









**Workforce of Today and Tomorrow:** 

# The Economics of Tennessee's Child Care Crisis

**KNOX COUNTY EDITION** 















# **Acknowledgements**

#### **About this Report**

This report was produced by Tennesseans for Quality Early Education (TQEE), with support from Clive Belfield, Ph.D., and Zogby Analytics.

Tennesseans for Quality Early Education is a nonpartisan coalition of Tennesseans fighting to ensure our children get the quality early care and education they need to power our state's future. Learn more at tqee.org.

Clive Belfield, Ph.D., is a Professor of Economics at the City University of New York and an economist with the Center for Benefit-Cost Studies in Education, University of Pennsylvania Graduate School of Education. He was commissioned by TQEE to produce The Economic Losses from Inadequate Child Care for Working Families in Tennessee on which this report is based.

Zogby Analytics was commissioned by TQEE to conduct a new survey of 2,507 Tennessee parents with a child under age 9. The survey is large-scale, new (administered June 23, 2022 through August 1, 2022), and has a sampling frame that matches the Tennessee demographics (race, age, family size) for households with a child under age 9, labor market conditions in Tennessee (earnings, sector of work), and regional populations. Based on a confidence interval of 95 percent, the margin of error for the 2,507 surveys is  $\pm$  2.0 percentage points. Analysis in this report is based on a subset of the statewide sample of parents or guardians working or actively looking for work who have at least one child under age 6 in Tennessee. This representative subset of Tennessee parents has a sample size of 1,297. In addition, oversampling by region was undertaken to ensure sample sizes were sufficient for precise estimates of the impacts by region. The regional analysis is based on the original sample and additional regional oversampling.

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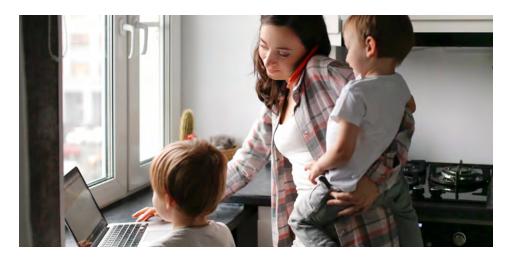


# **A Critical Support for Today's Workforce**

Pre-pandemic, child care was a growing crisis for families and our economy.1 Fast forward to today, Tennessee's working parents of young children continue to struggle to find and afford child care. For employers the situation is likewise acute, with the child care crisis exacerbating the growing workforce shortage.

The topline findings of a new study that examined adverse economic impacts of inadequate child care on Tennessee parents, businesses and taxpayers reveals the impact on Knox County: \$108 million annually in lost earnings and revenue. (See figure 1.)

The study, conducted by Tennesseans for Quality Early Education (TQEE), analyzed survey results from working parents across the state with children under age 6 to determine how child care challenges adversely affect workforce participation and productivity, and quantifies the resulting economic impact.<sup>2</sup>



#### Tennessee Child Care Crisis: **What Knox County Parents Revealed**

Thirty-nine percent of working parents reported employment disruptions due to inadequate child care, citing affordability, quality and access as major challenges. (See figure 2.) Many reported quitting, being fired or turning down a job offer or promotion as a result of child care problems. And 16 percent stopped seeking employment altogether. (See figure 3.)

The vast majority of Knox County parents need to work in order to put food on the table for their families, with 73 percent of those surveyed reporting they can't afford not to work. When families don't have the child care they need, it affects their household financial stability while also permeating the economy.

Working Knox County parents and their families are hit hardest, with annual reduced earnings of \$69.2 million. Employers in turn experienced losses of \$21.5 million from lower productivity, reduced revenue, increased hiring and retention costs and, ultimately, lost profits. Finally, the economic impact on families and employers resulted in lower consumption of taxable goods, lower profit margins, and ultimately reduced tax revenues of approximately \$17.4 million per year.

