



QUALITY CHILD CARE IN COLORADO: A COST STUDY

PART 1: THE COLORADO COST OF CARE MODEL

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BACKGROUND

The child care system is broken. Families can't afford the high costs, child care providers can't sustain their businesses, and caregivers' wages are well below self-sufficiency standards.¹ The U.S. Department of Health and Human Services (HHS) considers child care affordable when it accounts for 7 percent or less of a family's income. Nationally, families spend an average of 13 percent of their income on child care at a time in their careers when they can least afford the expense.² In Colorado, families typically spend between 16-27 percent of their income on child care. Infant care is especially expensive, with quality center-based care costing 44 percent more annually than a year of public college tuition.³

The pandemic has only highlighted the fragility of the system. During the early days of the crisis, nearly 10 percent of Colorado's child care providers closed.⁴ In September 2020, five times as many women as men left the workforce nationwide⁵ and 1 in 3 who are still in the workforce say they are considering leaving.⁶ In Colorado, this trend impacted Black women the most.⁷ The availability of affordable, high-quality child care is a key driver in these decisions.

COST OF CARE | WHY DOES CHILD CARE COST SO MUCH?

Child care is labor-intensive. The primary cost of providing child care is salaries, which account for 52-63 percent of a provider's budget.⁸ Personnel costs are higher for programs serving babies and toddlers than preschoolers because child-staff ratios are lower for our youngest children. Other key costs are food, classroom materials, administrative expenses, rent, utilities, and benefits. Break-even margins are slim and dependent on market rates for tuition and subsidy structures for public funding. Because these tuition and subsidy structures can differ significantly by county, providers in some regions find it impossible to sustain their businesses, resulting in child care deserts across the state. Families either leave the workforce to care for children or rely on family members, friends, neighbors, babysitters or nannies (Family, Friend, and Neighbor or FFN care) to provide needed care. It has been estimated that 33-53 percent of children birth-age 5 receive FFN care.⁹

A child care desert is any census tract with more than 50 children under age 5 that contains either no child care providers or so few options that there are more than three times as many children as licensed child care slots.

– Center for American Progress

DEFINITIONS

Child care provider:

The business or entity delivering child care services

Caregiver/early educator:

The staff who provide care and education services to children birth-age 5

PUBLIC FUNDING SOURCES

- Colorado Child Care Assistance Program
- Colorado Preschool Program
- Denver Preschool Program
- Head Start/Early Head Start
- Early Intervention/Special Education (IDEA)

HOW CAN A COST MODEL HELP?

In 2021, the Bell Policy Center commissioned a cost of care model to understand the costs of providing quality care across the state. The goal was to create a Colorado-specific tool to help inform both policy and practice at the state and regional levels. The model was designed to help policy makers and administrators of public funding programs make decisions about subsidy rates, child care policies, and the use of public dollars that can sustain and grow high quality child care in Colorado.

Colorado is on the verge of several developments within the early care and learning sector that make this an ideal time to rethink how we pay for child care. In November 2020, Colorado voters passed Proposition EE, which will fund at least ten hours per week of universal preschool for all 4-year-olds, beginning in 2023. In 2021, the legislature passed and the Governor signed HB21-1403, which created a new Department of Early Childhood. Nationally, legislation is being drafted that will create the largest investment in early care and education in history, including funding for child care and universal preschool for 3- and 4-year-olds. These unprecedented opportunities require a robust system of high-quality early care and education to meet the potential demand. Modeling different cost, revenue, enrollment, quality, and wage scenarios will be critical to making sound decisions.

COLORADO COST OF CARE MODEL

RESEARCH BASIS

The cost of care model draws on years of national research¹⁰ and more recent statewide data collection to develop unique regional and local data estimates. Child care cost researcher Andrew Brodsky, Ph.D., and researchers at the University of Denver collected existing state and county data on wages, cost of living, and subsidy and market rates to build a cost model that is unique to Colorado and its sixty-four counties. They also collected survey and interview data from Colorado providers to adjust national data assumptions to more accurately reflect state and local conditions. For instance, salary estimates were adjusted across a range of job types typically found in child care settings.

COST MODEL DATA SOURCES

- Administration for Children and Families
- Bureau of Labor Statistics
- Colorado Child Care Assistance Program
- Colorado Child Care Market Rate Study (2017-2018)
- Colorado Shines
- National Association for the Education of Young Children
- United States Census Bureau



CORE COMPONENTS

The cost model is based on the key cost, revenue, and operational factors that drive child care providers' operations, including personnel and non-personnel expenses and market and subsidy rates. In some cases, the model makes different assumptions for child care centers than for family child care homes, since the two service delivery models have unique operational characteristics.

