per child calculations use reported enrollment, with part-time enrollments counted as ½ of a full-time enrollment. Similarly, if a center reports part-time staff, we count that as ½ of full-time staff.

In Table 3c we report non-classroom costs by Tier 1 and Tier 2 agencies. We document mean and median reported expenses, then express those amounts on a per-child basis. On a per-child basis, agencies report spending the most on utilities, maintenance, and insurance. Reported mean per child costs for non-classroom expenses are generally higher for Tier 1 agencies than those in Tier 2. Note that median reported expenses for 5 of 11 categories in both Tier 1 and Tier 2 is \$0. Given the small sample and data problems, we would interpret these reported amounts as illustrative only, and caution against relying on them for any other purpose.

Table 3a: Statistics for Key Expenditures by Provider Type (2021)

	Child Care Centers			Family Child Care Home			Group Child Care Home		
	Mean	Median	Per Child Average	Mean	Median	Per Child Average	Mean	Median	Per Child Average
Salaries paid to officers and employees	\$331,814	\$198,893	\$5,182	\$42,031	\$28,976	\$4,231	\$50,632	\$32,801	\$4,058
Benefits paid to officers and employees	\$23,646	-	\$373	\$214	-	\$30	\$136	-	\$13
Rent expense	\$42,265	\$13,200	\$576	\$6,618	\$2,681	\$707	\$2,970	-	\$189
Depreciation expense	\$12,723	-	\$182	\$3,663	-	\$338	\$2,357	-	\$191
Food and supplies for children	\$39,626	\$20,120	\$601	\$10,001	\$7,750	\$950	\$9,003	\$8,893	\$808
Educational supplies for children	\$15,421	\$6,000	\$272	\$4,085	\$2,409	\$372	\$5,173	\$3,928	\$474
Transportation expense for children	\$4,015	-	\$31	\$727	-	\$90	\$241	-	\$8
Training and professional development for teachers	\$2,690	\$650	\$57	\$517	\$75	\$41	\$542	-	\$56
Child care general liability insurance	\$12,866	\$5,557	\$157	\$1,901	\$1,342	\$183	\$1,481	\$1,000	\$124

Table 3b: Statistics for Key Expenditures by Market Tier (2021)

	Market Tier 1			Market Tier 2		
	Mean	Median	Per Child Average	Mean	Median	Per Child Average
Salaries paid to officers and employees	\$244,475	\$94,375	\$4,988	\$115,213	\$62,925	\$4,120
Benefits paid to officers and employees	\$14,195	-	\$245	\$4,391	-	\$115
Rent expense	\$28,127	\$4,590	\$570	\$9,285	\$413	\$319
Depreciation expense	\$8,307	-	\$181	\$6,266	-	\$306
Food and supplies for children	\$25,537	\$9,787	\$722	\$22,383	\$12,000	\$724
Educational supplies for children	\$10,965	\$4,000	\$346	\$7,380	\$2,516	\$308
Transportation expense for children	\$2,763	-	\$46	\$493	-	\$15
Training and professional development for teachers	\$1,279	\$250	\$47	\$2,302	-	\$71
Child care general liability insurance	\$8,896	\$2,400	\$173	\$3,222	\$1,911	\$104

Table 3c: Non-Classroom Costs by Tier

	Market Tier 1			Market Tier 2		
	Mean	Median	Per Child Average	Mean	Median	Per Child Average
Utilities	\$9,386	\$5,070	\$204	\$7,302	\$4,528	\$203
Sanitation	\$937	-	\$32	\$538	-	\$22
Telecom	\$2,352	\$1,200	\$70	\$1,691	\$1,481	\$64
Transport	\$2,763	-	\$46	\$493	-	\$15
Insurance	\$8,896	\$2,400	\$173	\$3,222	\$1,911	\$104
Maintenance	\$8,672	\$2,130	\$244	\$3,933	\$1,000	\$110
Fees/Permits	\$7,412	\$250	\$105	\$2,444	\$400	\$78
Office Equip.	\$2,702	\$675	\$72	\$1,457	\$500	\$61
Advertising	\$723	-	\$24	\$533	-	\$17
Accounting	\$2,904	-	\$69	\$910	-	\$35
Security	\$441	-	\$24	\$464	-	\$14

Table 4 reports per child expenditures by star rating and market tier. In general, agencies with 3-star ratings spend more per child than lower-rated agencies for both Tier 1 and Tier 2 markets. The higher spending per child for 3-star rated agencies suggests that spending levels are positively associated with quality as measured by star ratings. However, we test this association using standard statistical techniques and we do not find any statistically significant correlation between selected spending categories and star rating (untabulated). This is likely due to the lack of variation in star ratings among the agencies in the sample (i.e., a small share of the sample is rated less than 3 stars) and in the broader population of Tennessee daycare providers.

Table 4: Per Child Expenditures by Star Rating and Market Tier

	0-2 stars		3 stars	
	Tier 1	Tier 2	Tier 1	Tier 2
Salaries, per child	\$4,051	\$3,703	\$5,204	\$4,199
Benefits, per child	\$238	-	\$247	\$144
Rent, per child	\$459	\$201	\$595	\$348
Depreciation, per child	\$165	\$42	\$185	\$370
Classroom supplies, per child	\$255	\$334	\$370	\$304
Food, per child	\$500	\$609	\$783	\$741
Transport, per child	\$53	\$5	\$44	\$18
Training, per child	\$62	\$33	\$43	\$81
Insurance, per child	\$171	\$74	\$174	\$109

Table 5a reports the midpoint of the salary range for teachers/educators only. For example, if the agency reports a minimum salary for teachers of \$16,000 and a maximum salary of \$20,000, we calculated the midpoint between those amounts, or \$18,000. The median midpoint teacher/educator salary is similar for agencies with a 3-star rating to agencies rated with 0-2 stars. Agencies rated 0-2 stars report paying approximately \$24,750, and 3 stars paid approximately \$26,400. Total salaries paid to all staff when measured on a per-child basis showed some variation based on ratings, as agencies with a 3-star rating report spending about \$4,912 per child versus \$3,964 per child for centers rated 0-2 stars.

Table 5b reports the educational attainment of classroom teacher(s). Roughly two-thirds of all agencies report employing at least one teacher with at least an associate degree, and about half report having at least one teacher with a bachelor's degree. Child care centers report the highest levels of educational attainment, and group homes report the lowest levels.

In Table 5c we divide the sample into agencies that report employing at least one teacher with an associate degree or bachelor's degree, and the mean and median salary for these categories. Educational attainment is generally positively associated with higher mean and median wages, but the differences are relatively small (roughly \$1,000 for most comparisons), and agencies that report employing no teachers with a bachelor's degree report lower median salaries (but higher mean salaries) than those who do.

Table 5a: Total Salary and Benefit Expense by Star Rating

	Star Rating = 0-2 Stars				Star Rating = 3 Star			
	N	Mean	Median	Per Child Avg.	N	Mean	Median	Per Child Avg.
Midpoint salary for a teacher/ educator	18	\$35,568	\$24,750	N/A	57	\$31,452	\$26,400	N/A
Total salaries to all employees	24	\$226,579	\$115,408	\$3,964	121	\$204,225	\$75,274	\$4,912
Total benefits to all employees	29	\$6,749	\$0	\$170	135	\$12,672	\$0	\$219
Total Enrollment	30	54	27	N/A	125	34	15	N/A

Table 5b: Classroom Staff Education by Provider Type

	Provider Type			
	Child Care Center (N=82)	Family Child Care Home (N=30)	Group Child Care Home (N=43)	Overall (N=155)
At least one classroom staff member with associate or higher	69.5%	66.7%	58.1%	65.8%
At least one classroom staff member with bachelor's or higher	57.3%	43.3%	34.9%	48.4%

Table 5c: Mean and Median Educator Salaries by Presence of Degree Holders

	Indicator of at least one classroom staff with associate degree or more		Indicator of at least one classroom staff with bachelor's degree or more	
	Yes (N=44)	No (N=26)	Yes (N=32)	No (N=38)
Mean salary	\$32,989	\$31,958	\$32,276	\$32,884
Median salary	\$25,824	\$24,600	\$25,824	\$24,830

In addition to salaries, agencies may choose to provide employees with benefits. For our sample, benefits include paid vacation, paid sick leave, scholarships or discounts for staff's children, and tuition assistance for professional development. Table 6a lists employee benefits by star rating, and trends are quite similar between the two groups for most benefits. For a few categories, such as tuition assistance and school discounts, agencies rated 3 stars are more likely to offer benefits compared to agencies rated with less than 3 stars. The most popular benefits include paid vacation and sick leave, tuition assistance and school discounts.

