



# District of Columbia Cost Estimation Model Overview

July 2021

## Background Recap

- As in previous years, OSSE chose to use a cost model approach to rate setting, as opposed to a market rate survey
- A cost estimation model **estimates the cost of care** by incorporating data and assumptions to model what expected costs would be under different scenarios
- The District of Columbia believes the cost estimation model is the **most accurate way** to reflect the actual cost of care
- The District is a national leader in this work and one of only two jurisdictions to receive approval to use alternative methodology during this CCDF plan submission cycle

# Timeline for Updating the Cost Model

Date	Action
Jan. 28, 2021	State Early Childhood Development Coordinating Council (SECDCC) approves OSSE's use of alternative methodology
April 15, 2021	OSSE's request to use alternative methodology is approved by ACF
April – May, 2021	OSSE presents alternative methodology to groups of stakeholders for input and discussion
Spring 2021	OSSE convenes internal working group and national cost model experts to update cost estimation model and analysis
July 22, 2021	OSSE presents updates to SECDCC
Within 30 days of plan submission	Cost model analysis report published

# Stakeholder Meetings

- As part of the process, OSSE consulted stakeholders to update and validate:
  - Cost drivers
  - Personnel assumptions
  - Non-personnel assumptions
  - Revenue
  - Operating assumptions
- Robust discussions regarding salaries, health benefits, accurate mix of personnel to include for centers and homes
- Updated cost model inputs and assumptions based on these discussions

# Stakeholder Meetings

Date	Stakeholder Group
March 3, 2021	Initial meeting to discuss approach and request meetings with smaller groups to validate model assumptions and data collection.  Attendees from DC Head Start Association. DC Director's Exchange, DCAEYC, DC Family Child Care Association, Washington Association of Child Care Centers
April 7, 2021	DCAEYC
April 7, 2021	DC Head Start Association
April 20, 2021	OSSE Child Care Provider Recovery Group
April 20, 2021	Washington Association of Child Care Centers
April 23, 2021	Multicultural Spanish Speaking Provider Association
May 12, 2021	Family Child Care Association

## Review of the Cost Model

- Cost model scenarios show the effect of size of facility, child's age, Capital Quality designation, enrollment and other factors have on provider revenues
- The inputs (and results) in each scenario are based on an average approximation of a child care facility
- The cost model enables OSSE to calculate the cost per child for different scenarios based on the total expenses and number of children enrolled by age group
- The cost model also enables OSSE to calculate the estimated revenue for a facility under different scenarios based on the inputs and operating assumptions
- The results of this analysis will inform the subsidy reimbursement rates, based on funding availability

# Inputs to the Cost Model Scenarios Include

- Capital Quality designation
- Number of classrooms by age group (facility size)
- Salaries and benefits
  - Health insurance (**included for all providers**)
  - Number of sick days (10)
  - Number of paid leave days (10)
  - Staff time for professional development (**40 hours annually**)
- Additional program participation:
  - Level 2 provider (Y/N)
  - QIN provider (Y/N)
  - Pre-K Enhancement and Expansion Program (PKEEP) provider (Y/N)
  - Shared Service Business Alliance (SSBA) provider (Y/N)

# Center-Based Staffing Assumptions

Position Title	Full Time Equivalent (FTE)	Variation by Quality Designation
Director	1 FTE for > 64 children, 0.5 FTE under 64 children	All Designations
Assistant Director	1 FTE for > 94 children, 0.5 FTE for under 94 children	All Designations
Office Manager	1 FTE > 94 children	All Designations
Lead Teacher	1 FTE per classroom	All Designations
Assistant Teacher	1 FTE per classroom + coverage	All Designations
Floaters/Teacher Aides	Varies depending on number of classrooms	All Designations
Janitor	1 FTE for > 64 children, 0.5 FTE under 64 children	All Designations



# Center-Based Salary Assumptions

Position	Developing	Progressing	Quality	High-Quality
Director	\$53,216	\$66,520	\$79,824	\$93,128
Assistant Director	\$48,320	\$57,984	\$67,648	\$67,648
Office Manager	\$42,608	\$44,312	\$51,129	\$51,129
Lead Teacher	\$41,536	\$43,424	\$45,312	\$50,976
Assistant Teacher	\$39,648	\$41,536	\$43,424	\$43,424
Floater/Teacher Aides	\$31,616	\$31,616	\$31,616	\$31,616
Janitor	\$35,070	\$35,070	\$35,070	\$35,070

- Updated salary with most recent data from the Bureau of Labor Statistics (BLS) Occupational Employment Statistics survey
- Assumes base of \$15.20/hour DC minimum wage (\$31,616 annually)
- Salaries represent the **average wages** of employees

