



Modeling the Cost of Child Care in the District of Columbia

March 11, 2016



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Introduction

The Office of the State Superintendent of Education (OSSE) is committed to building a high-quality early care and education system in the District of Columbia (the District or DC) that ensures all children start school ready for success. As noted by the National Institute for Early Education Research, the District exceeds national norms for quality standards, financing, and access to pre-K education.¹ Nevertheless, as evidenced by this cost modeling report, the District's shift to universal pre-Kindergarten for 3- and 4-year-old children, largely delivered in public school settings, has created financial challenges for community-based child development organizations and child development homes that serve infants and toddlers, the most expensive type of care to provide.

Traditionally, subsidy rates have been determined using a statistically valid and reliable survey of the market rates; however, the child care market is one in which natural market forces generally fail. Although consumers typically pay what they can afford and the market responds in turn with a range of options, the cost of high-quality child care exceeds most families' ability to pay. Many market-based child care programs—especially those that serve infants and toddlers—have to establish prices that are below the true cost of delivering quality services. In order to better understand the actual cost of providing child care in the District of Columbia, OSSE, with the assistance of national financing experts, took the opportunity to develop an interactive model of the actual cost of delivering child care services in the District at each quality tier level for both centers and homes.

This innovative approach to cost modeling is supported by the reauthorized federal Child Care and Development Block Grant Act of 2014 (CCDBG Act of 2014) (Pub.L. 113-186), which provides states with an option to develop and use a statistically valid and reliable alternative methodology for setting payment rates, such as a cost estimation model. The law also requires states to consult with its State Advisory Council, and on March 24, 2015, OSSE consulted with the District's State Early Childhood Development Coordinating Council (SECDCC). Pursuant to the Pre-k Enhancement and Expansion Act of 2008, the SECDCC was legislatively created in March 2011 to improve collaboration and coordination among entities carrying out federally-funded and District-funded pre-K and other early childhood programs to improve school readiness and assist in the planning and development of a comprehensive early care and education (ECE) system that serves children ages birth to 8 years of age.

The CCDBG Act of 2014 also requires states to provide a detailed report on the results of its cost estimation model and make it widely available to the public. The results provided in this report fulfill this federal obligation and will be used by OSSE to inform rate-setting and other ECE policies in the District.

¹ Barnett, W.S., Carolan, M.E., Squires, J.H., Clarke Brown, K., & Horowitz, M. (2015). *The state of preschool 2014: State preschool yearbook*. New Brunswick, NJ: National Institute for Early Education Research.

Definitions

Child Development Center: A child development facility located on premises other than a dwelling occupied by the operator of the facility.

Child Development Home: A child development facility located in a private dwelling occupied by the operator of the facility. “Child Development Home” also includes those facilities classified as “Expanded Child Development Home.”

Extended Day Full-time: Six (6) to fourteen (14) hours where at least one hour of care is in the morning before 7:00 a.m. or in the afternoon after 6:00 p.m. and the majority of hours are between 7:00 a.m. and 6:00 p.m., Monday through Friday.

Extended Day Part-time: Less than six (6) hours where at least one hour of care is in the morning before 7:00 a.m. or in the afternoon after 6:00 p.m. and the majority of hours are between 7:00 a.m. and 6:00 p.m., Monday through Friday.

Full-time Traditional: Six (6) to eleven (11) hours between 7:00 a.m. and 6:00 p.m., Monday through Friday.

Level II Center: A child development facility that is authorized by OSSE to determine initial eligibility and to re-determine eligibility of families and children for subsidized child care services.

Non-traditional Full-time: Six (6) to eleven (11) hours between 6:00 p.m. and 7:00 a.m., Monday through Friday; or six (6) to eleven (11) hours on Saturday or Sunday, regardless of the time of day.

Non-traditional Part-time: Less than six (6) hours between 6:00 p.m. and 7:00 a.m., Monday through Friday; or less than six (6) hours on Saturday or Sunday, regardless of the time of day.

Part-time Traditional: Less than six (6) hours of care between 7:00 a.m. and 6:00 p.m., Monday through Friday.