Personnel Expenses

The model includes county-specific base wages for ten different job titles from the Bureau of Labor Statistics. It calculates wage increases by quality level, assuming that as program quality levels rise, so will staff wages. Colorado survey data reflects salaries that are between two and ten percent higher in Level 3-5 rated programs, compared to programs rated a 1-2.

Personnel costs consider the ratios and maximum group sizes allowed by licensing and those anticipated at different quality levels and in different settings. The model also incorporates staffing to cover daily breaks, required training, and annual leave. Some mandatory benefits required by law are assumed for all programs, while health benefits are only incorporated at higher quality rating levels.

Non-Personnel Expenses

Non-personnel expenses within the model fall into four categories related to the number of children, classrooms, and staff, as well as site-specific costs. Costs in the first three categories can vary based on enrollment, program size, and staffing, while site expenses are more fixed. Child costs include such things as classroom

materials, child assessments, and food, while classroom-related costs include rent, utilities, and maintenance. Training and instructional consultants fall under the staff category, and expenses such as audits and permits are site costs.

NON-PERSONNEL COST CATEGORIES

- | | |
|---------------------|-----------------|
| 1. Child | 3. Staff |
| 2. Classroom | 4. Site |

Revenues

Revenues within the cost of care model are primarily based on the tuition rates identified in the 2017-2018 Colorado Child Care Market Rate Study, adjusted for quality levels and county-adjusted Colorado Child Care Assistance Program (CCCAP) subsidy rates, and Colorado Preschool Program (CPP) allocations. The model also assumes that all programs participate in the USDA Child And Adult Care Food Program. Because most programs do not always operate at full capacity, the model calculates enrollment at less than 100 percent of capacity, dependent on quality level. It also assumes that providers will lose 3 percent of revenue based on tuition or subsidy non-payment (for instance, when the child has been cared for, but their family does not pay their child care fee).

SYSTEM FINANCING AND STAFFING

The cost of care model has been created to help users see how variations in several factors can change: (1) the demand for care, (2) the need for additional early educators/caregivers, and (3) the amount of related public funding that would be required to meet different scenarios. This functionality will be critical in making decisions about how to allocate funds and to what purposes.

CHANGE LEVERS IN MODEL

- **Geography:** The model can be adjusted to look at results statewide, by six regions (Metro, Northeast, Southeast, San Luis Valley, Northwest, Southwest), or by county
- **Wage basis:** Users can examine demand, staffing and funding needs based on four wage scenarios, including current wage structure, pay parity with public kindergarten teachers, self-sufficiency standards, and income needed to rent a 2-bedroom apartment
- **Time horizon:** The model can estimate results for a ten-year timeframe, from 2021-2031
- **Child participation rates:** Users can vary the percentage of children of each age group expected to participate in the system
- **Child attendance schedule:** Users can select the percentage of children expected to attend 50, 30, and 12½ hours per week
- **Program quality level:** The model allows users to use existing program quality distributions or estimate their own

MODEL IN ACTION | CONTEXT

Currently in Colorado, there are four major public funding sources for early care and education: The Colorado Child Care Assistance Program (\$135.3M), the Colorado Preschool Program (\$127.1M), Head Start (\$112.6M), and the Individuals with Disabilities Education Act (\$7.5M).¹¹ In 2023, universal preschool is expected to add \$164.7M to the mix, rising to \$230.9M annually by 2027.¹² State and federal stimulus funding to help the sector recover from the pandemic is injecting approximately \$385M into the system between 2021-202X, and the Build Back Better legislation under consideration in Congress would save Colorado families an average of \$2,256 annually in child care costs.¹³

Even with current funding, many families who need care and early learning opportunities for their children cannot access them. Approximately 30 percent of infants and toddlers, 45 percent of 2- to 3-year-olds, and 60 percent of preschoolers with working parents are currently in either licensed or informal care in Colorado. Based on the number of parents in the workforce, the need for care is likely 45 percent higher than the system can currently serve.¹⁴ The situation is worse in some parts of the state than in others and not all families have equal access to quality care. Latinx and Black Coloradans are more likely to live in child care deserts across the state.¹⁵ Many are also in settings where their teachers do not speak their home language.¹⁶

Current funding is also not enough to attract and retain a workforce to meet projected or even existing demand. In 2017, early educators made between \$14.00-\$16.50 per hour, and home child care providers made even less. Latina women are more likely to be at the lower end of these pay scales and career ladders.¹⁷