We also report employee benefits by market tier in Table 6b. Paid vacation and sick leave, tuition assistance and school discounts are reported by a greater proportion of agencies in Tier 2 markets when compared to agencies in Tier 1 markets. However, a larger proportion of Tier 1 agencies report providing vision, other medical benefits, and retirement benefits for their employees, when compared to agencies in Tier 2 markets. Overall, we see little relationship between benefits offered and market tier or quality.

Table 6a: Staff Benefits by Star Rating

Staff Benefit	0 to 2 Star		3 Star	
	N	Percent	N	Percent
Paid vacation	19	61%	82	56%
School discount	9	29%	54	37%
Paid sick leave	12	39%	52	35%
Tuition assistance	5	16%	36	24%
Medical	3	10%	19	13%
Other health benefit	2	6%	20	14%
Vision	1	3%	18	12%
Retirement Contribution	2	6%	15	10%
Other health insurance	2	6%	10	7%
Employee Assistance Program	2	6%	8	5%
Family Plan	0	0%	7	5%
Other benefits	7	23%	30	20%

Table 6b: Staff Benefits by Market Tier

Staff Benefit	Tier 1		Tier 2	
	N	Percent	N	Percent
Paid vacation	69	52%	32	70%
School discount	43	33%	20	43%
Paid sick leave	47	36%	17	37%
Tuition assistance	25	19%	16	35%
Medical	19	14%	3	7%
Other health benefit	17	8%	5	2%
Vision	15	11%	4	9%
Retirement Contribution	15	11%	4	4%
Other health insurance	11	13%	2	11%
Employee Assistance Program	8	6%	8	4%
Family Plan	5	4%	2	4%
Other benefits	29	22%	8	17%

Table 7 summarizes two key expenses, rent and teacher salaries, by market tier. For reporting agencies, the midpoint median salary for teachers was higher in urban counties, with Tier 1 counties paying a median midpoint of \$27,780 versus \$22,880 in Tier 2 markets. As expected, agencies located in Tier 1 markets incur higher rent expense than agencies in Tier 2 markets. Median rent expense was roughly \$4,590 for agencies in Tier 1 markets versus \$413 for agencies in Tier 2 markets. Many respondents care for children in their own homes, and therefore, they do not pay rent.

Table 7: Teacher Salaries and Rent Expense by Market Tier

	Tier 1					Tier 2				
	N	Mean	Median	Min	Max	N	Mean	Median	Min	Max
Midpoint salary range for a teacher	56	\$33,293	\$27,780	\$16,600	\$165,030	19	\$29,925	\$22,880	\$16,500	\$134,161
Rent expense	126	\$28,127	\$4,590	\$0	\$596,816	45	\$9,285	\$413	\$0	\$61,638
Total Enrollment	113	41	18	5	261	42	31	20	6	148

The reported midpoint salary by grand division shows interesting regional trends (Table 8). East and West Tennessee agencies reported median midpoint teacher salaries of \$24,980 and \$24,500 respectively, versus \$27,780 in Middle Tennessee.

Table 8: Teacher Salaries and Rent Expense by Grand Division

	East Tennessee			
	Mean	Median	Min	Max
Midpoint annual salary range for a teacher	\$31,461	\$24,980	\$16,600	\$112,840
Enrollment (weighted)	48.0	28.0	5	260
Rent	\$47,674	\$2,618	\$0	\$596,816
	Middle Tennessee			
	Mean	Median	Min	Max
Midpoint annual salary range for a teacher	\$37,238	\$27,780	\$16,500	\$165,030
Enrollment (weighted)	39	15	5	261
Rent	\$11,491	\$0	\$0	\$89,000
	West Tennessee			
	Mean	Median	Min	Max
Midpoint annual salary range for a teacher	\$28,389	\$24,500	\$16,800	\$72,000
Enrollment (weighted)	30	12	5	160
Rent	\$18,128	\$10,000	\$0	\$151,760

Impact of Enrollment Size on Quality

As described above, the State of Tennessee licenses child care providers depending on the maximum number of enrolled children. A child care center is the largest category and is defined as any provider that is licensed to enroll 13 or more children. Family and group homes are allowed a maximum capacity of 7 and 12 children, respectively. However, as a child care agency enrolls more children, economies of scale may allow larger agencies to provide better care at any given per-child cost level.

We present reported (survey) enrollment by provider type, star rating and market tier in Table 9a. Total enrollment in our sample for all providers ranged from 5 to 261 children. For child care centers, our sample reported mean and median enrollments of 63 and 50, respectively. Agencies in Tier 1 markets report mean enrollment of 41 versus 31 for agencies in Tier 2 markets. Interestingly, agencies rated 3 stars reported mean enrollment of 34 versus 54 for those agencies rated 0-2 stars.

To examine the impact of enrollment size on quality, we divided reporting agencies into three size categories: Small Agency = 6 to 25 children (n=95), Medium Agency = 26 to 75 children (n=31), and Large Agency = more than 75 children (n=29). Note that some of our sample did not report enrollment, or the reported enrollment was not consistent with other reported data, and we exclude these agencies from the analysis. We show the frequencies and star ratings for these size categories in Table 9b.

Six of seven agencies with a 0-star rating are categorized as small, however, more than 85 percent of small agencies are rated 3 stars. Only 68 percent of medium agencies are rated 3 stars, but of those not rated 3 stars, 9 out of 10 agencies are rated 2 stars. Overall, we cannot conclude from the available data that size has a predictable impact on quality.

Table 9a: Reported Enrollment by Provider Type, Star Rating, and Market Tier

	N	Mean	Median	Min	Max
Child care centers	81	62.7	50	8	261
Family child care homes	32	9.9	9	5	26
Group child care homes	42	12.3	12	5	18
3-star agencies	125	34.4	15	5	260
0-2 star agencies	30	53.5	27	7	261
Tier 1 markets	113	40.8	18	6	261
Tier 2 markets	42	30.8	19.5	5	148

Table 9b: Enrollment Categories Based on Size

	Small (25 or fewer children)	Medium (26 to 75 children)	Large (more than 75 children)
STAR Rating	N	N	N
0	6	0	1
1	1	1	0
2	7	9	5
3	81	21	23
Total	95	31	29

Excludes agencies where enrollment was not reported or reported enrollment was considered outlier data.

Table 10 presents key spending categories by size and star rating. Agencies rated 3 stars pay more per child in salaries and benefits (combined) at every size level than agencies rated 0-2 stars. For large agencies (more than 75 enrolled children), agencies rated three stars report spending \$5,739 per child in salaries and benefits versus \$3,603 per child for agencies rated 0-2 stars. For small agencies (less than 26 children enrolled) 3-star rated agencies pay \$4,533 per child on salaries and benefits (combined) versus \$3,910 per child for lower-rated providers.

The median reported midpoint teacher salary ranges show similar trends, but the reported differences are smaller. For example, for the largest agencies, *median* midpoint teacher salary for 3-star rated respondents is \$25,674 versus \$25,000 for agencies rated 0-2. We present *mean* midpoint salary in the table. The means should be interpreted with caution because a few agencies rated 0-2 stars report paying teacher salaries greater than \$100,000 per year, causing the mean to be significantly larger than median values in some categories. For example, the median midpoint salary for large agencies rated 0-2 stars is \$25,000 which is consistent with salaries reported by other agencies throughout the sample, but the mean midpoint salary is \$46,001.

Small agencies spend the least per child on salaries and benefits (combined). For agencies rated 3 stars, small agencies pay on average \$4,533 per child in salary and benefits versus \$6,494 and \$5,739 for medium and large agencies, respectively. We should note, however, that an involved owner may not be paid any salary (compensation of the owner(s) may be through distribution of net profits), and this may have a larger per-child impact on reported salary of smaller agencies versus larger ones.

Overall, the reported salary ranges by size indicate a competitive market for child care teachers and little variation by size. Agencies rated 3 stars spend more per child on salary and benefits (combined) than the agencies rated 0-2 stars, and the large and medium-sized agencies rated 3 stars generally pay higher salaries and benefits than the smaller agencies, though smaller providers may pay themselves with profits and not salary expense.

We present average and per-child expenditures for training and professional development, but we urge caution in interpreting the reported figures. The small sample size and wide variation in reported amounts produce large differences between mean and median values and the calculated per-child averages are insignificant in relation to total expenditures (range per child across all categories is \$19 - \$125).

