



MODELING THE COST OF CHILD CARE IN THE DISTRICT OF COLUMBIA, 2024

July 2024

Background

- This report serves to comply with DC Official Code § 4–410.01(b), which requires the Office of the State Superintendent of Education (OSSE) to conduct a cost modeling analysis to estimate the costs of care for child development facilities in the District of Columbia.

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Cost Modeling Approach

What is cost modeling?

- Cost modeling estimates the **cost** for child care providers to deliver child care services, as opposed to a market rate survey that measures the **price** paid by families.
- The District's cost modeling tool is a set of flexible financial models that project the costs to operate a child development facility while meeting:
 - District child care licensing regulations.
 - Health, safety and quality requirements.
 - Compliance with employment laws.
- The tool can estimate costs based on various scenarios (program size, ages of children served) and can also estimate revenue (private tuition and subsidy payments).
- Cost modeling can inform:
 - District policy and budgeting.
 - Provider business decisions.

Cost Modeling in the District of Columbia

- The federal Child Care and Development Fund (CCDF) allows Lead Agencies to set child care subsidy payment rates based on a market rate survey or an alternative methodology, such as cost modeling.
- OSSE believes cost modeling is the most accurate way to assess the true cost of child care because it is based on an analysis of the resources a facility needs to provide care, not the price of care in the market or the amount parents can afford to pay.
- The District has used cost modeling to set child care provider subsidy payment rates since 2015.
- The Birth to Three Act requires OSSE to complete a cost estimation model on a triennial basis.

Understand the actual cost of providing care

Set rates for subsidy

Comply with the Birth to Three Act

2024 Cost Modeling Approach

- In 2024, the District's overall cost modeling methodology and approach were unchanged from the most recent [2023 cost modeling](#).
- OSSE updated the following data and inputs used in the District's cost estimation model:
 - Staff wages, non-personnel costs and private tuition rates were increased in line with inflation rates captured in the Consumer Price Indices.
 - Employer costs for health insurance coverage and other discretionary benefits were increased from \$6,000 to \$6,500 per full-time equivalent (FTE) staff member.
 - Inputs associated with revenue sources (subsidy payment rates, parent co-payment fees, Pre-K Enhancement and Expansion formula awards) were updated to reflect fiscal year 2024 (FY24) program levels.
- OSSE made one change to child development center configurations by changing the adult:child ratio for children ages 24-30 months from 1:4 to 1:6, with a maximum group size of 12, in alignment with OSSE's Notice of Proposed Rulemaking (NPRM) for the Licensing of Child, Development Facilities (5A DCMR Chapter 1) published May 17, 2024.
- Unless otherwise indicated, cost estimations were calculated using data on educator wages collected in the 2022 Child Care Provider Survey and updated for inflation, not the minimum salaries required for the Early Childhood Educator Pay Equity Fund.

Modeled scenarios

- OSSE modeled multiple scenarios across small, medium, and large child development centers serving a mix of ages in different classroom configurations and child development homes and expanded child development homes serving a mix of ages.
- The following configurations are used throughout the report:
 - **Small Center:** one infant classroom, one older toddler classroom and one 3-year-old classroom (total = 36 children)
 - **Medium Center:** two infant classrooms, one toddler classroom, one older toddler classroom and one 3-year-old classroom (total = 52 children)
 - **Large Center:** one infant classroom, one toddler classroom, one older toddler classroom, one 3-year-old classroom, one 4-year-old classroom and one out-of-school-time (OST) classroom (total = 94 children)
- In order to align small, medium and large capacity with required ratios and group sizes, costs for every age group are not included in every scenario.

Capital Quality

- OSSE's Quality Rating and Improvement System (QRIS) measures the quality of early care and education programs in licensed child development facilities and supports providers to continuously improve quality.
- Previous versions of the cost estimation model incorporated assumptions about increasing cost drivers at higher quality levels (including additional staff positions, the provision of comprehensive services such as health screenings, and higher staff salaries).
- Beginning in 2023, OSSE revisited these assumptions and concluded that there are no explicit drivers of the cost associated with the constructs measured by the valid and reliable observational tools that determine quality designations.
- Thus, the estimated costs for small, medium and large centers are applicable across all facilities with Capital Quality designations.
- Revenues from child care subsidy payments were calculated for programs with various Capital Quality designations.