Subsidized Child Care Provider: Licensed child development facilities that have a contract with the Office of the State Superintendent of Education to provide care for eligible children under the Subsidized Child Care Program; however, all children enrolled at these facilities are not necessarily participants in the subsidy program.

Quality Rating and Improvement System: The District’s Going for the Gold system establishes criteria at three different levels for early care and education providers that participate in the subsidy program. Each level (Bronze, Silver, and Gold) has criteria associated with it that must be met to receive that tier’s reimbursement rate. The levels are

determined by national accreditation status (i.e., not accredited, candidacy or equivalent, or fully accredited) and compliance with licensing regulations.

Pre-K Center: A Gold-level rated center that meets the requirements and high quality standards as outlined in the Pre-k Enhancement and Expansion Funding regulations. These centers receive funding at the uniform per student funding formula (UPSFF) for eligible 3- and 4-year old children.

Early Care and Education Landscape in the District

Passage of the historic Pre-k Enhancement and Expansion Act of 2008 (Pre-k Act of 2008) elevated early learning as a centerpiece of the District’s education reform agenda.² This legislation set forth a pivotal goal to make pre-Kindergarten universally available to all 3- and 4-year-old children who reside in the District by 2014. In fiscal year 2015 (FY15), 12,612 or 78 percent of 3- and 4-year-olds in the District were enrolled in public pre-K programs. Although DC does have a three-sector pre-K delivery system (District of Columbia Public Schools, public charter schools, and community-based organizations), the majority of 3- and 4-year-old children are served in public schools.

Table 1. Licensed Capacity by Age and Ward

| Ward | Infant | Toddler | Pre-school | School Age ³ | Total Capacity by Ward | Percentage |
|--------------|-------------|-------------|--------------|-------------------------|------------------------|-------------|
| 1 | 426 | 134 | 746 | 585 | 1891 | 8% |
| 2 | 1205 | 210 | 1856 | 784 | 4055 | 16% |
| 3 | 255 | 117 | 1782 | 363 | 2517 | 10% |
| 4 | 680 | 485 | 1081 | 1452 | 3698 | 15% |
| 5 | 669 | 253 | 922 | 1421 | 3265 | 13% |
| 6 | 467 | 200 | 1027 | 543 | 2237 | 9% |
| 7 | 450 | 305 | 1318 | 1128 | 3201 | 13% |
| 8 | 705 | 389 | 1504 | 1729 | 4327 | 17% |
| Total | 4857 | 2093 | 10236 | 8005 | 25191 | 100% |

As of January 2016, the District has 356 licensed child development centers and 128 child development homes, of which 280 (58 percent) provide subsidized early care and education services to children across the District. In FY15, subsidized child care was provided to 5,093 infants and toddlers and 5,498 children 3- to 5-years of age in all eight

² Pre-k Enhancement and Expansion Amendment Act of 2008, D.C. Law 17-202, D.C. Official Code §§ 38-271.02.

³ A child who is between 5 years of age on or before September 30 of the current school year or 15 years, unless a child has special needs.

wards of the District. Table 1 illustrates the licensed capacity in the District by age of the child and ward.

Methodology

OSSE and Otero Strategy Group LLC worked with Louise Stoney and Libbie Poppick, nationally recognized early childhood finance experts, to model the cost of delivering services at each level of the District’s current Quality Rating and Improvement System (QRIS) at both center- and home-based settings. The objectives of this work were to 1) identify the fiscal impact of the District’s QRIS standards on centers and homes; 2) identify key cost drivers that cut across all QRIS levels; 3) explore differential costs between programs that serve primarily (or exclusively) infants and toddlers and those that serve primarily (or exclusively) 3- and 4-year-old children; 4) create greater transparency on how the child care market operates; and 5) provide information that will allow key stakeholders and policymakers in the District to test a range of alternative rate-setting and subsidy policy recommendations with a clear understanding of the fiscal impact of these decisions.