Table 10: Selected Expenditures by Star Rating and Enrollment Size

Small Agencies (total enrollment < 26 children)						
	0 to 2 STARs			3 STARs		
	Mean	Median	Per child avg.	Mean	Median	Per child avg.
Total salaries paid to officers and employees	\$68,525	\$61,500	\$3,644	\$61,568	\$39,232	\$4,451
Total benefits paid to officers and employees	\$5,641	\$0	\$266	\$1,589	\$0	\$82
Midpoint annual salary range for a teacher	\$22,100	\$21,000	\$1,499	\$28,871	\$26,350	\$2357
Training and professional development for teachers	\$1,058	\$175	\$75	\$508	\$0	\$43
Medium Agencies (26 to 75 total enrollment)						
Total salaries paid to officers and employees	\$247,664	\$273,502	\$4,854	\$267,042	\$208,643	\$5,975
Total benefits paid to officers and employees	\$4,398	\$0	\$81	\$20,118	\$360	\$519
Midpoint annual salary range for a teacher	\$37,465	\$25,390	\$783	\$31,910	\$26,500	\$705
Training and professional development for teachers	\$1,000	\$0	\$29	\$4,914	\$850	\$125
Large Agencies (more than 75 total enrollment)						
Total salaries paid to officers and employees	\$492,678	\$528,015	\$3,510	\$636,386	\$450,000	\$5,331
Total benefits paid to officers and employees	\$13,802	\$2,148	\$93	\$55,970	\$4,000	\$408
Midpoint annual salary range for a teacher	\$46,001	\$25,000	\$364	\$36,342	\$25,674	\$266
Training and professional development for teachers	\$4,900	\$3,500	\$54	\$2,697	\$1,500	\$19

Excludes agencies where enrollment was not reported or enrollment was considered outlier data.

For some child care agencies, volunteer hours are a significant source of labor. To see if the number of volunteer hours had a significant effect on quality, we expressed total volunteer hours for the year and compared the result for agencies rated 0-2 stars with agencies rated 3 stars. Of those 23 agencies that reported any volunteer labor, 3-star agencies reported mean hours of 223 versus only 103 hours for 0-2 rated agencies. However, the median number of volunteer hours for both groups was less than one hour per week. Mean voluntary hours are much greater than the median, suggesting a small number of agencies benefit from a significant amount of labor from unpaid volunteers (Table 11).

Table 11: Volunteer Hours by Star Rating

	Rating = 0 - 2 STARs		Rating = 3 STARs	
	Mean	Median	Mean	Median
Volunteer hours	103	20	223	30

Only 23 providers reported having volunteer hours.

5. Estimates of Total Expenditures

We report total expenditures per child by type of provider, market tier, and star rating in Table 12. Total expenses are lower for Tier 2 markets than for Tier 1, except for family home child care providers. Reported costs per child also generally decrease with the number of enrolled children, which is consistent with survey respondents generally reporting no salary for the services of owner-operators who are compensated with profits, as discussed above. We caution against using these reported totals as more than illustrative results because of the problems with inconsistent reported data and because several categories contain very few survey responses. Missing values in Table 12 indicate we did not have a single survey from that subsample; other subsamples had one or two responses. For these reasons, we use the provider cost of quality calculator (PCQC) discussed in the next section to better estimate total costs, both by number of enrolled children and by quality level.

Table 12: Average Per Child Total Expenses (Reported) by Provider Type, Star Rating and Tier

Provider Type	0 Stars		1 Star		2 Stars		3 Stars	
	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2
Centers	\$6,460	-	-	-	-	-	\$9,509	\$7,769
Family Homes	\$2,237	-	\$1,557	-	-	-	\$7,194	\$10,414
Group Homes	\$8,040	-	-	-	\$6,500	\$4,213	\$6,531	\$5,781

Missing values do not have survey responses.

6. PCQC Estimates of Total Expenditures

The PCQC is an online tool available to the public that uses a variety of government and other external data sources to estimate revenues and expenditures for child care providers. Users create hypothetical scenarios for each provider type, market tier, star rating, enrollment level, and mix of enrolled children (e.g., infant, toddler, preschool, afterschool).

The PCQC starts with “default” values that are derived from the state’s payroll records, cost of living data such as rent per square foot, housing prices, employer unemployment insurance premiums, and other sources. Users can adjust the default data to reflect their own estimates of those expenditures. For this study, we used the results from the survey to inform changes to the default values. Broadly, we divided survey responses by provider type and market tier and used either expenditure medians or averages reported by Tennessee providers to further tailor the PCQC output. Because we relied on survey data as much as possible to inform the PCQC, we chose to simulate the model provider in terms of care age groups. Surveyed child care centers are most likely to provide care to the combination of ages used in the center-based scenarios (infant, toddler, and preschool-aged children) in both the Tier 1 and Tier 2 counties. In contrast, fewer than five center-based survey respondents, all of whom were located in Tier 1 (urban) counties, indicated they provided care across all the subsidized age ranges, including school age

children. We exclude school-age care from our analyses because we had too few completed surveys from which to draw conclusions about the actual cost of care for this age group.

While our survey focused on providers' expenditures, the PCQC also takes into account revenue sources. We leverage information from Tennessee's child care market rate survey to model revenue and providers' ability to increase their prices with higher quality ratings, similar to how TDHS subsidies increase with quality rating scores. While we do provide information on tuition rates from our smaller survey below, we rely on data from the larger market rate survey in PCQC calculations. We also simulate market- and tier-based differences in proportion of subsidized enrollments based on information from the market rate survey to better model how subsidy rates affect providers' revenues.

See Appendix B for the PCQC default values, changes to those default values, and how we obtain the customized input values. We first discuss the PCQC estimates for child care centers, followed by group and family homes.

Child Care Centers

The most significant expenditure for any child care provider is salary expense, accounting for approximately 60 percent of total costs. We use state-mandated child-to-teacher ratios and hypothetical enrollment for each scenario to determine staffing levels (i.e., number of classroom teachers). The default teacher salaries far exceeded the amounts reported by respondents to the survey. The likely difference is that the PCQC default values assume a fully certified child care teacher such as those educators who are qualified to teach in public schools. The actual requirements to work in a child care center in Tennessee are lower. Most teachers do not have an associate or bachelor's degree, and therefore, the salary paid to these employees is lower—as was reported by survey respondents—than the salary levels assumed by the PCQC.

The PCQC calculates a 'baseline (i.e., 0-Star)' cost estimate, and allows the user to increase costs associated with their state's measures of quality (i.e., star rating). State quality ratings begin at 0 Stars (the base level of care) and increase as providers attain higher scores in the health, safety, and teacher-child interaction components of their quarterly facility evaluations.

Because more than 80 percent of our survey respondents are 3-star rated agencies, the median agency is rated at the highest level. We therefore use the reported median salary for the 3-star rated agency (by provider type) as the default 3-star rated salary. We reduce salaries by a fixed percentage for each level below 3. This is because we assume that centers offer higher salaries for higher-quality teaching staff or staff with more experience. Moreover, higher salaries may be correlated with longer hours worked and therefore more student-teacher interaction, which drives higher QRIS ratings. Further, we increase staffing ratios for 2- and 3-star rated facilities to simulate higher quality.

Another cost driver for centers is rent. We adjust rent defaults in the PCQC to better reflect Tier 1 and Tier 2 markets in Tennessee. The PCQC uses a state-wide average of \$13/sq. ft. for all counties; we use \$14.60/sq. ft.⁷ for Tier 1 markets and \$11/sq. ft. for Tier 2 markets. Another notable adjustment is the default value for food expenses. The PCQC assumes that the child care agency provides lunch each day, and the calculator estimates total per-child cost of food of over \$1,300 per year. Many providers in Tennessee do not provide lunch each day. We lowered per-child food costs plus food-related supplies to roughly \$500 per child, consistent with the results of the survey.

We input the median salary per teacher and other adjustments as described above, and the PCQC incorporates our hypothetical enrollment level and child age mix (e.g., infants versus toddlers) to generate an estimate of costs for a hypothetical child care center for a given enrollment level. We summarize total costs by age and salary and benefit costs per child in Tables 13a (Tier 1) and 13b (Tier 2) for child care centers.

We find that the salary estimates produced by PCQC are consistent with survey reported values from the survey. For example, total salaries (per child) for 3-star providers in Tier 1 markets are \$5,204 (Table 4) compared with PCQC total salaries (per child) of \$5,179 (Table 13a). Similarly, total salaries (per child) for 3-star providers in Tier 2 markets are \$4,199 (Table 4) compared with PCQC total salaries (per child) of \$3,844 (Table 13b).

Similarly, the total costs per child estimated by the PCQC are consistent with the survey data provided by centers. PCQC estimates cost per category of child (infant, toddler, pre-school). We calculate an average cost given the PCQC estimated enrollment mix. For 3-star centers in Tier 1 markets, estimated total per child cost from survey data is \$9,509 (Table 12) versus \$9,008 for the PCQC (Table 13a). For 3-star centers in Tier 2 markets, estimated total costs from survey data is \$7,769 (Table 12) versus \$6,898 for the PCQC (Table 13b).

⁷ We use the average commercial rent of Memphis and Chattanooga to reflect average rent for Tier 1 counties.

