

# Quality Child Care in Colorado: A Cost Study

Presented to the Early Childhood Education and School Readiness  
Legislative Commission

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# Highlights

- Cost of Care Study Background, Purpose, and Goals
- Methodology for the Cost of Care Model  
*Data Sources, Assumptions, Considerations*
- Cost of Care Model  
*Key features*  
*Select findings and implications*  
*Building on the model*
- Next Steps and Questions



# Cost of Care Study Background: Purpose

- What is the real cost of providing quality child care in Colorado?
- Build a cost model that reflects the true costs of providing quality early care and education and can be adapted to inform policy and practice on state and regional levels.
- Inform both policy and practice, including subsidy rates, local and state public budgets for ECE, costs to families for accessing care, changes to support financial viability of ECE, steps toward more sustainable early care and education ecosystem.



# Cost of Care Study Background

- Key partners include Bell Policy Center, Denver Preschool Program, Raise Colorado Coalition, EPIC
- Components:  
*Cost of Care Model*  
*Research briefs: Cost of Care Model, ECE Ecosystem, Federal Developments*
- Development: Spring 2021 – December 2021, with potential adjustments/updates going forward



# Cost of Care Model: Overview

- Two components: provider-level model and system model
- Provider-level model computes per-child annual costs and revenues for each Colorado Shines quality level, based on assumptions about enrollment, child-teacher ratios, salaries, nonpersonnel costs, market rates, subsidy revenue
- System model draws from provider model output and combines with participation rates to give a county, regional, or state view
- Draws from county-level data on costs, revenue, and population



# Cost of Care Model: Methodology

- Provider-level cost model drawn from previous research in Colorado and other states
- Parameters updated with additional data from multiple sources, both primary and secondary
- Aligned with data with PDG Needs Assessment Calculator, drawing on additional primary and secondary research
- Keeping in mind the difficulty in collecting accurate data on child care, modeling incorporates multiple data sources



# Methodology: Data Sources

- Provider cost surveys (210 Responses received - 103 centers and 107 homes)
- Secondary sources, including:
  - Wages for various professions (Bureau of Labor Statistics)*
  - CCCAP subsidy rates*
  - Market rates*
  - Child population*



# Data Sources: Provider Cost Surveys

- Online Survey  
*Circulated to both centers and home-based providers through partners (including DPP and EPIC)*  
*Responses distributed across the state (centers from 31 counties, homes from 35 counties) and represent a mix of quality levels and ages served*
- Nonpersonnel Interviews  
*Sponsored by Colorado Preschool Development Grant*  
*10 centers and 10 homes interviewed to do deeper dive on nonpersonnel costs, such as food, materials, utilities, etc.*  
*Results will be incorporated once analyzed*





# Methodology: Assumptions and Considerations

## Key assumptions built into model

- *Personnel costs: Based on either current wages by county or “living wage” metric*
- *Nonpersonnel costs: Based on surveys of providers, adjusted for county cost of living*
- *Participation rates: Based on projections of public preschool participation; can be modified*
- *Quality levels: based on current or projected quality distribution*

## Considerations

- *Post-COVID care challenges and additional operating costs*
- *Effects of EE funding for preschool or new federal funding*
- *Care and provider availability may further affect costs*



# **Statewide Cost of Care Model**



# Cost Model Highlights

- Presents results by county, by region, or statewide
- Presents costs per child to deliver child care based on child's age and provider quality level
- Estimates total need and cost to meet unmet need, taking into account current public funding
- Estimates workforce pipeline needs (number of ECE professionals required to serve Colorado's young children)
- Multiple wage scale options:
  - Current child care wages*
  - Kindergarten teacher parity*
  - Self-sufficiency standard – one adult and one preschooler*
  - Housing wage – 2-bedroom apartment*



# Cost Model Front Page

**Geography**

☒ Select by region    ☐ Select by county

Colorado    Denver

**Select year**

2021

**Wage Basis**

Housing wage

**Participation Rates**

Age 0-12 mo.	40%
Age 12-24 mo.	40%
Age 24-36 mo.	50%
Age 3 years old	60%
Age 4 years old	60%

**Full Time Status**

Percent Full Time (50h/wk)	50%
Percent School Day (30h/wk)	20%
Percent Part Time (12.5h/wk)	30%