The District used a cost modeling approach that was developed and tested by national experts Anne Mitchell, from the Alliance for Early Childhood Finance, Andrew Brodsky, from Brodsky Research, and Augenblick, Palaich and Associates (APA), a firm with extensive experience analyzing public education systems and policies. These leaders worked collaboratively with the federal Office of Child Care, through the support of the National Center on Child Care Quality Improvement and the Child Care State Systems Specialist Network, to build the Provider Cost of Quality Calculator (PCQC). The PCQC is a dynamic, web-based tool that calculates the cost of quality based on site-level provider data. However, because the DC child care system has so many levels and funding variations, it was necessary to understand the potential impact of rates and policy on a range of options. To facilitate comparisons across multiple sites and options, OSSE chose to develop and use a set of interactive Excel spreadsheets that embedded the PCQC principles rather than use the online tool.

Lessons from Cost Modeling in DC

- The gap between costs and revenue is largest for programs that serve infants, toddlers, and children with special needs.
- The gap between costs and revenues is greatest in Gold-level programs due to increased requirements for credentialed staff and the need for more staff to cover planning and professional development time.
- Some child care centers and many family child care homes are not fully enrolled and as a result have significant revenue losses.
- Larger centers (or a network of centers linked by a shared administration) can be more financially stable depending on the age distribution of children served and the quality level.
- Subsidy rates need to align with licensing ratios. Rates for children 12 to 30 months old are lower than for children birth to 12 months old, but the adult to child ratios are the same.

Careful attention was paid to ensuring that the data used to inform cost assumptions in the model accurately reflected the DC provider experience. OSSE and its consultants looked carefully at available data on ECE programs throughout the District and, in some cases, conducted targeted surveys to gather specific data (e.g., enrollment data in child development homes). Group and individual interviews with the sector were also conducted to gather and vet information. Additionally, District staff collaborated with the DC Fiscal Policy Institute and DC Appleseed on an interview protocol to identify the cost of care in Silver-level and Gold-level centers. DC Child Care Connections staff helped conduct telephone interviews with child development home providers. The results of these surveys helped inform assumptions used in the model.

Cost modeling enabled OSSE to explore the likely cost of delivering services at each level of the District's current QRIS, as well as to compare the net revenue of a program that 1) primarily serves infants and toddlers compared to one that serves a mix of ages and receives pre-K funding; 2) serves a significant number of children with special needs; 3) includes classrooms for school-age children; and 4) offers services in child development homes. The assumptions used in each of these scenarios varied based on cost drivers such as adult to child ratios, teacher wages and benefits (as a proxy for the level of education and training), facility requirements, vacancy rate, fee collection (i.e., level of bad debt), and others. Use of the cost modeling spreadsheets also makes it possible to include a range of revenue sources, including child care subsidy (with tiered reimbursement), parent fees, the Child and Adult Care Food Program (CACFP), and District pre-K funding.

The cost estimation model will help OSSE and other key stakeholders more precisely understand the gap between the cost of providing quality services in a range of settings and scenarios and the revenue sources available to support ECE programs.

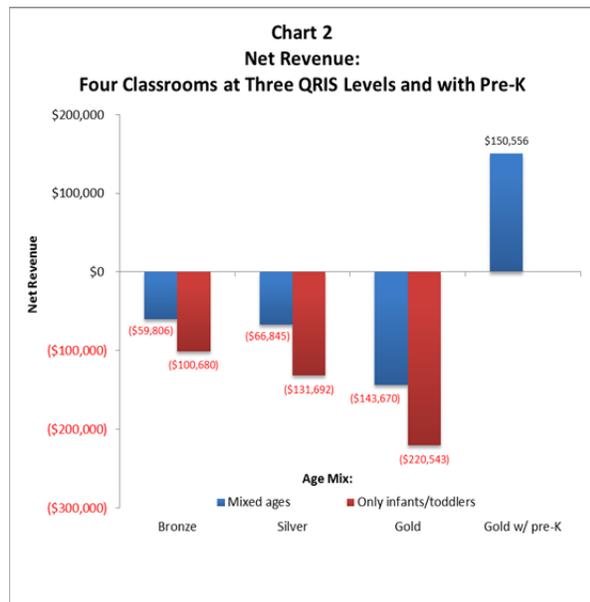
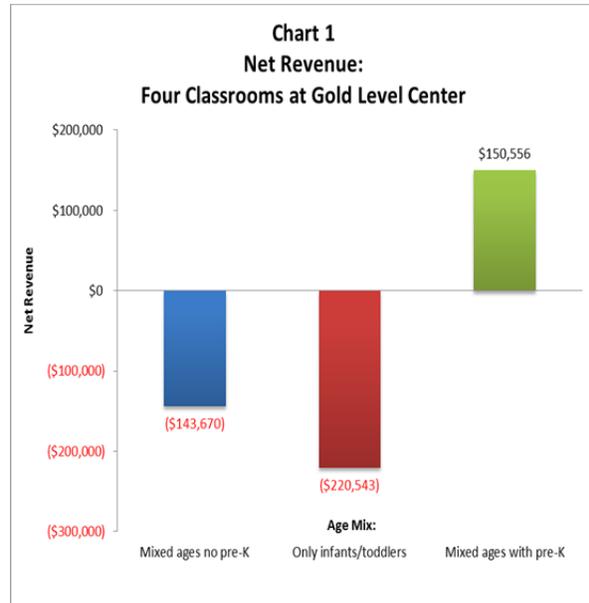
Results in Child Development Centers