Table 13a:**Total Costs by Classroom Age and Total Salary and Benefits by Star Rating, per child (Tier 1)**

Total Costs by Age	0-Star	1-Star	2-Star	3-Star
Infant	\$13,390	\$13,768	\$14,194	\$14,454
Toddler	\$9,334	\$9,586	\$11,601	\$11,809
Preschool	\$6,089	\$6,240	\$6,415	\$6,519
Blended cost per child weighted by enrollment mix*	\$7,982	\$8,192	\$8,855	\$9,008
	0-Star	1-Star	2-Star	3-Star
Salary expense	\$4,418	\$4,602	\$5,076	\$5,179
Employment benefits	\$396	\$413	\$455	\$465
Total salary plus benefits (per child)	\$4,814	\$5,015	\$5,531	\$5,644

**For 0- and 1-star rated agencies, we assume enrollment capacity of 8 infants, 24 toddlers, and 40 pre-school children. For 2 and 3 star rated agencies, maximum toddler capacity is reduced to 20 but all other enrollment estimates are the same.*

Table 13b:**Total Costs by Classroom Age and Total Salary and Benefits by Star Rating, per child (Tier 2)**

Total Costs by Age	0-Star	1-Star	2-Star	3-Star
Infant	\$10,834	\$11,048	\$11,236	\$11,530
Toddler	\$7,620	\$7,763	\$9,228	\$9,463
Preschool	\$5,049	\$5,134	\$5,212	\$5,330
Blended per child cost weighted by enrollment mix*	\$6,335	\$6,448	\$6,735	\$6,898
	0-Star	1-Star	2-Star	3-Star
Salary expense	\$3,407	\$3,508	\$3,711	\$3,844
Employment benefits	\$309	\$318	\$336	\$348
Total salary plus benefits (per child)	\$3,716	\$3,826	\$4,047	\$4,192

**For 0- and 1-star rated agencies, we assume enrollment capacity of 8 infants, 12 toddlers, and 40 pre-school children. For 2- and 3-star rated agencies, maximum toddler capacity is reduced to 10 but all other enrollment estimates are the same.*

Family and Group Homes

The PCQC has a separate calculator to create hypothetical scenarios for agencies with small enrollments, such as family homes (maximum enrollment of 7 children) and group homes (maximum enrollment of 12 children). The calculator estimates total revenues and costs (per child) but does not estimate costs by age of the child (e.g., infants, toddlers). For these providers, many costs, such as rental space and utilities, that might vary by classroom capacity and therefore child age for larger centers are assumed to be fixed costs in the PCQC. For family homes, the PCQC assumes all services are provided by the owner-operator and compensated via profits, not salary. For group homes, we assume one assistant, with the owner-operator working full-time and being compensated via profits. Our staffing assumptions are based on the enrollment patterns and totals reported by our group and family home survey respondents, and state-required staffing for family and group homes of those sizes.

The PCQC offers a few dimensions on which the user can simulate quality for family and group home scenarios. Before providing detail on those elements, it is important to note how these differ from center-based scenarios. Staffing ratios—and therefore overall enrollment—is fixed for family and group homes. So, any changes we make to simulate increased quality do not have the ability to affect, for example, facility size requirements as in the case of centers or number of staff members employed.

The PCQC allows users to simulate quality for family and group homes based on the number of hours providers work—assuming that extra hours go to quality-related activities—and through increased expenditures on training, professional memberships and child assessment and developmental screening tools. Therefore, the total cost per child for these smaller providers varies much less based on quality level than for larger centers.

We present the PCQC estimated total cost per child for group and family homes in Table 13c. The estimated total costs per child for both group and family homes are generally lower than the estimates we obtain from survey data (see Table 12 above). The difference is primarily driven by the salary costs reported by the survey versus those assumed by the PCQC. Survey respondents in Tier 1 markets report paying median total salaries of \$33,745 for group homes and \$28,976 for family homes (untabulated). If we assume the median reported total salaries for family and group homes for the PCQC estimates, the PCQC will often result in net losses for the owner/operator. This result is unsustainable for the population, and therefore, we use the PCQC default for outside staffing levels. Accordingly, our PCQC results summarized in Table 13c provide a lower bound estimate of total costs for group and family homes.

Table 13c: Total Costs for Group and Family Home Providers by Star Rating and Tier, per child

	Tier 1			
	0 Star	1 Star	2 Star	3 Star
Group Home	\$4,465	\$4,486	\$4,516	\$4,558
Family Home	\$3,819	\$3,849	\$3,890	\$3,948
	Tier 2			
	0 Star	1 Star	2 Star	3 Star
Group Home	\$3,829	\$3,849	\$3,876	\$3,914
Family Home	\$2,785	\$2,811	\$2,845	\$2,893

Funding Gap – Difference between PCQC Estimated Costs and Subsidies

The PCQC-modeled per-child cost of care assumes 52 weeks of care, while TDHS subsidies are provided on a weekly basis. Tables 14b and 15c convert the estimated per child annual costs to a weekly cost for centers and group homes, respectively. We then compare weekly subsidy rates to estimates of average weekly costs, by tier and quality level, and present the differences for Centers (See Table 14c). We do not have enough survey data to estimate costs by age for the smaller family and group homes but do present weekly subsidy rates for these providers and our overall estimate of per child costs. See Tables 15a, 15b, and 15c. When estimated weekly costs per child exceed weekly subsidy rates, the difference is the funding “gap.” Absent parent copays, there are clear funding gaps for infant and toddler care for center-type providers, regardless of market tier. For example, a 3-Star Tier 1 Center faces a gap between modeled cost per infant of \$43 per week and \$22 per toddler (Table 14c). However, to remain afloat, cross-subsidization of care must occur—preschool-age subsidies are \$35 per week higher than the weekly cost. Thus, preschool enrollment, with lower staffing costs, help centers mitigate weekly funding gaps for infant and toddler care.

We again caution that because family and group home care providers make up a relatively small share of both the subsidized child care market in Tennessee and also our survey respondents, PCQC estimates of the cost of care for both these types should be considered lower bounds. Our cost estimates also do not assign any value to the labor provided by the owner-operators. However, if we compare the weekly costs estimates in Table 15c to the subsidy rate for the typical child in our cost scenarios—a toddler—group and family home care providers receive subsidies that appear to more than cover their weekly care direct costs.

Table 14a: Subsidy Rates by Age Group and Market for Centers (2021)

AGE GROUP	Tier 1				Tier 2			
	0 Stars	1-Star	2-Stars	3-Stars	0 Stars	1-Star	2-Stars	3-Stars
Infants	\$196	\$206	\$225	\$235	\$141	\$148	\$162	\$169
Toddlers	\$171	\$180	\$197	\$205	\$127	\$133	\$146	\$152
Preschool	\$133	\$140	\$153	\$160	\$105	\$110	\$121	\$126

Table 14b: PCQC Estimate Weekly Cost (Per Child) by Age Group and Market for Centers

	Tier 1				Tier 2			
AGE GROUP	0 Stars	1-Star	2-Stars	3-Stars	0 Stars	1-Star	2-Stars	3-Stars
Infants	\$258	\$265	\$273	\$278	\$208	\$212	\$216	\$222
Toddlers	\$180	\$184	\$223	\$227	\$147	\$149	\$177	\$182
Preschool	\$117	\$120	\$123	\$125	\$97	\$99	\$100	\$103

Table 14c: Estimated Gap between Subsidy Rates and PCQC Cost for Centers

	Tier 1				Tier 2			
AGE GROUP	0 Stars	1-Star	2-Stars	3-Stars	0 Stars	1-Star	2-Stars	3-Stars
Infants	\$62	\$59	\$48	\$43	\$67	\$64	\$54	\$53
Toddlers	\$9	\$4	\$26	\$22	\$20	\$16	\$31	\$30
Preschool	(\$16)	(\$20)	(\$30)	(\$35)	(\$8)	(\$11)	(\$21)	(\$24)

Table 15a: Subsidy Rates by Age Group and Market for Group Homes (2021)

	Tier 1				Tier 2			
AGE GROUP	0 Stars	1-Star	2-Stars	3-Stars	0 Stars	1-Star	2-Stars	3-Stars
Infants	\$171	\$180	\$197	\$205	119	\$125	\$137	\$143
Toddlers	\$149	\$156	\$171	\$179	111	\$117	\$128	\$133
Preschool	\$121	\$127	\$139	\$145	99	\$104	\$114	\$119

Table 15b: Subsidy Rates by Age Group and Market for Family Homes (2021)

	Tier 1				Tier 2			
AGE GROUP	0 Stars	1-Star	2-Stars	3-Stars	0 Stars	1-Star	2-Stars	3-Stars
Infants	\$149	\$156	\$171	\$179	\$111	\$117	\$128	\$133
Toddlers	\$141	\$148	\$162	\$169	\$105	\$110	\$121	\$126
Preschool	\$120	\$126	\$138	\$144	\$99	\$104	\$114	\$119

Table 15c: PCQC Estimate Weekly Cost (Per Child) for Group and Family Homes

	Tier 1				Tier 2			
	0 Stars	1-Star	2-Stars	3-Stars	0 Stars	1-Star	2-Stars	3-Stars
Group Homes	\$86	\$86	\$87	\$88	\$74	\$74	\$75	\$75
Family Homes	\$73	\$74	\$75	\$76	\$54	\$54	\$55	\$56

7. Tuition

We also examine weekly tuition fees to gain a better understanding of the relation between tuition and quality. Table 16 presents descriptive statistics for tuition for the various age groups for agencies that received 0-2 stars compared to agencies that received 3 stars. We focus on median reported tuition. Tuition is highest for the infant group, with median per child tuition of \$175 and \$160 for the 0-2 star rating agencies and 3-star rating agencies, respectively. Tuition is the lowest for school-aged children.