## Non-Personnel Assumptions

- Applied Consumer Price Index (CPI) for 2019, 2020 and 2021 for curriculum, supplies, food, etc.
  - 2019 CPI: 2.3% increase
  - 2020 CPI: 1.4% increase
  - 2021 CPI: 0.8% increase
- Fixed costs – rent increased from \$42/sq ft to **\$50/sq ft**
- Additional expenses related to coronavirus (COVID-19)
  - Number of cleanings per month (at \$500/per cleaning)
  - Estimated cost of additional sanitation supplies

## Revenue Inputs

- Subsidy revenue
- Parent co-pays
- Private pay tuition
- PKEEP allocation, including at-risk funding
- Considers full daily reimbursement rate for Level 2 and SSBA members
- Child and Adult Care Food Program (CACFP)

## Operating Assumptions

- Applied to estimated revenue
- Enrollment efficiency
  - Assume 85 or 90 percent
- Percentage of uncollected tuition
  - Assume 3 percent uncollected

## Home-Based Model Operating Assumptions

- Model assumes six children enrolled in a child development home and nine children enrolled in an expanded home
- Can run scenarios to show effect of participation in the QIN or SSBA

## Home-Based Model Changes from 2018

- Included personnel expenditures for the provider/lead teacher for all homes and expanded homes
- Included personnel expenditures for an assistant teacher and floater for expanded homes

# Home Staffing Assumptions

<b>Position</b>	<b>Child Development Home</b>	<b>Child Development Expanded Home</b>
Provider/Lead Teacher	1 FTE	1 FTE
Assistant Teacher	-	1 FTE
Floater/Teacher Aide	-	1 FTE
Substitute	Varies by quality designation	Varies by quality designation

# Home Salary Assumptions

<b>Position</b>	<b>Developing</b>	<b>Progressing</b>	<b>Quality</b>	<b>High-Quality</b>
Provider/Lead Teacher	\$41,536	\$43,424	\$45,312	\$50,976
Assistant Teacher	\$39,648	\$41,536	\$43,424	\$43,424
Floater/Teacher Aide	\$31,616	\$31,616	\$31,616	\$31,616
Substitute	\$31,616	\$31,616	\$31,616	\$31,616



## Key Takeaways

- Current rates for High-Quality Capital Quality designation and school-age care are close to or meeting the cost of care
- Increased compensation for lead teachers and assistant teachers has driven an overall increase in expenditures/costs for child care programs

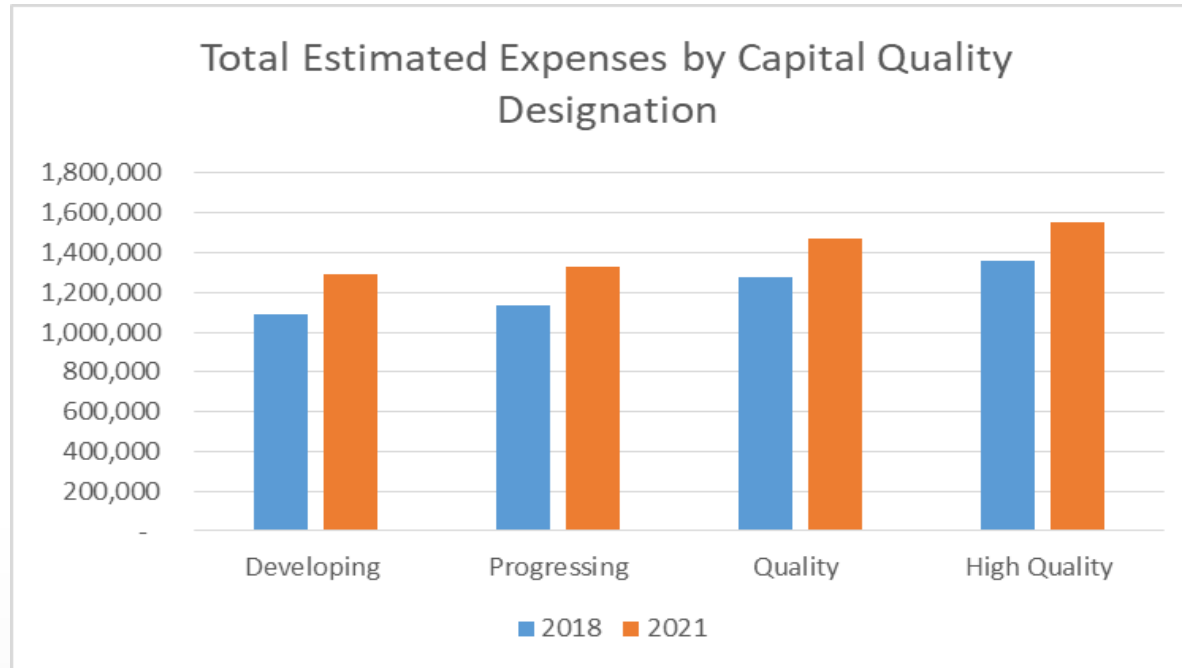
## Current Rates Are Meeting the Cost of Care for High-Quality Child Care Centers