Cost modeling revealed that the likely cost of delivering services exceeds available public revenues in most cases as discussed in more detail below. Modeling also indicated that although the tiered reimbursement levels currently established by the District help to narrow the gap between costs and revenues, most community-based organizations need to tap other funding streams, increase program size, and maintain full enrollment to break even. The most significant gaps are in infant and toddler care. Programs that are at the highest quality level (i.e., Gold-level) and are also able to tap pre-K funding appear to have the revenues needed to attain and maintain high-quality standards, including lower child to teacher ratios and higher-credentialed teachers. Organizations that have attained scale by establishing multi-site programs linked by a central administration are also more likely to reach the size and age mix to break even or profit.

Infant and Toddler Care is the Most Expensive

The biggest gap between costs and available revenues occurs in small centers that primarily serve infants and toddlers. Chart 1, which models a four classroom Gold-level center, indicates the difference in profit/loss based on the ages of children served and the ability to tap District pre-K funding. High-quality child care that focuses on serving infants and toddlers needs additional sources of revenue to break even or profit.

The District has established tiered reimbursement rates through its Quality Rating and Improvement System – “Going for the Gold” – that help narrow the gap between costs and available revenues by increasing the subsidy reimbursement rate as program quality increases. Chart 2 indicates that although tiered reimbursement helps to narrow the funding gap, serious challenges persist. Programs that serve mixed ages and receive District pre-K funding for 3- and 4-year-old children are better able to break even or profit and also meet quality standards (see “Gold w/ pre-K” scenario in Chart 2).



Program Size Matters

It is important to note that the scenarios cited above are based on a small center with only four classrooms. Assuming that the center focused on infants and toddlers, this means that it would serve no more than 40 children or a total of 56 children if multiple ages were included. The cost modeling methodology makes it possible to test a range of ways ECE programs can break even or profit. One such strategy is to increase the number of children served so that overhead, including the cost of business and pedagogical leadership and administration, is spread over a larger number of classrooms (i.e., economies of scale).

Chart 3 looks more closely at the impact of scale at a Gold-level center. To better understand how big and what age and income mix is required for a Gold-level center to break even or profit, various scenarios are tested. The deficit was reduced significantly when the center reached a size of 204 children of mixed ages with 20 percent private pay families; however, a positive revenue stream was not realized until the program served almost 245 children and included two out-of-school-time classrooms. The scenario includes an assistant director, receptionist, and office manager for centers serving more than 100 children.