Table 16: Weekly Tuition Per Child by Age and by Star Rating

AGE GROUP	Rating = 0 - 2 STARs					Rating = 3 STARs				
	N	Mean	Median	Min	Max	N	Mean	Median	Min	Max
Infants	20	\$166	\$175	\$81	\$235	20	\$166	\$160	\$2	\$350
Toddlers	24	\$154	\$153	\$81	\$220	24	\$154	\$150	\$4	\$325
Preschool	24	\$152	\$145	\$81	\$370	24	\$147	\$150	\$1	\$285
School-age, out of school	14	\$80	\$70	\$40	\$150	14	\$81	\$75	\$2	\$200
School-age, in school	16	\$110	\$100	\$85	\$150	16	\$118	\$120	\$25	\$175

Excludes agencies reporting \$0 rates.

8. Impact of COVID

As expected, COVID had a much smaller impact on child care agencies in 2021 versus 2020. Roughly two-thirds of the sample reported shutting down at some point during 2020 because of COVID restrictions, but that share dropped to approximately 43 percent in 2021. For those reporting closure, agencies in Tier 1 counties markets shut down for two weeks longer (median 4 weeks), on average, than agencies in Tier 2 markets (median two weeks).

We also asked the agencies if their enrollment, revenues and/or expenses increased, decreased or stayed about the same in 2021 versus 2020. Almost 35 percent of agencies report enrollment decreases, and 38 percent report their revenues declined year over year. Of those that reported declines in enrollment, about 70 percent report that enrollment declined by at least 15 percent, and 37 percent report declines greater than 25 percent. The declines in enrollment coincide with a time period when many employees are allowed to work from home (partly or entirely), and it is possible that fewer families need daycare and/or need it less often. It is also interesting that although revenues and enrollment dropped for more than a third of our sample, only 8 percent of respondents report a decrease in expenses.

9. Conclusion

We examine 178 child care agencies from across the state of Tennessee from a population of agencies that participate in the Quality Rating and Improvement System (QRIS). We asked survey respondents to provide financial and other information about their operations to examine the relationship between expenditures and quality, as reflected by star rating. As described more fully above, this presents a number of practical difficulties. Many child care providers are home-based businesses that provide care to a small number of children. Other agencies are associated with non-profits and receive free or heavily subsidized rental space and other operational support. Furthermore, many respondents' expertise is in child care rather than finance and they may not categorize expenditures consistent with other agencies or our expectations. Other respondents provided data that are internally inconsistent or clearly erroneous. The data are not audited or otherwise verified, and we can only analyze what is reported in the surveys. All of these factors make drawing firm conclusions about the relationship between costs and quality difficult and might obscure trends that do exist.

However, we present a number of interesting findings, and the relationships that are evident in the data are consistent with expectations in a number of cases. As expected, the agencies rated 3 stars pay more in salary and benefits per child than agencies rated less than 3 stars, consistent with QRIS standards for increased child-teacher interaction for higher ratings. We also find a small difference in median midpoint teacher salary between 3-star rated agencies (\$26,400) and agencies with 0-2 star ratings (\$24,750). In addition, the data show that agencies located in urban counties, and higher cost-of-living areas such as in the Nashville metropolitan region, offer higher salaries to attract the needed employees. Overall, the results indicate a competitive state-wide employment market for child care employees, with some evidence that higher-rated agencies pay more in overall salaries, and more per educator, although the differences are relatively small.

For expenses other than salary, such as rent, food, and classroom supplies, we also find that 3-star rated agencies spend more per child than agencies rated with less than 3 stars. We do not find significant differences in rating by grand division or by tier.

The Tier 1 market is comprised of all Tennessee counties in either the top 20 for population or top 20 for per-capita personal income. As expected, Tier 1 markets generally report higher salary and benefit expense and higher rent expense, consistent with a higher cost of living in these counties. Providers in all markets report spending similar amounts for food and food supplies and educational supplies.

Because of the small sample size and difficulty in obtaining consistent/reliable data from survey respondents, we use the PCQC to augment our survey findings. Our total cost estimates from the PCQC for child care centers are very similar to those reported by survey respondents and provide some assurance that the cost analyses presented are reasonable. The PCQC has

different assumptions for the small child providers, and we present both survey and PCQC cost estimates to provide lower and upper bound estimates.

The goal of this study is to examine the relationship between child care expenditures and quality of care as measured by the state's star rating. More than 80 percent of our sample is rated at 3 stars and only 8 agencies that completed the survey are rated 0 stars. The overall exemplary ratings of the agencies in our sample, combined with a relatively small sample size, created practical difficulties in finding statistically significant relationships between spending and quality.

Funding:

This project is funded through an agreement with the Tennessee Department of Human Services and the University of Tennessee, Social Work Office of Research and Public Service and Boyd Center for Business and Economic Research.

Approved by the Tennessee Department of Human Services on September 30, 2023.

Appendix A: Quality Care Survey Instrument

FACILITY CHARACTERISTICS

1. Is the child care agency operated independently or is it part of a franchise?
 - a. Operated independently (**Instructions: If part of a church or other religious institution, the child care agency is considered independent**)
 - b. Franchise
 - c. Other
2. Is the space where the child care agency operates owned, rented or leased, or the space provided free of charge?
 - a. Commercial property is owned by the child care agency.
 - b. Commercial property is rented or leased by the child care agency.
 - c. Child care is operated out of a personal residence.
 - d. Property is provided free of charge
 - e. Other. Please explain. _____
3. If property is rented or leased and the child care agency is associated with a church or other charity, is the rent charged to the child care agency:
 - a. Market rate
 - b. Reduced rate
 - c. Provided at no cost to the child care agency.
4. Estimate the size of the child care facility (heated and cooled) in square feet. If the child care operations occupy only a portion of a larger structure, such as a personal residence or rooms in a church, estimate the indoor space used for daycare operations. _____ sq. ft.
5. Does the child care agency operate during nontraditional hours? (**Instructions: Traditional hours are defined as 6am-6pm Monday through Friday**).

DETAILS ABOUT CARE LEVELS IN 2021

6. Please identify your child care agency's classroom capacity, enrollments, and WEEKLY private pay (unsubsidized) rates in 2021 for each of the following care levels? (**Instructions: Please do not report any Child Care Certificate Program rates. Enter a 0 if the agency did not offer child care for a particular age group. If the rate is only available as a monthly or daily rate, please convert it to a FT-Weekly rate using the formula provided below. Full-time = 20 or more hours per week; Part-time = less than 20 hours per week. If you bill monthly divide your monthly rate by 4.33 to convert to a weekly rate. If you bill by the day, multiply your daily rate by 5 to convert to a weekly rate. Enter "zero" if there were no enrollments/vacancies or you did not serve that age range.**)

Care Level	# Classrooms per Care Level	# Capacity per Care Level	# Full-Time Child Enrollments	# Part-Time Child Enrollments	Full-Time Child Rate	Part-Time Child Rate
Infants (6 weeks through 12 months)					\$	\$
Toddlers (thirteen (13) months through thirty (30) months of age)					\$	\$
Preschool (at least thirty-one (31) months of age and who has not entered kindergarten.)					\$	\$
School-Age In (Before/After School)					\$	\$
School-Age Out					\$	\$

PERSONNEL

7. Please enter your child care agency's total number of paid staff in 2021.
 - a. # Paid Full Time _____
 - b. # Paid Part-Time _____
 - c. Were any these positions vacant for an extended period (90 days or more) during 2021?
 - d. **Logic: If yes**, how many? _____ #