Fig. 1 Annual Economic Losses in Knox County Due to Insufficient Child Care:

### \$108 Million

BUSINES		SSES
\$17.4M	\$21.5M	\$69.2 MILLION
TAXPAYERS		WORKING PARENTS

Parents' most significant challenge finding child care:

44%	Quality
<b>60</b> %	Access
<b>55</b> %	Affordability

Over the last 6 months as a result of child care problems:

<b>18</b> %	Quit or were fired
24%	Went from full-time (FT) to part-time (PT) or couldn't increase from PT to FT
<b>27</b> %	Turned down a job offer or promotion
<b>16</b> %	Left the workforce

## **Laying the Early Education Foundation for Tomorrow's Workforce**

While child care is an essential support for today's workforce, it also has a significant impact on the development of our children.

Annually over the past decade or so, roughly 300,000 Tennessee children under the age of 6 have all available parents in the workforce.3 In other words, about two-thirds of Tennessee children may spend a substantial portion of the most consequential phase of human development – their first five years – in some form of child care. Therefore, the quality of that care will have profound implications for school readiness and, in turn, the workforce of tomorrow.

We tend to think of K-12 school as where children learn. In fact, the brain develops more in the first five years of life than any other time, with rapidly expanding neural connections "wiring" the brain for future learning, behavior and health.4 Regardless of the setting, whether at home with parents or in care with nonparental caregivers, it's the quality of care during the early years that determines whether a child's developing brain provides a weak or strong foundation for future learning and development.

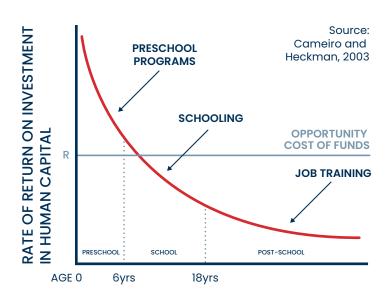


Fig. 4 Noble prize-winning economist James Heckman's graph depicts what he calls "the economics of human potential."

#### The Economics of Human Potential

Given the outsized role of early childhood in human development, it's not surprising that economists have documented a significant return on investment in highquality early care and education programs. Noble prizewinning economist James Heckman's graph depicts what he calls "the economics of human potential." (See figure 4.)

A broad set of skills – from language to "soft" skills – start developing in children's first months of life and form the foundation for acquiring additional higher-level skills later. For example, a child develops early language skills beginning in infancy, which help her learn to read a few years later, which in turn equips her to read to learn throughout her lifetime. Similarly, in their earliest years children develop "executive function" and "self-regulation", which enable skills like persevering on a task, solving problems, building relationships, and managing emotions and impulses. These skills are crucial to later school and work success.<sup>5</sup> As Heckman concludes in The Productivity Argument for Investing in Young Children, "[r]eturns are highest for investments made at younger ages" while "remedial investments are often prohibitively costly." 6

Economists Art Rolnick and Rob Grunewald at the Federal Reserve Bank of Minneapolis also found that investments in early childhood result in better academic outcomes; improved public health; less crime; and more educated, skilled workers. In calculating the economic impact of those societal benefits, they found a public return of up to 16 percent per year.

#### **Quality Child Care is Crucial**

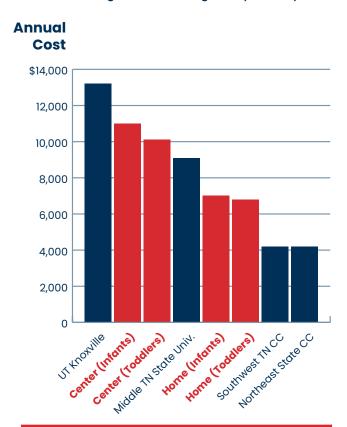
To capture those returns though, the child care must be high quality. Quality child "care," regardless of the setting, is in fact early education. It provides a safe, supportive environment that promotes the development of cognitive and soft skills necessary for success in school and beyond. It's interaction-driven, occurring through consistent, back-and-forth engagement with nurturing caregivers who skillfully engage children in ongoing, language-rich conversations and employ other developmentally appropriate care and teaching practices. In short, quality child care facilitates early learning, and as with K-12 education, depends on the educator.