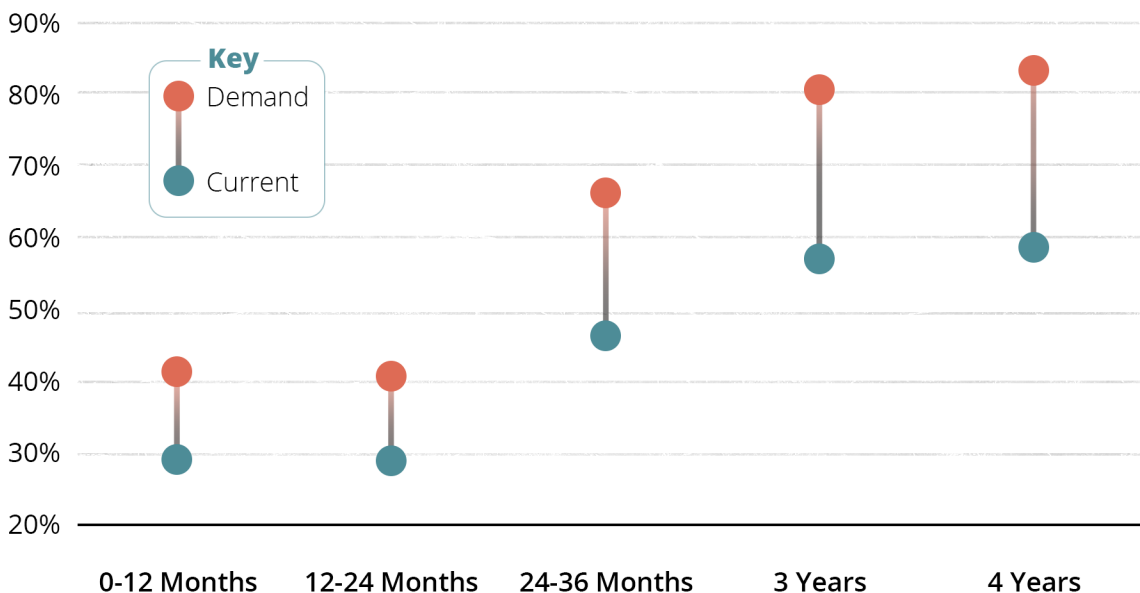
The quality of available care in Colorado is also inconsistent. Currently, only 49 percent of licensed early care and education providers participate in Colorado Shines ratings¹⁸, and more than half of the slots for children are in settings with quality ratings below level 3.¹⁹ Increasing quality requires funding to increase physical facilities and workforce training and education.

The cost of care model allows users to look at different scenarios of program quality, wages, participation levels, attendance factors, and geography to estimate demand, staffing and funding needs. Two such scenarios are presented here for Colorado as a whole, but other decisions could lead to different outcomes.



Colorado's universal preschool program will add \$231M annually to the state's early education funding by 2027.

ESTIMATED DEMAND FOR CARE IS NOT BEING MET BY CURRENT PARTICIPATION RATES



SCENARIOS

Both scenarios presented here assume a two-year time horizon of 2023 and look at statewide demand, staffing, and funding needs. The first scenario assumes the system stays mostly as it is now. Wages remain flat, except for inflation adjustments, child enrollments and attendance patterns are like now, and the distribution of programs across the quality levels is unchanged. The second scenario incorporates increased family demand for high-quality care and assumes wages on which an early educator could afford to rent a two-bedroom apartment.





In the status quo scenario, almost 145,000 children would participate in early care and education, including nearly 69,000 infants and toddlers (up to age 3) and more than 75,000 preschoolers (ages 3 and 4). Staffing for this demand would require approximately 24,000 lead and assistant teachers, plus additional directors, office staff, and instructional/health consultants. In the quality-demand scenario, more than 190,000 children would participate, reflecting an increase of over 47,000 children, including almost 22,000 more infants and toddlers and 25,000 more preschoolers than in the status quo scenario. The number of needed lead and assistant teachers would rise by almost 15,000. The cost per child would also rise by nearly \$6,000, with higher costs for infants and toddlers than for preschoolers. Overall, the state would need an additional \$1.71 billion.

MORE THAN HALF OF SLOTS ARE IN SETTINGS BELOW A QUALITY LEVEL 3



		SCENARIO 1: STATUS QUO ²⁰	SCENARIO 2: QUALITY DEMAND
WAGE BASIS	Lead Teacher	Current Child Care Wages \$37,302	Self-Sufficiency Wages \$57,208
	Assistant Teacher	\$30,921	\$57,208
PARTICIPATION RATES	Under 2 Years	30%	40%
	24 to 36 Month Olds	50%	65%
	3 & 4 Year Olds	60%	80%
ATTENDANCE	50 Hours/Week	50%	65%
	30 Hours/Week	20%	20%
	12.5 Hours/Week	30%	15%
QUALITY DISTRIBUTION	Level 1	35%	5%
	Level 2	19%	5%
	Level 3	9%	30%
	Level 4	33%	45%
	Level 5	4%	15%

Even under the status quo, Colorado will face an unmet funding need for early care and education of over \$500 million in 2023. Paying early educators wages they can live on and improving quality levels across programs will increase that unmet need by \$1.17 billion. These are costs that can't be borne by parents, who are already paying well over the federally recommended 7 percent of income on child care, or by providers, who are operating on unsustainably thin margins.²¹ Our standard approach has been to put the cost onto early educators in the form of deeply suppressed wages, but this strategy is not only unethical, but has also suppressed the recruitment and retention of educators to a crisis point. Instead, the funds for meeting unmet costs need to come from public investments into the true cost of care. The cost of care model can help to figure out what this could look like.