2024 Cost Modeling Approach: Early Childhood Educator Pay Equity Fund

- General cost estimation findings presented in slides 11-27 of this document are for licensed child development facilities generally and do not take into account participation in the Early Childhood Educator Pay Equity Fund.
- That means the scenarios presented **do not** include:
 - Minimum salaries required by the Early Childhood Educator Pay Equity Fund
 - Revenue from Child Development Facility (CDF) Payroll Formula Awards
- Findings for the Early Childhood Educator Pay Equity Fund program are reported separately.



Cost Estimation Findings

Cost Estimation Findings: All Facilities

- On average, across all program configurations, the cost of care increased slightly from FY23 to FY24.
 - Average per-child costs for a medium-size child development center increased 2 percent from \$26,453 in FY23 to \$27,034 in FY24.
 - Average per child costs for a child development home, caring for children birth to five, increased 5 percent from \$19,045 in FY23 to \$19,957 in FY24.
- Serving infants and toddlers costs more than serving preschool or school-aged children.
- Regardless of a facility's size, staff wages and benefits are the major drivers of costs for child care programs.

Cost Estimation Findings: Centers

- Serving a larger number of infants and toddlers results in higher costs as more staff are needed to meet ratios and group size requirements.
- Conversely, school-age care has the lowest average costs, due to higher allowable ratios and group sizes. Therefore, serving school-age children can reduce average costs per child across all age groups.

Child Development Center Costs, 2024

Estimated Annual Cost Per Child			
Age Group	Small Center	Medium Center	Large Center
Infants	\$31,841	\$31,826	\$32,178
Young Toddlers	NA	\$31,826	\$32,178
Older Toddlers	\$24,157	\$24,159	\$24,516
3-year-olds	\$20,315	\$20,326	\$20,685
4-year-olds	NA	NA	\$18,386
School age (5 years and older)	NA	NA	\$10,464
Average per-child cost	\$25,438	\$27,034	\$23,068

Small Center: one infant classroom, one older toddler classroom and one 3-year-old classroom (36 children).

Medium Center: two infant classrooms, one toddler classroom, one older toddler classroom and one 3-year-old classroom (52 children).

Large Center: one infant classroom, one toddler classroom, one older toddler classroom, one 3-year-old classroom, one 4-year-old classroom and one OST classroom (94 children).

Findings on this slide reflect costs to deliver care at market wages, not the minimum salaries required for the Early Childhood Educator Pay Equity Fund.



Cost Estimation Findings: Child Development Homes

- Because child development homes and expanded homes do not have separate classrooms, as is the case in centers, costs per child for infants, toddlers and preschool-aged children are projected to be the same.
- The costs for OST care are projected separately and are lower than the cost to serve younger children since there are fewer hours of OST care offered annually, compared to full-day, full-year care for children not yet in school settings.
- Expanded child development homes have a lower cost per child, compared to child development homes, as costs are spread over more children.
- Because of the smaller size of homes, actual costs per child served may vary based on specific program enrollment.

Child Development Home Costs, 2024

Estimated Annual Cost Per Child		
Age Group	Child Development Home	Child Development Expanded Home
Infants	\$19,957	\$17,190
Toddlers	\$19,957	\$17,190
3-year-olds	\$19,957	\$17,190
4-year-olds	\$19,957	\$17,190
School age	\$11,087	\$9,550

Child Development Home: two infants, one older toddler, one 3-year-old, one 4-year-old and one school-age child (six children).
 Expanded Child Development Home: two infants, two toddlers, six 3-year-olds and two school-age children (12 children).

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Estimated Annual Cost Per Child, QIN				
	Centers		Homes	
Age Group	Medium Center	Large Center	Home	Expanded Home
Infants	\$31,207	\$30,911	\$26,672	\$24,629
Young Toddlers	\$31,207	\$30,911	NA	NA
Older Toddlers	\$31,207	\$30,911	\$26,672	\$24,629
3-year-olds	\$19,747	\$19,451	NA	\$24,629
4-year-olds	NA	\$17,159	NA	\$24,629
School age (5 years and older)	NA	\$9,637	NA	\$12,314
Average per-child cost	\$27,387	\$23,163	\$26,672	\$22,166

Medium Center: one infant classroom, one older toddler classroom, and two 3-year-old classrooms.

Large Center: one infant classroom, one toddler classroom, one older toddler classroom, one 3-year-old classroom (PKEEP), one 4-year-old classroom (PKEEP), and one out-of-school time classroom.