8. Please summarize your child care agency's classroom program staff based on the **primary** care level in 2021?

Care Level	# Full-Time (30 hrs+)	# Part-Time	# with no more than a high school diploma or equivalent?	# with no more than an Associate degree?	# with no more than a Bachelor's degree?	# with a Master's degree or higher?	Minimum Annual Salary Range	Maximum Annual Salary Range
Infants (6 weeks through 12 months)							\$	\$
Toddlers (thirteen (13) months through thirty (30) months of age)							\$	\$
Preschool (at least thirty-one (31) months of age and who has not entered kindergarten.)							\$	\$
School-Age In (Before/After School)							\$	\$
School-Age Out							\$	\$
Mixed Care Levels							\$	\$

9. Please summarize your child care agency's non-classroom program staff in 2021?

Care Level	# Full-Time (30 hrs+)	# Part-Time	# with no more than a high school diploma or equivalent?	# with no more than an Associate degree?	# with no more than a Bachelor's degree?	# with a Master's degree or higher?	Minimum Annual Salary Range	Maximum Annual Salary Range
Administrators (Ex. Directors, assistant directors, owners)							\$	\$
Substitute Educator Services							\$	\$
Food Services							\$	\$
Transportation							\$	\$
Facilities							\$	\$
Other							\$	\$

10. Did your child care agency use volunteers or other unpaid workers in 2021?
- a. No
 - b. Yes
11. **Logic: If yes**, please estimate the total hours of volunteer/unpaid workers: _____ hours
12. If the owner(s) of the facility is compensated by earnings instead of wages, about how many hours did the owner(s) spend working at or for the child care agency in 2021? Full time would be about 2,000 hours. _____ hours

EXPENSES

13. Please refer to your 2021 (or most recently filed) tax return to complete the following table regarding expense. Please choose one:

- ▶ IRS Form 1120
- ▶ IRS Form 1120S
- ▶ IRS Form 990
- ▶ IRS Form 1040
- ▶ IRS Form 1065
- ▶ I prefer to use my financial system and/or I do not know which form is filed.

Expense Amount	Corresponding Tax Return Form and Line Numbers				
<i>Logic:</i>	<i>If you file a Form 1120 (Corporation), refer to</i>	<i>If you file a Form 1120S (S Corporation), refer to</i>	<i>If you file a Form 990 (Nonprofit), refer to</i>	<i>If you file a Form 1040 (Individual/Sole Proprietorship), refer to</i>	<i>If you file a Form 1065 (Partnership), refer to</i>
a. Total salaries paid to officers and employees in 2021	Page 1, add lines 12 and 13.	Page 1, add lines 7 and 8.	Page 10, Part IX, add lines 5, 6 and 7.	Schedule C, add lines 11 and 26.	Page 1, add lines 9 and 10.
b. Total employee benefits, including amounts paid for employer-provided health insurance and retirement contributions	Page 1, add lines 23 and 24.	Page 1, add lines 17 and 18.	Page 10, Part IX, add lines 8 and 9.	Schedule C, line 14.	Page 1, add lines 18 and 19.
c. Total rent or lease payments	Page 1, line 16.	Page 1, line 11.	Page 10, Part IX, line 16.	Schedule C, line 20b	Page 1, line 13.
d. Total depreciation expense	Page 1, line 20.	Page 1, line 14.	Page 10, Part IX, line 22	Schedule C, line 13.	Page 1, line 16a.
e. All other expenses not listed above.					
f. Total expenses (add lines 13a-13e)	Page 1, line 27.	Page 1, line 20.	Page 10, Part IX, line 25.	Schedule C, line 28.	Page 1, line 21.

OTHER EXPENSE DETAILS

14. How much was paid for the following classroom expenses in 2021 ? If you do not know the exact amount, an estimate is fine. **(Instructions: Please do not include any depreciation expenses here.)**

Expense Types	\$ Annual Cost
Classroom supplies, materials, and educational curriculum for children	
Classroom furniture	
Food and food service supplies (paper towels, utensils) for children	
Training, consultants, and/or professional development for educators	
Other	

15. How much was paid for the following non-classroom expenses in 2021? If you do not know the exact amount, an estimate is fine. **(Instructions: Enter the annual cost (or estimate) in the first column and then check the applicable column whether the costs were paid directly or indirectly. If you check "no cost/do not have", please enter an annual cost of \$0.)**

Expense Category	\$ Annual Cost	Paid Directly	Paid Indirectly, (Ex. with rent or lease, etc.)	No Cost/Do Not Have
Utilities (Electric, Water, Gas)	\$			
Sanitation/Trash/Recycling	\$			
Telecommunications, i.e., phone, internet, television	\$			
Transportation	\$			
Insurance	\$			
Maintenance, repairs, cleaning	\$			
Fees and permits, and misc. taxes	\$			
Office equipment and supplies, including software	\$			
Advertising	\$			
Bookkeeping/Accounting/Payroll Services	\$			
Security Monitoring Services (Excluding Equipment)	\$			

16. **Logic: If utilities are not paid directly,** About what portion of the building is used by the child care agency? Would you estimate it to be one-tenth, one-fourth, or one-half, or some other amount? _____

17. **Check all that apply.** What benefits are paid by the child care agency for staff members?

- a. Health Benefits:
 - 17.a.1. Medical
 - 17.a.2. Dental
 - 17.a.3. Vision
 - 17.a.4. Family Plan
 - 17.a.5. Employee Assistance Program
 - 17.a.6. Other
- b. Retirement contributions
- c. Scholarship and/or staff discount for their children
- d. Tuition assistance for professional development
- e. Paid vacation
- f. Paid sick leave
- g. Other – please specify type: _____
- h. None of the above

COVID-19

18. Were you closed down at any point during 2021 due to COVID-19 pandemic?

- a. No
- b. Yes

19. **Logic: If yes,** Approximately how many weeks were you close due to COVID-19 in 2021?

_____ weeks

20. During 2021, did your enrollments decrease, increase, or remain about the same compared to 2020?

- a. Our enrollments decreased.
- b. Our enrollments increased.
- c. Our enrollments remained about the same (plus or minus 5%).

21. **Logic: If our enrollments decreased,** Which of the following statements best describes your decreased enrollments during the COVID-19 pandemic?

- a. Our enrollments were 5-15% lower in 2021, compared to 2020.
- b. Our enrollments were 16-25% lower in 2021, compared to 2020.
- c. Our enrollments were more than 25% lower in 2021, compared to 2020.

22. **Logic: If our enrollments increased,** Which of the following statements best describes your increased enrollments during the COVID-19 pandemic?

- a. Our enrollments were 5-15% higher in 2021, compared to 2020.
- b. Our enrollments were 16-25% higher in 2021, compared to 2020.
- c. Our enrollments were more than 25% higher in 2021, compared to 2020.

23. Compared to revenue in 2020, did your total revenues during 2021 decrease, increase, or remain the same?

- a. Our revenues decreased.
- b. Our revenues increased.
- c. Our revenues remained the same (plus or minus 5%).

24. **Logic: If our revenues decreased,** Which of the following statements best describes your decreased total revenues during 2021?

- a. Our revenues were 5-15% lower in 2021, compared to 2020.
- b. Our revenues were 16-25% lower in 2021, compared to 2020.
- c. Our revenues were more than 25% lower in 2021, compared to 2020.

25. **Logic: If our revenues increased,** Which of the following statements best describes your increased total revenues during 2021?

- a. Our revenues costs were 5-15% higher in 2021, compared to 2020.
- b. Our revenues costs were 16-25% higher in 2021, compared to 2020.
- c. Our revenues were more than 25% higher in 2021, compared to 2020.

26. Compared to total operating costs in 2020, did your total operating costs during 2021 decrease, increase, or remain the same?

- a. Our operating costs decreased.
- b. Our operating costs increased.
- c. Our operating costs remained the same (plus or minus 5%).

27. **Logic: If our operating costs decreased**, Which of the following statements best describes your decreased total operating costs during 2021?

- a. Our operating costs were 5-15% lower in 2021, compared to 2020.
- b. Our operating costs were 16-25% lower in 2021, compared to 2020.
- c. Our operating costs were more than 25% lower in 2021, compared to 2020.

28. **Logic: If our operating costs increased**, Which of the following statements best describes your increased total operating costs during 2021?

- a. Our operating costs were 5-15% higher in 2021, compared to 2020.
- b. Our operating costs were 16-25% higher in 2021, compared to 2020.
- c. Our operating costs were more than 25% higher in 2021, compared to 2020.

29. During 2021, did you receive any grant or loan funding offered due to the COVID-19 pandemic?

- a. Yes, check all that apply
 - 29.a.1. TDHS/Disaster Recovery Grant
 - 29.a.2. Federal Payroll Protection Program
 - 29.a.3. Other grant/loan _____
- b. No

30. **Logic: If yes**, how much total funding did you receive? If you do not know the exact amount, an estimate is fine. \$_____

Thank you very much for your assistance. Please provide the name and contact information for the person we should speak to if we have questions about the responses.