# Why Can't Families Access the **Quality Child Care They Need?**

#### Quality Child Care is Unaffordable for Most Tennessee Families

In Tennessee, the average annual price of center-based care, irrespective of quality, is \$11,068 and \$10,184 for infants and toddlers respectively. For care in a home setting, the price is \$7,194 for infants and \$6,749 for toddlers.9 Child care costs more than most in-state college tuition. (See figure 5.)

Consider child care costs in light of Tennessee household income, and the affordability problem becomes clear. A third of Tennessee children under age 6 live in families with incomes below \$40,000, and nearly half with incomes less than \$60,000 annually.10 (See figure 6.) For reference, United Way's ALICE report calculates \$65,040 as a basic "survival" budget for a working family of two parents with an infant and preschooler.11



Source: % U.S. Census Bureau 30 25 20 15 10 5 20,000, 20,000 32,00,000 0 \$80K-120,000 5504-801000

Fig. 5 Child care costs more on average than in-state college tuition in Tennessee

Fig. 6 Nearly one-third of children under age 6 live in families with annual income below \$40,000



#### The Child Care Workforce Problem

Child care providers struggle with balancing competitive workforce compensation with affordability for parents. The sad result is that the industry is among the lowest paying in Tennessee (and across the nation), thus adversely impacting supply, stability and quality of the child care workforce. The average annual pay for child care workers in Tennessee is \$23,780 – less than that of parking attendants.<sup>12</sup> (See figure 7.) Such low pay hurts workforce recruitment, causes high turnover, and discourages people from pursuing a career in the industry.13 The child care industry was failing to meet the needs of families before the pandemic.14 Now given the stresses of the pandemic on the child care workforce and other options for better pay, it's no wonder the child care sector nationally has lost nearly 10 percent of its workforce compared to pre-pandemic levels.<sup>15</sup> The child care labor shortage is exacerbating the problem of simple access to child care, while low pay often results in lower quality care.

#### Child Care Supply Isn't Responding to Market Need

Largely because of the tension between child care workforce compensation and affordability for parents, the child care business model is difficult. Add to that the needs of many working parents for care during nontraditional hours, and the industry's challenge gets more complex. In many instances, even if parents could afford child care, the hours of operation may not align with parent work hours. A study by the Urban Institute found that 41.4 percent of children under age 6 in Tennessee have parents who work nontraditional hours (weekends, early mornings and evenings)16, yet most child care programs operate Monday through Friday and close their doors at 5:30 or 6 p.m.

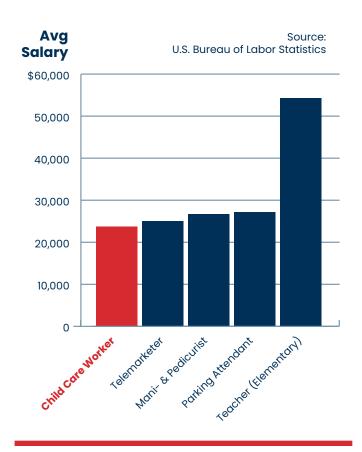
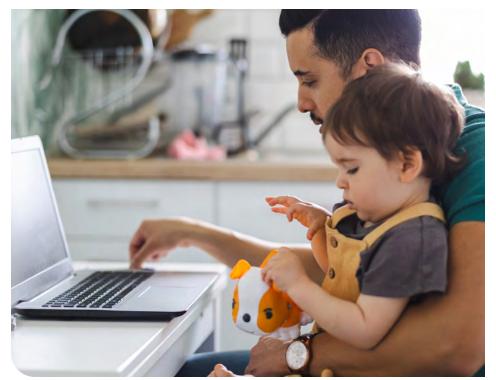


Fig. 7 Average annual earnings for child care workers vs. other occupations in Tennessee







## **Government and Business Investment in Child Care**

Market forces alone aren't sufficient to address the child care crisis. Neither are government or employer investments yet moving the needle substantially – but there is opportunity with both.