Child Development Home: one infant, three toddlers.

Child Development Expanded Home: two infants, two toddlers, one 3-year-old, one four-year-old, and three school-age children.

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Quality Improvement Network (QIN) Costs, 2024

- Facilities participating in the QIN follow Early Head Start standards, including adult:child ratios and group size requirements.
- Lower ratios result in higher average per child costs.



Revenues Findings

FY24 Child Care Subsidy Rate Increase

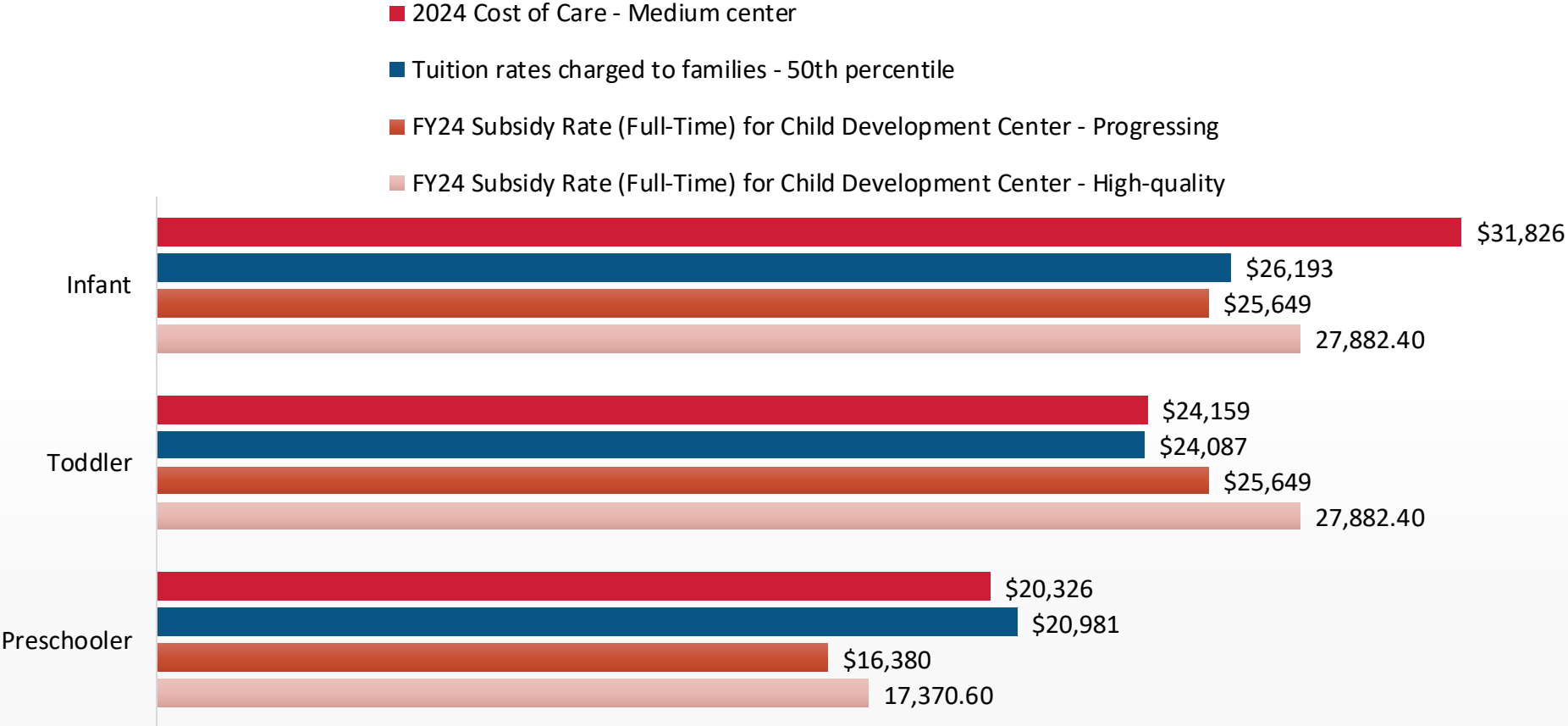
- Effective Oct. 1, 2023, OSSE raised subsidy payment rates for all providers for FY24.
- The new payment rates include three rate tiers (rather than four) based upon quality designations:
 - Progressing and Developing (reimbursed at the same rate as each other);
 - Quality (reimbursed at a higher rate than Progressing and Developing); and
 - High-Quality (reimbursed at a higher rate than Quality).
- Rates for all quality designations were increased, with the Progressing and Developing rates increased by a greater amount to be closer to the Quality and High-Quality rates.
- Across all quality designations, payment rates for infant and toddler care increased by the greatest amount.
 - The infant-toddler rate increased between 15 to 29 percent for homes and centers, depending on a provider's Capital Quality designation.