Please indicate if you prefer the \$100 gift card incentive be sent electronically or via U.S. Postal Service.

- a. Electronically
- b. U.S. Postal Service. Please provide the address. _____

Appendix B: PCQC Input Values and Assumptions

Provider Cost of Quality Calculator Data Collection Template for Center Scenarios

Child Group Information			
Classroom Information		Default value(s) provided by calculator	Values used by BCBER (darker green indicates a value that changes with quality rating)
Infants		—	Used most common mix of ages for centers in survey: Infants, Toddlers and Preschool
Toddlers		—	For Tier 1, 1 classroom of Infants, 2 each of Toddlers and Preschool.
Preschool		—	For Tier 2, 1 classroom of each age group
Child to staff ratio		—	4 Infants to 1 Adult, maximum group size of 8; 6 Toddlers to 1 Adult maximum group size of 12; 11 Preschoolers to 1 Adult, maximum group size of 20 (from DHS provided staffing ratios)
		—	*staffing ratios decrease with star rating increases to reflect increased staff interactions associated with higher quality ratings
Enrollment Efficiency	Center-Level	85%	95% used; the PCQC applies enrollment inefficiency equally across care types, but non-infant care is where the enrollment inefficiencies occur according to survey data (infant classrooms are typically full). Meanwhile, infant care per child is ~45% more expensive than toddler care, and more than double the cost per child of preschool care. Set enrollment inefficiency to 95% to compensate.

Personnel Costs

Default

Director Salary	Per Staff Member	\$45,900/\$58,407	Because the majority of centers are 3 star rated, begin with median administrator salary by market tier from survey, decrease by 2% when simulating quality rating decrease to 2 stars, and from 2 to 1 star, decrease by 4% going from 1 to 0 stars.
Education Coordinator Salary	Per Staff Member	\$45,900/\$58,407	Same as survey director salary (and changes based on quality detailed above) because PCQC defaults are same. *Note that for Tier 2 facilities, which are smaller on average than Tier 1 facilities, this position is set to part-time.
Administrative Assistant	Per Staff Member	\$15,080/\$19,189	Begin with state minimum wage on full-time basis for 0 stars; increase by 4 % going from 0 to 1 star, +4% for 1 to 2 stars and 2% for 2 to 3 stars. *Note that for Tier 2 facilities, which are smaller on average than Tier 1 facilities, this position is set to part-time
Additional Staff Salary	Per Staff Member		n/a
Classroom Teacher Salary	Per Staff Member	\$32,680/\$41,585/\$50,490	Because the majority of centers are 3 star rated, begin with median midpoint educator salary by market tier from survey, decrease by 2% when simulating quality rating decrease to 2 stars, and from 2 to 1 star, decrease by 4% going from 1 to 0 stars.
Teacher Assistant Salary	Per Staff Member	\$23,780/\$30,260/\$36,740	Use values from educator salary, multiplied by the ratio of PCQC default salary values for assistant teacher to classroom teacher salaries (23780/32680=.727662179)
Substitute Hourly Wage	Per Hour	\$7.25	state minimum wage
Workers Compensation	Rate	1.20%	State requires worker's compensation insurance be purchased. NCCI administers TN's worker's compensation insurance plan. Rates can be found at https://www.insurors.org/assets/pdf/Pages+from+NCCI+Assigned+Risk+Rates+3-1-22/ (code 8869 for child care)
Unemployment Rate	Rate	2.00%	Average premium rate from the Tennessee Unemployment Insurance Model
Unemployment (Maximum Basis for Annual Wages)	Base	\$19,924	Current UI wagebase
Disability Rate	Rate	1.00%	State does not require facilities to carry disability insurance
Disability Max	Max	\$100,000	State does not require facilities to carry disability insurance
Health Insurance	Per Staff Member		Only 1/4 of providers report providing HI
Annual Paid Time Off (Hours per Staff)	Hours Per Staff Member	40	Begin with 40 hours per staff member; increase to simulate increases in quality.
Annual Teaching Staff Training	Hours Per Staff Member	20 hours	Statutory minimum is 12; increase to simulate increased quality through training above mandatory minimum.
Training Fees and Background Checks	Per Staff Member		State provides free minimum training and pays for background checks; STAR 2 and 3 values are median and 75th percentile from survey respectively.
Percent Additional Teaching Staff Time		20%	Not a survey question; use PCQC default

Non-Personnel Costs

PCQC Default			
Food & Food Prep	Per Child	\$1,376	
Kitchen Supplies	Per Child	\$53	Not a survey question; use PCQC default
Classroom Supplies	Per Child	\$139	Survey median seemed relatively low (\$96); use PCQC default
Education Supplies	Per Child	\$111	Not a survey question; use PCQC default
Office Supplies& Equipment	Per Child	\$111	75th percentile from survey by tier
Medical Supplies	Per Child	\$56	Not a survey question; use PCQC default
Insurance	Per Child	\$118	survey median
Advertising	Per Child	\$21	Survey median was 0; use PCQC default
Child Assessment Tool	Per Child	\$25	Not a survey question; use PCQC default
Developmental Screening Tool	Per Child	\$12	Not a survey question; use PCQC default
Curriculum	Per Child	\$35	Not a survey question; use PCQC default
Additional Per Child Cost	Per Child		
Square Feet (average per classroom)	Square Feet	1280	Statutory minimum is 30 sq ft per child. Using 75 square feet to include non-classroom spaces. Square footage used is based on max enrollment by tier scenario/ number of classrooms to yield average number of students per classroom x 75 sq feet per student. Tier 1: 1125; Tier 2 1000 square feet per classroom.
Rent, Lease, or Mortgage	Per Square Foot	\$13/sq ft	National Association of Realtors reports costs for commercial retail space per square foot (values from 2021Q4): Nashville \$25.3, Knoxville \$16, Memphis \$14.6 Chattanooga \$14.6 for retail space per square foot 2021 Q4. Using Memphis/Chattanooga costs because some of the Tier 1 counties tend toward much more rural than e.g. Nashville MSA counties. Jackson, Johnson City and Bristol MSAs values were \$13.7, \$13.1 and \$11 for retail space per square foot. Used a value of \$12 per square foot because these smaller MSAs should better reflect Tier 2 better.
Utilities	Per Square Foot	\$4/sq ft	Survey questions separated out sanitation and utilities, while calculator groups them together. Median cost per square foot for utilities alone was \$3.3, so using default because it seems reasonable for the combination of sanitation and utilities.
Building Insurance	Per Square Foot	\$2/sq ft	Not a survey question; use PCQC default
Maintenance, Repair, and Cleaning	Per Square Foot	\$4/sq ft	75th percentile from survey by market tier to avoid 0s from skipped questions.
Additional Per Classroom Cost	Per Square Foot	n/a	n/a
Transportation	Center-Level	\$0	83% of survey respondents do not report having transportation costs
Telephone & Internet	Center-Level	\$4,818	75th percentile from survey by market tier to avoid 0s from skipped questions.

Audits & Legal Fees	Center-Level	\$3,212	75th percentile from survey by market tier to avoid 0s from skipped questions.
Licensing Fees and Permits	Center-Level	\$535	Survey median by tier
Professional Services and Fees	Center-Level	\$1,157	Not a survey question; use PCQC default
Accreditation Fees	Center-Level	\$625	Not a survey question; use PCQC default
Professional Membership and Subscriptions	Center-Level	\$70	didn't ask, going with default
Additional Per Site Cost	Center-Level		

Revenue Sources

Default

Weekly Subsidy Rate			
Classroom Age Group A	per child	n/a	Set by DHS
Classroom Age Group B	per child	n/a	
Classroom Age Group C	per child	n/a	
Weekly tuition rate		per child	n/a
% of Children Receiving Subsidies	Center-Level	n/a	median from MRS 2021 by market tier
Does this program charge the difference between subsidy and tuition?		No	Yes, because state law allows this
Uncollected Revenue Rate		3%	Not a survey question; assuming 0%

Provider Cost of Quality Calculator Data Collection Template for Family/Group Home Scenarios

Directions:

Enter data for your state or territory in the shaded boxes. In this template, default values are based on national average. In the PCQC tool, default values are based on typical values for your selected state or territory, and will be automatically used unless unique data are entered.