RESULTS FOR COLORADO	
Total Participants	
Age 0-12 mo.	25,097
Age 12-24 mo.	25,244
Age 24-36 mo.	31,403
Age 3 years old	38,579
Age 4 years old	39,468
TOTALS	159,791
Staff Needed	
Director	1698
Office Manager	1698
Ed. Coordinator	1698
Healthcare Consultant	509
Lead Teacher	23659
Teacher Assistant	21489
Teacher Aides	2170
Total Cost	
	Cost (Millions)
Age 0-12 mo.	\$510.9
Age 12-24 mo.	\$514.2
Age 24-36 mo.	\$487.2
Age 3 years old	\$466.5
Age 4 years old	\$438.8
TOTALS	\$2,417.5
Average Full-Time Cost Per Child	
Age 0-12 mo.	\$28,076
Age 12-24 mo.	\$28,095
Age 24-36 mo.	\$21,398
Age 3 years old	\$16,678
Age 4 years old	\$15,335

# Cost Model Center Assumptions Page

CENTERS						
		Level 1	Level 2	Level 3	Level 4	Level 5
SIZE						
Number of Classrooms	0-12 mo.	1	1	1	1	1
	12-24 mo.	1	1	1	1	1
	24-36 mo.	1	1	1	1	1
	3 year olds.	1	1	1	1	1
	4 year olds	2	2	2	2	2
	Totals	6	6	6	6	6
Ratios - Children Per Group	0-12 mo.	10	10	10	8	8
	12-24 mo.	10	10	10	8	8
	24-36 mo.	14	14	14	12	12
	3 year olds.	20	20	20	18	18
	4 year olds	24	24	24	20	20
Efficiency		80.0%	82.5%	85.0%	90.0%	92.5%
Full Attendance (days per year)		250	250	250	250	250
PERSONNEL EXPENSES						
Staff Name	BLS Occupation Type	Selected Wages as Pct of Baseline				
Director	CC/Preschool administrator	120%	125%	130%	135%	140%
Office Manager	Office & admin support worker	100%	105%	110%	115%	120%
Ed. Coordinator	Instructional Coord (Educ)	115%	120%	125%	130%	135%
Healthcare Consultant	Registered nurse	110%	115%	120%	125%	130%
Lead Teacher	Preschool Teacher, except Special Education	110%	115%	120%	125%	130%
Teacher Assistant	CC worker	100%	105%	110%	115%	120%
Teacher Aides	Minimum wage	100%	105%	110%	115%	120%
Staff Name	BLS Occupation Type	Number of Staff				
Director (FT if >40 children)	CC/Preschool administrator	1.0	1.0	1.0	1.0	1.0
Office Manager (FT if >50 children)	Office & admin support worker	1.0	1.0	1.0	1.0	1.0
Ed. Coordinator(if >100 children)	Instructional Coord (Educ)	1.0	1.0	1.0	1.0	1.0
Healthcare Consultant (.25 FTE/250 children)	Registered nurse	0.3	0.3	0.3	0.3	0.3