Revenues Findings

- Average infant care costs for a child development center exceed private tuition rates at the 50th percentile of the market (the median rate charged across child care programs) and the FY24 subsidy rates paid to child development centers.
- In many scenarios, child development facilities are operating at a loss or using cost-saving strategies that may not be sustainable.
- As a result of the Oct. 1, 2023 subsidy rate increase, the gap between costs and revenues for subsidy providers was less in 2024, as compared to 2023.
- Enrollment efficiency and collected revenue are vital to profitability. The cost model assumes enrollment at 95 percent and 3 percent uncollected revenue (tuition, fees and copayments).
- Facilities that are under enrolled will experience lower revenues than shown in the following tables and may experience financial loss.
- Diversifying revenue sources increases financial stability for providers.

Revenue vs. Costs for Child Development Centers

Average infant care costs exceed tuition and subsidy rates, while subsidy rates exceed average toddler care costs.

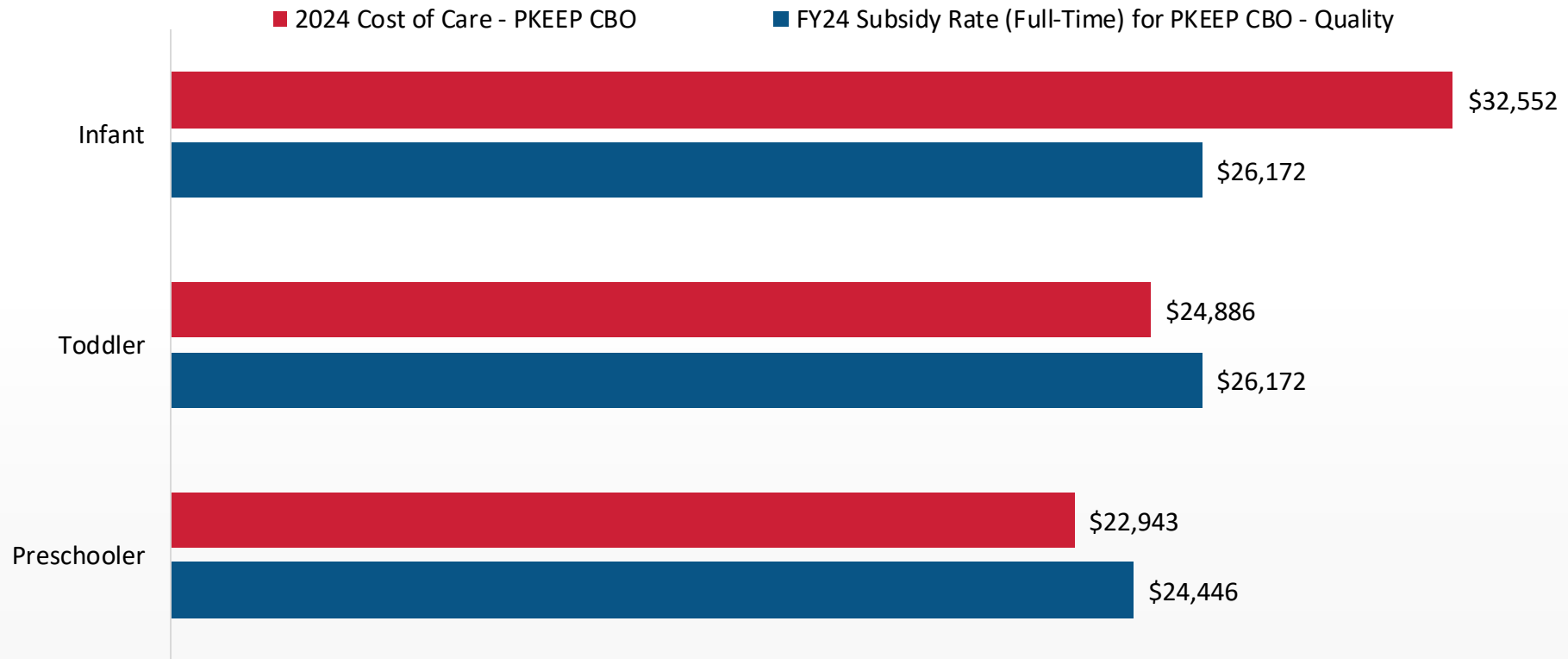


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Revenue vs. Cost for Child Development Center Participating in Pre-K Enhancement and Expansion Program (PKEEP)