	ENROLLMENT	TEACHERS	COST/CHILD	UNMET NEED
				
SCENARIO 1: STATUS QUO	144,959	23,813	\$12,694	\$544M
SCENARIO 2: QUALITY- DEMAND	192,231	38,417	\$18,687	\$1.71B

STRATEGIZING SOLUTIONS

Options for funding projected unmet needs are in sight, with the upcoming launch of universal preschool, opportunities for integrating existing funding sources more efficiently, one-time stimulus spending, and proposed federal investments in early care and education. Strategically phased implementation of policy goals and testing of solutions across the state's diverse geography and populations may also be needed. The Colorado cost of care model will be a critical tool to support this kind of strategizing.

An equitable, sustainable, thriving system for early care and education in Colorado is critical to our state's success, to the economic mobility of Colorado families, and to the well-being of Colorado children. The Bell Policy Center will continue to refine and make use of this model for research and analysis as we move toward policies that help Colorado build toward such a system, as well as provide access to help support others in their policy planning. If you are interested in accessing the model to inform your own policy planning, please contact the Bell Policy Center at the information below.²²

Endnotes

- 1** Franko, M., Brodsky, A., Wacker, A., & Estrada, M. (2017). Bearing the cost of early care and education in Colorado: An economic analysis. Denver: Butler Institute for Families, Graduate School of Social Work, University of Denver.
- 2** US Department of Treasury (2021). The economics of child care supply in the United States. <https://home.treasury.gov/system/files/136/The-Economics-of-Childcare-Supply-09-14-final.pdf>
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- 4** Delap, S., Franko, M., Nicolaou, K., Silva-Padrón, G., and Thornton, C., (2021). Measuring the Impact of COVID-19 on Colorado’s Early Care and Learning Sector. Denver: Early Milestones Colorado.
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- 6** McKinsey & Company (2021). Women in the workplace. <https://www.mckinsey.com/~media/mckinsey/featured%20insights/diversity%20and%20inclusion/women%20in%20the%20workplace%202021/women-in-the-workplace-2021.pdf?shouldIndex=false>
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- 10** The model is based on cost of quality research conducted by Anne Mitchell and Louise Stoney, as well as the Office of Child Care’s Provider Cost of Quality Calculator.
- 11** Program funding figures accessed from Colorado Department of Education (2019-20), Office of Early Childhood (2020-21), and Head Start Program Information Report (2019).
- 12** Colorado Children’s Campaign (undated memo). Proposition EE: What does this measure require for the future of preschool in Colorado.
- 13** Mailik, R. (2021, September 22). The Build Back Better Act would greatly lower families’ child care costs. Center for American Progress. <https://americanprogress.org/article/build-back-better-act-greatly-lower-families-child-care-costs/>
- 14** Projected demand was calculated from participant data in the Cost of Care model, population data from the Colorado Shines Brighter 2019 Needs Assessment, and parental workforce participation data from Bearing the Cost of Care (2017) and Child Care Aware of America (2015)
- 15** Childcaredeserts.org
- 16** Schaack, D. and Le, V. (2017). Colorado Early Childhood Workforce Survey 2017: Key Findings. Early Milestones Colorado. <https://earlymilestones.org/wp-content/uploads/2020/02/CO-EC-Workforce-Survey-Key-Findings.pdf>
- 17** ibid
- 18** Enboden, K. (personal communication, January 4, 2022).
- 19** Office of Early Childhood. (June 2021). Colorado licensed child care report for upload 2021-07-01. <https://docs.google.com/spreadsheets/d/1saE2Nbnngg-FOaQkA3kylDsCqo8hth6uv7nVtgZe6fuw/edit#gid=2062175605>
- 20** Where feasible, status quo assumptions are based on publicly available data. In some instances, existing research is not available to guide status quo assumptions (e.g., attendance distributions).
- 21** Franko, M., Brodsky, A., Wacker, A., & Estrada, M. (2017). Bearing the cost of early care and education in Colorado: An economic analysis. Denver: Butler Institute for Families, Graduate School of Social Work, University of Denver.
- 22** To explore the Colorado Cost of Care Model, contact Julie Pecaut at the Bell Policy Center, pecaut@bellpolicy.org.