# Cost Model Costs Per Child Page

CENTERS												
	Adams	Alamosa	Arapahoe	Archuleta	Baca	Bent	Boulder	Broomfield	Chaffee	Cheyenne	Clear Creek	Conejos
COSTS PER CHILD												
Wages as pct. of personnel costs	79.3%											
Wages to personnel costs multiplier	126.1%											
Wages: classroom teachers	\$937,320	\$493,480	\$937,320	\$603,272	\$428,656	\$461,944	\$1,006,816	\$937,320	\$532,024	\$428,656	\$937,320	\$428,656
Total personnel costs: classroom teachers	\$1,181,746	\$622,165	\$1,181,746	\$760,588	\$540,437	\$582,405	\$1,269,364	\$1,181,746	\$670,760	\$540,437	\$1,181,746	\$540,437
Distribution of Personnel Costs for Classroom Teachers												
0-12 mo.	\$196,958	\$103,694	\$196,958	\$126,765	\$90,073	\$97,068	\$211,561	\$196,958	\$111,793	\$90,073	\$196,958	\$90,073
12-24 mo.	\$196,958	\$103,694	\$196,958	\$126,765	\$90,073	\$97,068	\$211,561	\$196,958	\$111,793	\$90,073	\$196,958	\$90,073
24-36 mo.	\$196,958	\$103,694	\$196,958	\$126,765	\$90,073	\$97,068	\$211,561	\$196,958	\$111,793	\$90,073	\$196,958	\$90,073
3 year olds	\$196,958	\$103,694	\$196,958	\$126,765	\$90,073	\$97,068	\$211,561	\$196,958	\$111,793	\$90,073	\$196,958	\$90,073
4 year olds	\$393,915	\$207,388	\$393,915	\$253,529	\$180,146	\$194,135	\$423,121	\$393,915	\$223,587	\$180,146	\$393,915	\$180,146
Totals	\$1,181,746	\$622,165	\$1,181,746	\$760,588	\$540,437	\$582,405	\$1,269,364	\$1,181,746	\$670,760	\$540,437	\$1,181,746	\$540,437
Costs Per Child for Classroom Staff												
0-12 mo.	\$19,696	\$10,369	\$19,696	\$12,676	\$9,007	\$9,707	\$21,156	\$19,696	\$11,179	\$9,007	\$19,696	\$9,007
12-24 mo.	\$19,696	\$10,369	\$19,696	\$12,676	\$9,007	\$9,707	\$21,156	\$19,696	\$11,179	\$9,007	\$19,696	\$9,007
24-36 mo.	\$14,068	\$7,407	\$14,068	\$9,055	\$6,434	\$6,933	\$15,111	\$14,068	\$7,985	\$6,434	\$14,068	\$6,434
3 year olds	\$9,848	\$5,185	\$9,848	\$6,338	\$4,504	\$4,853	\$10,578	\$9,848	\$5,590	\$4,504	\$9,848	\$4,504
4 year olds	\$8,207	\$4,321	\$8,207	\$5,282	\$3,753	\$4,044	\$8,815	\$8,207	\$4,658	\$3,753	\$8,207	\$3,753
Total Other Costs (Not Personnel Costs: Classroom Teachers)	\$621,764	\$526,537	\$621,764	\$563,607	\$520,772	\$522,942	\$637,188	\$621,764	\$563,662	\$520,772	\$621,764	\$520,772
Cost per child for All Other Costs	\$6,096	\$5,162	\$6,096	\$5,526	\$5,106	\$5,127	\$6,247	\$6,096	\$5,526	\$5,106	\$6,096	\$5,106
Total Costs Per Child												
0-12 mo.	\$25,791	\$15,532	\$25,791	\$18,202	\$14,113	\$14,834	\$27,403	\$25,791	\$16,705	\$14,113	\$25,791	\$14,113
12-24 mo.	\$25,791	\$15,532	\$25,791	\$18,202	\$14,113	\$14,834	\$27,403	\$25,791	\$16,705	\$14,113	\$25,791	\$14,113
24-36 mo.	\$20,164	\$12,569	\$20,164	\$14,580	\$11,539	\$12,060	\$21,358	\$20,164	\$13,511	\$11,539	\$20,164	\$11,539
3 year olds	\$15,944	\$10,347	\$15,944	\$11,864	\$9,609	\$9,980	\$16,825	\$15,944	\$11,116	\$9,609	\$15,944	\$9,609
4 year olds	\$14,302	\$9,483	\$14,302	\$10,807	\$8,859	\$9,171	\$15,062	\$14,302	\$10,184	\$8,859	\$14,302	\$8,859

# The High Cost of Care in Colorado

Child age	Costs Based on Living Wage	Costs Based on Current Child Care Wages
Age 0-12 mo.	\$26,896	\$16,595
Age 12-24 mo.	\$26,914	\$16,596
Age 24-36 mo.	\$20,606	\$13,127
Age 3 years old	\$16,122	\$10,666
Age 4 years old	\$14,783	\$9,929



# Cost of Quality Care in Colorado

	Level 1	Level 2	Level 3	Level 4	Level 5
Age 0-12 mo.	\$23,272	\$24,226	\$25,184	\$31,984	\$33,173
Age 12-24 mo.	\$23,287	\$24,242	\$25,200	\$32,006	\$33,195
Age 24-36 mo.	\$18,310	\$19,026	\$19,746	\$23,709	\$24,550
Age 3 years old	\$14,568	\$15,105	\$15,645	\$18,166	\$18,775
Age 4 years old	\$13,129	\$13,597	\$14,068	\$17,070	\$17,634

*Cost of care based on Colorado Shines quality level, using affordable housing wage standard*