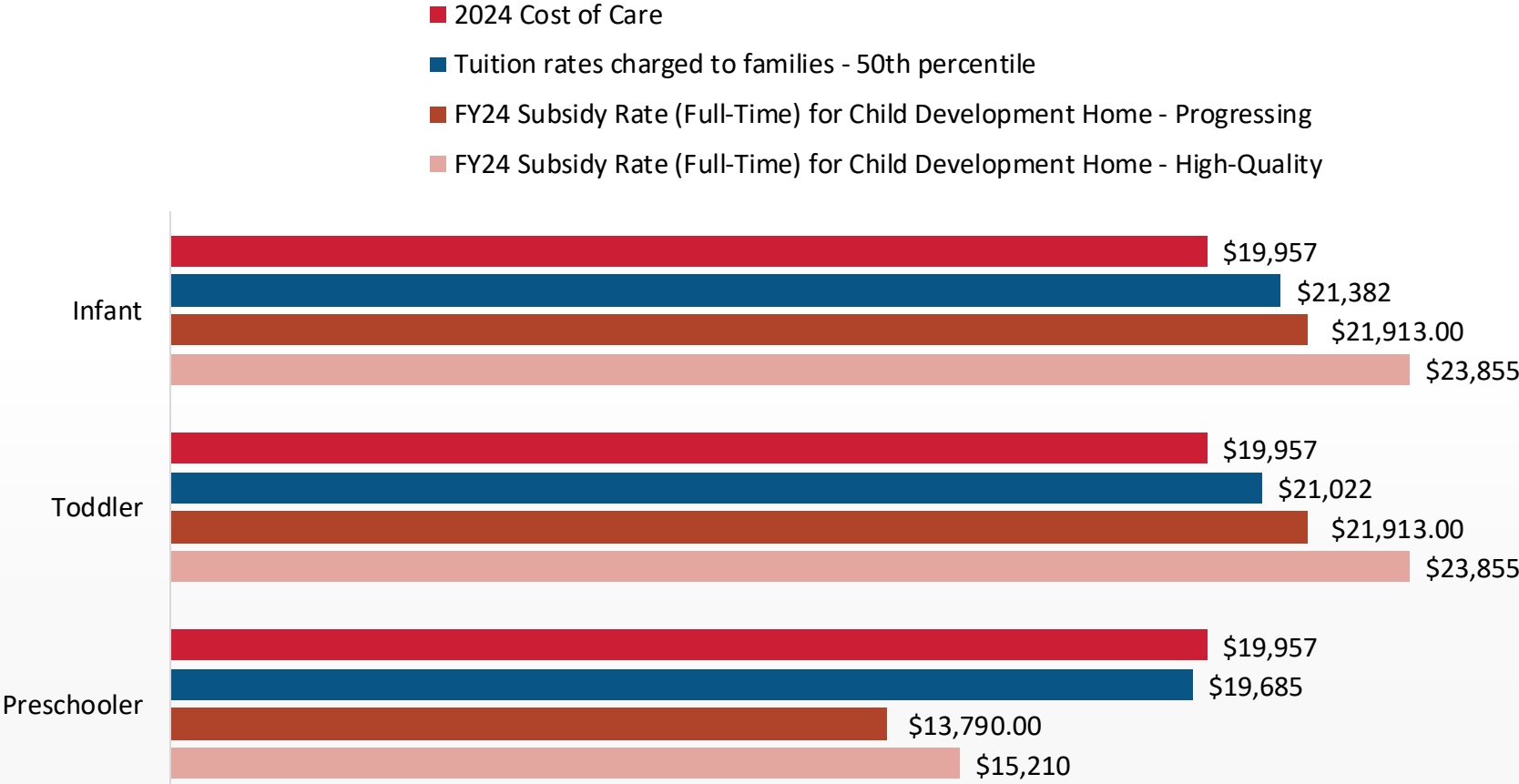
Community-based organizations (CBOs) participating in PKEEP receive higher funding per preschool-age child.