<b>2021 Annual Cost of Care for a High-Quality Center</b>	<b>2021 Daily Cost of Care for a High-Quality Center</b>	<b>Current High-Quality Subsidy Reimbursement Rate</b>
\$24,239	\$93.23	\$93.91

## Current Rates Are Meeting the Cost of Care for School-Age Children Enrolled in Subsidy

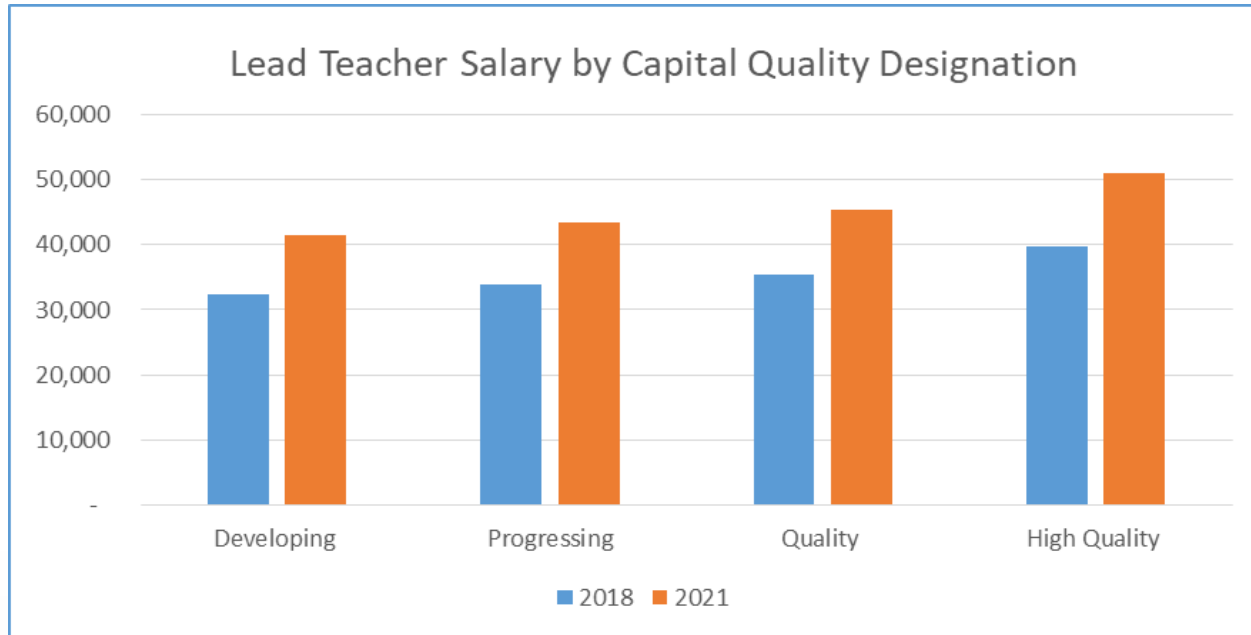
<b>2021 Annual Cost of Care for a School-Age Child</b>	<b>2021 Daily Cost of Care for a School-Age Child</b>	<b>Current School-Age Subsidy Reimbursement Rate</b>
\$9,840	\$37.85	\$36.06

# Estimated Annual Expenditures By Capital Quality Designation



- Scenario is for a center with five classrooms and 64 children
- Average increase is \$193k, attributable to increased personnel costs

# Comparison of Lead Teacher Salaries from 2018 to 2021



- 2018 BLS child care worker salary for Washington, DC was \$29,450
- 2021 BLS child care worker salary for Washington, DC is \$37,760, an increase of \$8,310

## Average Cost of Care for Child Care Centers

Capital Quality Designation	Average Cost of Care (annual)	Daily Cost of Care
Developing	\$20,132	\$77.43
Progressing	\$20,801	\$80.00
Quality	\$22,919	\$88.15
High-Quality	\$24,239	\$93.23

### Notes:

- Average cost of care is based on five classrooms and 64 children enrolled
- Average cost of care is an annual estimate
- Daily estimates can be calculated by dividing the estimated annual cost of care by 260 days

# Average Cost of Care for Child Care Homes and Expanded Homes

## Child Development Homes

Capital Quality Designation	Average Cost of Care (annual)	Daily Cost of Care
Developing	\$11,687	\$44.95
Progressing	\$12,952	\$49.82
Quality	\$10,288	\$54.69
High-Quality	\$16,165	\$62.17

## Child Development Expanded Homes

Capital Quality Designation	Average Cost of Care (annual)	Daily Cost of Care
Developing	\$19,903	\$73.09
Progressing	\$20,098	\$77.30
Quality	\$21,194	\$81.52
High-Quality	\$22,491	\$86.50

Notes:

- Average cost of care is based on 6 children for CDH and 9 children for CDX