# County Differences for Cost of Quality Care

	Colorado	Pitkin (highest)	Denver	Baca (lowest)
Age 0-12 mo.	\$26,896	\$32,588	\$29,865	\$16,587
Age 12-24 mo.	\$26,914	\$32,588	\$29,865	\$16,587
Age 24-36 mo.	\$20,606	\$24,727	\$22,731	\$13,215
Age 3 years old	\$16,122	\$19,140	\$17,671	\$10,818
Age 4 years old	\$14,783	\$17,436	\$16,143	\$10,087

*Cost of high-quality care (Level 3 + ) based on affordable housing wage standard*



# Preschool teachers struggle to make a living wage

Position	Bell Survey Average	BLS Average
Executive director	\$63,600	\$53.2k-\$66.1k
Center director	\$46,125	\$53.2k-\$66.1k
Assistant director	\$33,667	
Lead teacher	\$33,254	\$31.4k-\$41.0k
Teacher Assistant/Aide	\$26,260	\$26.0k-\$34.8k
Substitute/Floater Teacher	\$28,750	
Office Manager/Administrative Support	\$28,880	\$30.3k-\$45.9k
Financial Manager	\$32,000	
Instructional/Curricular Coordinator	\$51,500	\$48.4k-\$78.5k
Family Service Worker	\$31,500	

*\*BLS Average = Mean salary for Colorado for comparable position for Bureau of Labor Statistics Salary Data*

# Financial Considerations for ECE Teachers and Providers

- **Low wages and high costs:** Current wages not enough to maintain financial sustainability – but providers struggle to raise wages and remain sustainable (personnel costs comprise over 80% of child care costs)
- **Wage compression:** Teacher salaries do not increase enough commensurate with experience levels and credentials
- **Competition from other industries:** Professionals with comparable credentials (such as kindergarten teachers or nurses) make more
- **Cost of turnover:** Low wages accelerate turnover, increasing providers' costs and siphoning qualified teachers away from the profession
- **Disparity between cost and market rates:** Tuition costs do not match actual costs to provide care; market rates already unaffordable for many families



# Many Child Care Providers Struggle To Remain Profitable

Annual Revenue	Pct. of Providers
\$0-\$100k	24%
\$100k-\$500k	32%
\$500k-\$1M	20%
\$1M-\$3M	9%
\$3M+	1%
Prefer not to answer	13%

Financial Status	Pct. of Providers
Loses Money	12%
Breaks Even	16%
0-5% Profit	13%
5-10% Profit	7%
10%+ Profit	4%
Not Sure/Prefer Not to answer	52%

# Cost to Provide Child Care in Colorado (Publicly Funded ECE Scenario)

Position	Number of Staff Needed
Age 0-12 mo.	\$367.0
Age 12-24 mo.	\$369.4
Age 24-36 mo.	\$469.1
Age 3 years old	\$450.9
Age 4 years old	\$423.0
<b>TOTALS</b>	<b>\$2,079.6</b>

*Costs based on participation rates of 30% for infants and toddlers, 50% for 2-year olds, and 60% for 3- and 4-year olds, using current quality levels and affordable housing wage standard.*

# Colorado ECE Workforce Needs (Publicly Funded ECE Scenario)

Position	Number of Staff Needed
Director	1,543
Office Manager	1,543
Ed. Coordinator	1,543
Healthcare Consultant	463
Lead Teacher	20,561
Teacher Assistant	13,847
Teacher Aides	6,714

*Number of staff needed based on participation rates of 30% for infants and toddlers, 50% for 2-year olds, and 60% for 3- and 4-year olds.*

# Tuition Comparison

		Denver	Statewide
Infant	Level 1-2	\$21,580	\$12,951
	Level 3-5	\$19,950	\$16,290
	All Levels	\$20,635	\$14,891
Toddler	Level 1-2	\$16,712	\$11,748
	Level 3-5	\$17,865	\$14,974
	All Levels	\$17,843	\$13,541
Preschool	Level 1-2	\$15,412	\$10,375
	Level 3-5	\$15,053	\$12,689
	All Levels	\$15,143	\$11,565

# Building on the Model

- Areas for further examination
  - Unmet need – current public funding gaps*
  - Child care deserts – unmet need for providers*
  - Workforce and provider pipeline*
  - Impacts of preschool expansion*
- Use model as a tool for thinking through alternative funding models, affordability for families