A CBO participating in PKEEP receives the equivalent of the Universal Per Student Funding Formula (UPSFF) amount plus \$6,964 per child for before and after care for subsidy eligible children. Findings on this slide reflect costs to deliver care at market wages, not the minimum salaries required for the Early Childhood Educator Pay Equity Fund.

Revenue vs. Costs for Child Development Homes

Average tuition rates and subsidy rates exceed the cost of care for infants and toddlers for fully-enrolled homes.



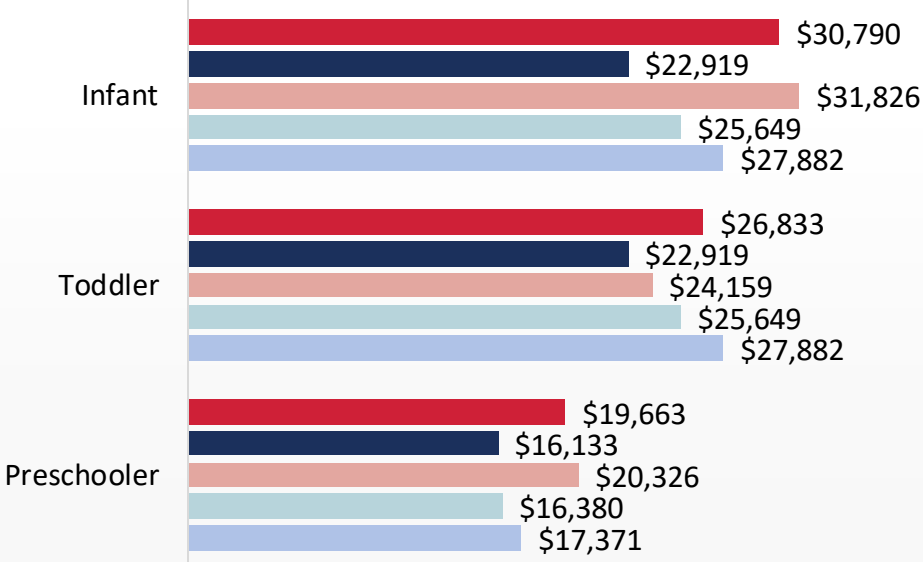
Findings on this slide reflect costs to deliver care at market wages, not the minimum salaries required for the Early Childhood Educator Pay Equity Fund.



OSSE's FY24 rate increase reduced the gap between costs and revenues for subsidy providers