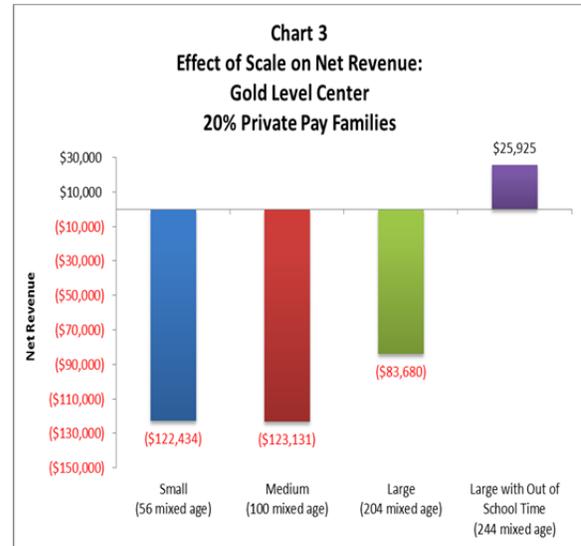


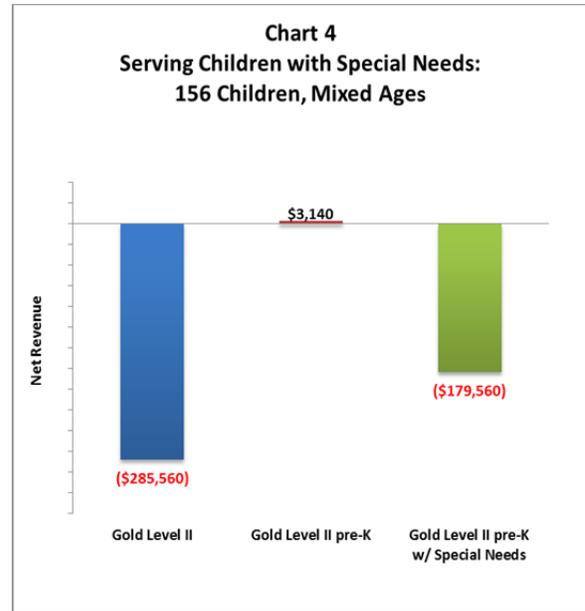
Table 2 provides an analysis of the size and tier level of the District’s child development centers. The majority of the Gold-level child development facilities in the District are serving less than 100 children. Serving 250 children in a single location is highly unlikely in the DC Metropolitan area; however, it is possible to create a multi-site ECE business, or a shared services alliance, that includes many classrooms linked by a central administration. ECE organizations in other parts of the United States have used a shared-services framework to achieve this end. Two examples include Sound Child Care Solutions, a Seattle-based nonprofit that created a shared back office that supports nearly 30 classrooms in diverse neighborhoods across the city and offers high quality care. Chambliss Center, a nonprofit in Chattanooga, uses a similar framework to Sound Child Care Solutions and includes classrooms located at local public schools that are managed and supervised by staff in the Chambliss central office. In short, District cost modeling suggests that looking more closely at how to incentivize shared ECE management could be a promising strategy. The District’s Quality Improvement Network, which launched in 2015, is an example of a shared-services framework that supports comprehensive services, coaching, and professional development for a network of centers and homes. This initiative can serve as a platform for exploring other components of a shared-services framework.

Table 2. Child Development Centers by Size and Quality Tier

| Licensed Capacity | Gold | Silver | Bronze | Total |
|-------------------|-----------|-----------|-----------|------------|
| Under 60 | 35 | 26 | 47 | 108 |
| 60-99 | 30 | 11 | 15 | 56 |
| 100-149 | 14 | 5 | 4 | 23 |
| 150+ | 17 | 6 | 8 | 31 |
| Total | 96 | 48 | 74 | 218 |

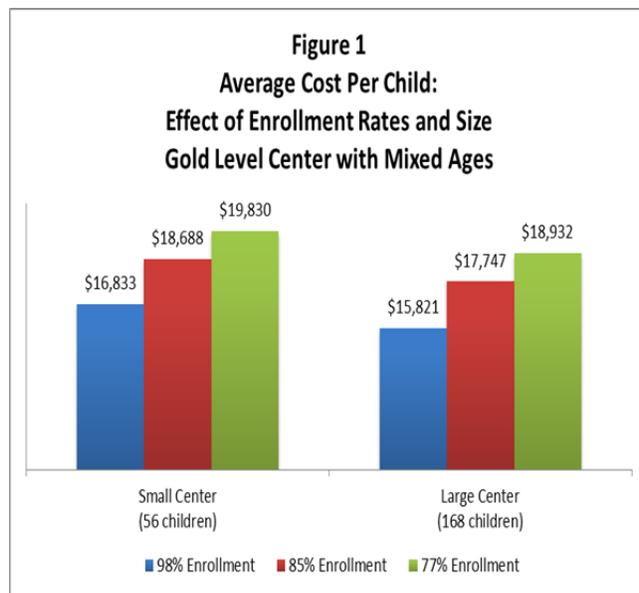
Children with Special Needs Require Additional Staff