#### Government Financial Aid for Families is Limited, But New Strategies Are Emerging

The federal Child Care and Development Fund and Temporary Assistance for Needy Families programs, operated through the Tennessee Department of Human Services (TDHS), are the major sources of child care financial aid for low-income families. However, this tuition assistance reaches only a fraction of eligible families, and the tuition rates offered, while they have been increased recently, still aren't sufficient to allow providers to pay their workforce competitively. TQEE's parent survey indicated that only 8 percent of parents of children under age 6 are accessing this financial aid – and TDHS reports about 20,000 children from birth through age 12 participating in the programs.<sup>17</sup>

There are also about 20,000 children participating in federally funded Head Start programs across the state. And the statefunded Voluntary Pre-K (VPK) program operated by school districts is funded to serve roughly 18,000 children. These programs have limited availability, though wait lists and parent demand for them persist. Based on these numbers, one could reasonably estimate that in total, no more than about 20 percent of the 300,000 children under age 6 with all parents in the workforce receive some form of financial assistance for child care or early learning programs.

The Tennessee Child Care Task Force, though, will be releasing recommendations at the end of 2022 with guidance for new strategic investments which could make a good start toward improving access, affordability and quality of child care in the state. Furthermore, there is strong parent demand and advocate momentum for making the state's VPK program an option for more families.

#### **Employers are Stepping Up**

In today's challenging labor market, employers are seeking new ways to recruit and retain employees, and are increasingly adding child care and familyfriendly benefits as a solution.

Child care has become a top HR trend in 2022.19 And 56 percent of employers now offer some child care benefits in 2022, according to Care.com's "The future of benefits" report surveying 500 companies every year.20 By comparison, only 36 percent of companies offered child care benefits in 2019.

Employers are partnering with child care innovators. WeeCare for instance recently raised funding to scale child care benefits in partnership with employers and is working with many large companies such as JCPenney and Dollywood. Other innovators like Wonderschool, Kinside and Tootris are likewise partnering with employers to help solve their employees' child care challenges.<sup>21</sup>

Those businesses investing in child care benefits can reap rewards such as cost savings from more successful recruitment and retention of employees. TQEE's survey of working parents of young children revealed that child care and familyfriendly benefits are very important in their employment decisions. (See figure 8.)

Fig. 8 Very important as motivation to accept a new job offer (%):

<b>74</b> %	Flexible working days
<b>70</b> %	Flexible working hours
<b>50</b> %	Work from home option
<b>46</b> %	Financial assistance for child care
43%	Child care center

at worksite

#### Child Care Tri-Share

Neither employer-sponsored child care nor government support are alone the solution. The greatest opportunity to solve Tennessee's child care crisis is through partnerships where low- and middle-income families share the costs of high-quality care with employers and government.





## **Conclusion**

#### The triple bottom line for high-quality child care

High-quality child care, which enables adults to work while laying a foundation for children's success in school and beyond, is a powerful strategy for growing Tennessee's workforce of today and tomorrow simultaneously.

The economics are clear: investments in high-quality care for working families will result in significant returns to taxpayers, businesses and family pocketbooks.

It's time Tennessee made high-quality child care a priority strategy for building our state's human capital.