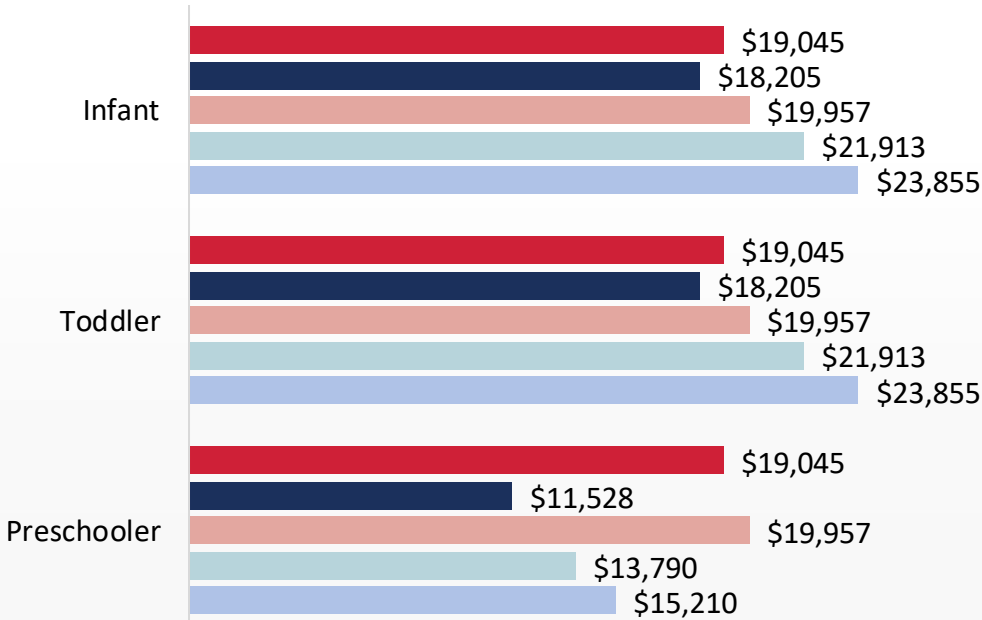
Centers

- 2023 Cost of Care - Medium center
- FY22 Subsidy Rate (Full-Time) for Child Development Center - Progressing
- 2024 Cost of Care - Medium center
- FY24 Subsidy Rate (Full-Time) for Child Development Center - Progressing
- FY24 Subsidy Rate (Full-Time) for Child Development Center- High Quality



Homes

- 2023 Cost of Care - Home
- FY22 Subsidy Rate (Full-Time) for Child Development Home - Progressing
- 2024 Cost of Care - Home
- FY24 Subsidy Rate (Full-Time) for Child Development Home - Progressing
- FY24 Subsidy Rate (Full-Time) for Child Development Home - High-quality



Findings on this slide reflect costs to deliver care at market wages, not the minimum salaries required for the Early Childhood Educator Pay Equity Fund.



Estimated Annual Expenses and Revenues for Child Development Centers of Median Size Under Varying Revenue Scenarios, 2024

Revenue Source	Expenses	Collected Revenues from All Sources	Profit/Loss	Percent
All subsidy (“Progressing/ Developing” level)	\$1,422,856	\$1,178,829	(\$244,027)	-17.2%
All subsidy (“Quality” level)	\$1,422,856	\$1,202,968	(\$219,888)	-15.5%
All subsidy (“High-Quality” level)	\$1,422,856	\$1,275,081	(\$147,775)	-10.4%
All tuition – 25th percentile	\$1,422,856	\$895,250	(\$527,606)	-37.1%
All tuition – 50th percentile	\$1,422,856	\$1,129,002	(\$293,854)	-20.7%
All tuition – 75th percentile	\$1,422,856	\$1,424,828	\$1,972	0.1%
Mix of subsidy at “Progressing” designation (45%) and tuition – 50th percentile (55%)	\$1,422,856	\$1,151,683	(\$271,172)	-19.1%

Findings on this slide reflect costs to deliver care at market wages, not the minimum salaries required for the Early Childhood Educator Pay Equity Fund.



Estimated Annual Expenses and Revenues for Child Development Homes Under Varying Revenue Scenarios, 2024

Revenue Source	Child Development Homes				Child Development Expanded Homes			
	Expenses	Collected Revenues from All Sources	Profit/Loss	Percent	Expenses	Collected Revenues from All Sources	Profit/Loss	Percent
All subsidy (“Progressing/ Developing” level)	\$110,874	\$108,056	(\$2,818)	-2.5%	\$190,996	\$201,167	\$10,172	5.3%
All subsidy (“Quality” level)	\$110,874	\$109,549	(\$1,326)	-1.2%	\$190,996	\$204,880	\$13,884	7.3%
All subsidy (“High-Quality” level)	\$110,874	\$117,335	\$6,460	6.8%	\$190,996	\$218,763	\$27,767	14.5%
All tuition – 25th percentile	\$110,874	\$99,281	(\$11,593)	-10.5%	\$190,996	\$193,644	\$2,649	1.4%
All tuition – 50th percentile	\$110,874	\$114,244	\$3,370	3%	\$190,996	\$227,160	\$36,165	18.9%
All tuition – 75th percentile	\$110,874	\$123,871	\$12,996	11.7%	\$190,996	\$247,496	\$56,500	29.6%

Cost and revenue estimates are for a child development home caring for six children and an expanded home caring for 12 children. Collected revenue assumes 95 percent enrollment efficiency and 3 percent adjustment for bad debt.

Findings on this slide reflect costs to deliver care at market wages, not the minimum salaries required for the Early Childhood Educator Pay Equity Fund.



Analysis of Child Care Subsidy Rates

- Subsidy rates were closer to the average cost of care in 2024, compared to 2023.
- Average infant care costs in child development centers **exceed** subsidy rates by 7 to 14 percent depending on the quality designation.
- Average costs for child development homes **fall below** subsidy rates by 10 to 20 percent depending on the quality designation.
- The **biggest gap** between cost of care and subsidy rate is for infant care in centers.
- Child care subsidy payment rates exceed the 25th percentile of market rates for all providers caring for all ages of children and exceed the 50th percentile for many providers depending on age of children and quality designation.
- Rates for all ages, settings and quality levels are below the 75th percentile with the exception of home-based providers at the High-Quality designation.
- Rates for High-Quality child development homes exceed the 75th percentile for infant and toddler care.