Child Group Information		
Labels for Child Age Groups	Default value(s) provided by calculator	Values used by BCBER (darker green indicates a value that changes with quality rating)
Infants	—	Used most common mix of ages for group homes in survey: Infants, Toddlers and Preschool
Toddlers	—	1 infant, 4 toddlers and 6 preschoolers (used median group home enrollments for Tier 1)
PreK	—	
Total Enrollment		11
Enrollment Efficiency	85%	92% (11/12 max)

Personnel Costs			
Default			
Hours Worked Per Week	Per Week, Owner	—	Using survey average over median for baseline because many providers defaulted to 2000 per year as survey suggested was a typical full-time position. However, PCQC guidance indicates that providers often work closer to 50 hours per week; increases across quality ratings assumes more hours go to quality improving activities.
Assistant Hourly Wage Rate	Per Hour, Assistants	\$7.25	State minimum wage
Assistant Hours Per Year	Hours	—	Same number of hours as owner. Any group home with children under 3 and over 3 must have 2 adults present.
Workers Compensation		1.2%	The state requires worker's compensation insurance to be purchased. NCCI administers TN's worker's compensation insurance plan. Rates can be found at https://www.insurors.org/assets/pdf/Pages+from+NCCI+Assigned+Risk+Rates+3-1-22/ (code 8869 for child care)
Unemployment Insurance Percentage		2.0%	Average premium rate from the Tennessee Unemployment Insurance Model
Annual Contribution to Health Insurance	Home Level	—	Most respondents indicate they do not provide
Additional Benefits	Home Level	—	Covered by TDHS

Non-Personnel Costs

Default

Advertising	Home Level	\$161	Average survey response for Tier 1; default from PCQC for Tier 2 because of low number of survey responses
Vehicle Expenses	Home Level	\$306	Not a survey question; use PCQC default
Depreciation of Equipment	Home Level	\$367	depreciation median in survey is 0, avg is \$1349, going with default
Insurance	Home Level	\$530	Median by tier
Interest	Home Level	\$144	Not a survey question; use PCQC default
Professional Fees	Home Level	\$733	Not a survey question; use PCQC default
Office Supplies	Home Level	\$222	Median by tier
Repairs and Maintenance for Child Care	Home Level	\$294	Medians were high due to low number of responses; using PCQC default
Supplies	Home Level	\$556	Median tier 1; average tier 2
Food and Food-Related Supplies	Home Level	\$6,881	Median by tier
Telephone & Internet	Home Level	\$1,071	Median by tier
Training/Professional Development	Home Level	\$278	For Tier 1: begin with midpoint between 3-star median and 75th percentile for Tier 1, decrease by 25% star rating decreases. For Tier 2: begin with median and increase by 25% as star rating increases.
Professional Membership Dues	Home Level	\$122	Not a survey question; use PCQC default; increase by 25% with each increase in star rating.
License and Permits	Home Level	\$118	Median by tier
Additional Annual Expense	Home Level		
Child Assessment Tool	Per Child	\$200	Not a survey question; use PCQC default (+25% for each increase in quality rating)
Developmental Screening Tool	Per Child	\$92	Not a survey question; use PCQC default (+25% for each increase in quality rating)
Total Space in Home	Per Child	sq. ft.	Survey asks for space used solely for child care. Double the median survey response by tier for whole home size.
Exclusively Used Space	Home Level	sq. ft.	Median survey response by tier
Partially Used Space	Home Level	sq. ft.	Assume 70 percent of space not solely dedicate to child care purposes is partially used in care.
Mortgage Interest, Property Taxes, & Depreciation or Rent/Lease	Home Level	\$11,074	The majority of survey respondents report no rent/or skipped the questions, and survey does not ask specifically about mortgages. Using median rent for those who report it as >1200 per year and median depreciation excluding 0s, by tier.
Homeowners/Renters Insurance	Home Level	\$792	Not a survey question; use PCQC default (multiply by ratio of home sizes for Tier 2 adjustment)
Utilities	Home Level	\$2,250	Median by tier
Cleaning Supplies, etc.	Home Level	\$294	Median by tier, excluding outliers
Repairs & Maintenance	Home Level	\$589	Survey medians seem high; using calculator default *ratio of home sizes by tier to adjust tier 2 values.

Revenue Sources		
Default		
Weekly Subsidy Rate		Set by DHS, using tier-specific values
Weekly Tuition Rate	—	50th percentile fees from MRS for 0 stars; 60th for 1 star, 70th for 2 stars, 75th for 3 stars
% of Children Receiving Subsidies	—	Median subsidization by tier for group homes from 2021 MRS
Does this program charge the difference between subsidy and tuition?	No	Allowed by law
Child and Adult Care Food Program (CACFP) Participation	No	No
Uncollected Revenue Rate	3%	

Provider Cost of Quality Calculator Data Collection Template for Family/Group Home Scenarios

Child Group Information

Labels for child age groups	Default value(s) provided by calculator	Values used by BCBER (darker green indicates a value that changes with quality rating)
Child Age Groups		Used most common mix of age enrollments from survey, and median enrollment numbers by age for family homes (1 infant, 3 toddlers, 3 preschoolers)
Enrollment Efficiency	85%	7/7 max=100%

Personnel Costs

Default			
Hours Worked Per Week	Per Week, Owner		Using average over the median for baseline because so many people defaulted to 2000 per year as the survey suggested, but the PCQC guide says that FCC providers often work closer to 50 hours per week; this is one of the fields we can manipulate for quality.
Assistant Hourly Wage Rate	Per Hour, Assistants	\$7.25	
Assistant Hours Per Year	Hours		Only 1 adult is required if no more than 4 children are under 2 years
Workers' Compensation Insurance Percentage		1.2%	TN requires worker's compensation insurance can be purchased. NCCI administers TN's worker's compensation insurance plan, rates from https://www.insurors.org/assets/pdf/Pages+from+NCCI+Assigned+Risk+Rates+3-1-22/ code 8869 for child care
Unemployment Insurance Percentage		2.0%	From TESIM APR
Annual Contribution to Health Insurance	Home Level		Most do not provide
Additional Benefits	Home Level		
Training and Background Checks Fees	Home Level		Covered by TDHS
Additional Staff Cost	Salary Owner Pays to Self		

Non-Personnel Costs

Default

Advertising	Home Level	\$161	Survey data quality is poor, use PCQC default
Vehicle Expenses	Home Level	\$306	Survey data quality is poor, use PCQC default
Depreciation of Equipment	Home Level	\$367	Survey data quality is poor, use PCQC default
Insurance	Home Level	\$530	Median non-zero Tier 1 value excluding \$9k outlier
Interest	Home Level	\$144	Not a survey question; use PCQC default
Professional Fees	Home Level	\$733	Not a survey question; use PCQC default
Office Supplies	Home Level	\$222	Survey data quality is poor, use PCQC default
Repairs and Maintenance for Child Care	Home Level	\$294	Survey data quality is poor, use PCQC default
Supplies	Home Level	\$556	Median survey value by tier
Food and Food-Related Supplies	Home Level	\$6,881	Median survey value by tier
Telephone & Internet	Home Level	\$1,071	Median survey value by tier
Training/Professional Development	Home Level	\$278	Using survey overall median by as 3-star facility value, decreasing by 25% as star rating falls
Professional Membership Dues	Home Level	\$122	Survey did not ask, use PCQC default, increase by 25% with star rating
License and Permits	Home Level	\$118	Median by tier
Additional Annual Expense	Home Level		
Child Assessment Tool	Per Child	\$200	Survey did not ask, use PCQC default, increase by 25% with star rating
Developmental Screening Tool	Per Child	\$92	Survey did not ask, use PCQC default, increase by 25% with star rating
Additional Per Child Cost	Per Child		
Total Space in Home	Per Home	sq. ft.	We asked about space for the business, so I am doubling the tier 1 median facility size
Exclusively Used Space	Home Level	sq. ft.	Median Tier 1 is 1100 excluding very low and very high outliers, so making 80% exclusive, 20 percent partial
Partially Used Space	Home Level	sq. ft.	70 percent of rest partial
Mortgage Interest, Property Taxes, & Depreciation or Rent/Lease	Home Level	\$11,074	The majority report no rent/failed to answer the question and we didn't ask about mortgages. Using mean rent for tier 1 of those who have rent listed >\$1000 annually (10800) and mean depreciation excluding 0s (3652)
Homeowners/Renters Insurance	Home Level	\$792	Did not ask, using default
Utilities	Home Level	\$2,250	Median Tier 1
Cleaning Supplies, etc.	Home Level	\$294	Poor quality data, using default
Repairs & Maintenance	Home Level	\$589	Median for Tier 1 is 1050... seems high, using default
Additional Shared Business Expenses	Home Level		

Revenue Sources		
Default		
Weekly Subsidy Rate		Set by DHS, using tier-specific values
Weekly Tuition Rate		50th percentile fees from MRS for 0 stars; 60th for 1 star, 70th for 2 stars, 75th for 3 stars by market tier
% of Children Receiving Subsidies		Median subsidization by tier for family homes from 2021 MRS
Does this program charge the difference between subsidy and tuition?	No	Yes
Child and Adult Care Food Program (CACFP) Participation	No	No
Uncollected Revenue Rate	3%	