## References

- Tennesseans for Quality Early Education, "Want to Grow Tennessee's Economy? Fix the Child Care Crisis," September 2019, https://tqee.org/wp-content/uploads/2020/02/TQEE\_TN\_Final.pdf
- For details on the economic analyses, see the accompanying technical report: "Economic Losses from Inadequate Child Care for Working Families in Tennessee," December 2022, https://tgee.org/wp-content/uploads/2022/12/TQEE\_2022\_ Technical\_Report.pdf
- U.S. Census Bureau, B23008 Age of Own Children Under 18 Years in Families and Subfamilies by Living Arrangements by Employment Status of Parents, 2021 American Community Survey, 1-year estimates
- Harvard Center on the Developing Child, "Brain Architecture". Retrieved December 2022 from https://developingchild. harvard.edu/science/key-concepts/brain-architecture/
- James J. Heckman and Tim Kautz, "Hard evidence on soft skills," Labour Economics, August 1, 2012, https://www.ncbi.nlm. nih.gov/pmc/articles/ PMC3612993/
- James J. Heckman and Dimitriy V. Masterov, 2007, "The Productivity Argument for Investing in Young Children," Review of Agricultural Economics, American Agricultural Economics Association, Vol. 29(3) 446-493, 09.
- Arthur J. Rolnick and Rob Grunewald, "Early Childhood Development on a Large Scale," June 2005, Federal Reserve Bank of Minneapolis, https://www.minneapolisfed.org/article/2005/early-childhood-development-on-a-large-scale
- Harvard Center on the Developing Child, "Serve and Return". Retrieved December 2022 from https://developingchild. harvard.edu/science/key-concepts/serve-and-return/
- Permaul, B. (August 2021). Determining Child Care Market Rates in the State of Tennessee, FY2021. University of Tennessee, Boyd Center for Business and Economic Research. https://www.tn.gov/content/dam/tn/human-services/ documents/2020-2021%20Market%20Rate%20Survey.pdf
- 10. U.S. Census Bureau, ACS 1-Year Estimates Public Use Microdata Sample 2021
- United Ways of Tennessee, ALICE Report. Retrieved from <a href="https://uwtn.org/106.5/alice">https://uwtn.org/106.5/alice</a>
- 12. U.S. Bureau of Labor Statistics, Standard Occupational Classification Codes, May 2021. Retrieved on Oct 23, 2022, https:// data.bls.gov/oes/#/geoOcc/Multiple%20occupations%20for%20one%20geographical%20area
- 13. Jennifer Ludden, "Poverty Wages for U.S. Child Care Workers May Be Behind Turnover," National Public Radio, November 7, 2016, http://www.npr.org/sections/health-shots/2016/11/07/500407637/povertywages-for-u-s-child-care-workers-maybe-behindhigh-turnover
- 14. Tennesseans for Quality Early Education, "Want to Grow Tennessee's Economy? Fix the Child Care Crisis," September 2019, https://tqee.org/wp-content/uploads/2020/02/TQEE\_TN\_Final.pdf
- 15. U.S. Bureau of Labor Statistics, Employment, Hours, and Earnings from the Current Employment Statistics survey (national). Retrieved October 2022, https://beta.bls.gov/dataViewer/view/timeseries/CES6562440001
- 16. Urban Institute, Nontraditional hour care, 2021. https://www.urban.org/projects/state-snapshots-potential-demand-andpolicies-support-nontraditional-hour-child-care-30
- Email from Gwen Laasar, TN Department of Human Services, to Blair Taylor on Friday, December 2, 12:43pm CT
- 18. Tennessee Department of Education website, "Head Start". Retrieved October 2022 from https://www.tn.gov/education/ early-learning/head-start.html
- 19. Brett Farmiloe, The SHRM Blog, June 27, 2022. https://blog.shrm.org/blog/the-12-biggest-hr-trends-in-2022.
- 20. Care.com, "Future of Benefits Report 2022", https://www.care.com/business/resources/ebooks-and-reports/future-ofbenefits-report-2022/
- 21. Isabelle Hau, "The Workforce of Tomorrow Requires A Child Care System Fit for the Future", Forbes, August 2, 2022 https:// www.forbes.com/sites/isabellehau-1/2022/08/02/the-workforce-of-tomorrow-requires-a-child-care-system-fit-for-thefuture/?sh=lelf8d7a50cd