Appendix

Center-based assumptions for cost model

Cost Drivers	
Staffing Assumptions	<ul style="list-style-type: none"> • Adult:child ratio required by licensing standards. • Includes a full-time director for facilities with 32 children or more and a part-time director for fewer than 32. Facilities with 94 or more children have a full-time assistant director. • Includes paid time to attend training, based on the District’s licensing requirements. • Additional staff (e.g., janitor, receptionist, office manager, assistant director) based on program size.
Staff Compensation Assumptions	<ul style="list-style-type: none"> • Salaries based on 2022 DC Child Care Provider Survey, adjusted for inflation. • Director and assistant salary based on Bureau of Labor Statistics (BLS) Occupational Employment Statistics Occupational Employment and Wage Estimates for the Metropolitan Washington Area. • Data inputs for additional staff wages are set based on BLS data for the Washington Metropolitan area for relevant occupational codes. • All staff wages are set to meet or exceed the DC minimum wage of \$17.50 in effect on July 1, 2024. • Employer paid benefits for all employees. • Early Childhood Educator Pay Equity Fund only: Teacher and assistant teacher salaries are set at FY25 minimum salary levels.
Non-Personnel Cost Assumptions	<ul style="list-style-type: none"> • Calculated per child, per classroom or program costs, depending on the cost. • Non-personnel costs are based on national industry norms and adjusted for the District where necessary/possible.

Center-based assumptions for cost model

Revenue Drivers	
Subsidy Reimbursement Rates	FY24 rates, effective Oct. 1, 2023.
Child and Adult Care Food Program (CACFP) Reimbursement Rates	The model assumes participation in CACFP for all programs serving children with subsidies, because this is a requirement of the District’s subsidy program. CACFP reimbursement rates were updated to reflect rates effective July 1, 2023
Pre-K	Some scenarios reflect provider participation in PKEEP, in which providers receive funding equal to the District’s UPSFF per enrolled PKEEP student. The USPFF revenue reflects 2023-24 school year rates for 3- and 4-year-olds, including at-risk funds allocated for PKEEP students in foster care, experiencing homeless, or on Temporary Assistance for Needy Families (TANF) or Supplemental Nutrition Assistance Program (SNAP).
Private Pay Tuition	Based on 2022 DC Child Care Provider Survey and adjusted for inflation.
Operating Assumptions	
Enrollment Efficiency	95 percent enrollment.
Uncollected Revenue	3 percent uncollected revenue (tuition, fees and copayments), which is industry standard.

Home-based assumptions for cost model

Cost Drivers	
Staffing and Compensation Assumptions	<ul style="list-style-type: none">• Assumptions include a salary for the caregiver.• Includes a floater/teacher aide when necessary due to adult to child ratios.
Non-Personnel Cost Assumptions	<ul style="list-style-type: none">• Non-personnel costs include per child, annual home operating or other direct costs.• Non-personnel costs are based on the national industry norms and adjusted for the District where possible.• Per-child costs include costs such as food, supplies, equipment and office supplies.• Annual home operating costs include rent or mortgage, utilities, home or renter's insurance and home maintenance and repairs.• Other annual direct costs include telephone, internet, accountant or tax preparation and fees and permits.

Home-based assumptions for cost model

Revenue Drivers	
Subsidy Reimbursement Rates	FY24 rates, effective Oct. 1, 2023.
Child and Adult Food Care Program (CACFP) Reimbursement Rates	The model assumes participation in CACFP for all programs serving children with subsidies, because this is a requirement of the District's subsidy program. CACFP reimbursement rates were updated to reflect rates effective July 1, 2023
Private Pay Tuition	Based on 2022 DC Child Care Provider Survey and adjusted for inflation.
Operating Assumptions	
Enrollment Efficiency	95 percent enrollment.
Uncollected Revenue	3 percent uncollected revenue (tuition, fees and copayments), which is industry standard.

Methodology

Additional details on the District's cost estimation model and methodology can be found in [Modeling the Cost of Child Care in the District of Columbia 2023](#).