Child development centers that serve large numbers of infants and toddlers with special needs incur higher costs due to the need for additional staff and staff with specialized credentials. When the additional staffing needed to serve infants and toddlers with special needs is included in the model, there is a revenue gap. Chart 4 adjusts for the scale challenges noted above and compares the revenue gap in a large child care center that serves 156 typically developing children of mixed ages, compared with a center of the same size and age mix that serves children with special needs.⁴



Full Enrollment Improves Bottom Line

All of the scenarios modeled and discussed thus far assume full enrollment and little to no bad debt, which means that the center is able to collect tuition for every available space, every day. However, given that OSSE currently pays providers on the basis of a child's enrollment and attendance, this assumption may not be true for all centers and homes.



Helping ECE programs maintain full enrollment is a key financing strategy.

If enrollment in child development centers is lowered to 85 percent (the industry standard), none of the centers break even (Figure 1). It is clear that helping ECE programs maintain full enrollment is a key financing strategy and one that will be carefully considered. To this end, OSSE will further research the feasibility of contracting for slots in high-quality child

⁴ This example also assumes that centers rely primarily on subsidy dollars (in other words, additional funding from other third-party sources such as Head Start or Part C of the Individuals with Disabilities Education Act are not included).

development facilities, with a special emphasis on those that serve infants and toddlers and children with special needs.

Tapping Multiple Funding Streams, an Important Provider Strategy

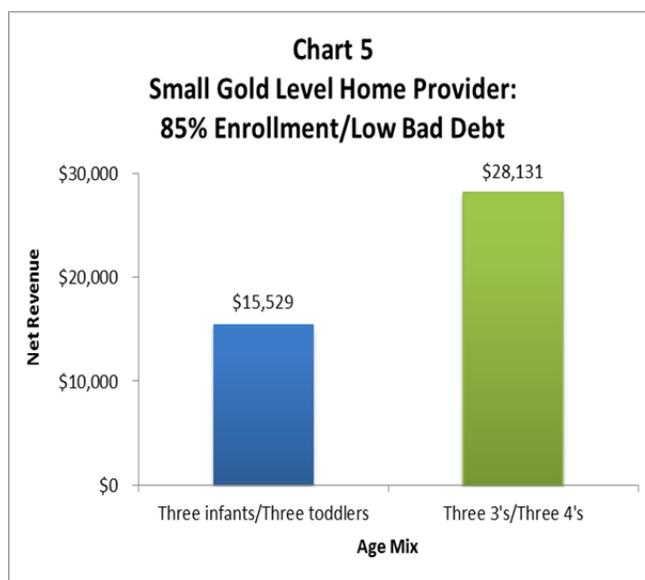
Cost modeling underscores that high-quality child care programs that are able to tap all available funding streams have a stronger business model. The net benefit of layered funding from third-party sources such as pre-K and Head Start is clear. However, one funding stream available to all child care providers that serve low-income children that is often overlooked is the Child and Adult Care Food Program (CACFP). Revenues from this federal funding stream were included in all of the scenarios modeled, and results indicate that these dollars can make a significant difference even in very small programs. For example, a small child-care center that serves about 56 children (four classrooms), half of whom are from families with incomes at or below 130 percent of the federal poverty level, would receive an additional \$65,000 per year in CACFP subsidy. DC’s implementation of the Healthy Tots Act in 2015, which requires child development facilities that serve more than 50 percent subsidy-eligible children to participate in the CACFP program, will ensure child development centers access CACFP funding and additional local reimbursement beyond the federal funding.

A small child-care center that serves about 56 low-income children could receive an additional \$65,000 per year in CACFP subsidy.

Results in Child Development Homes

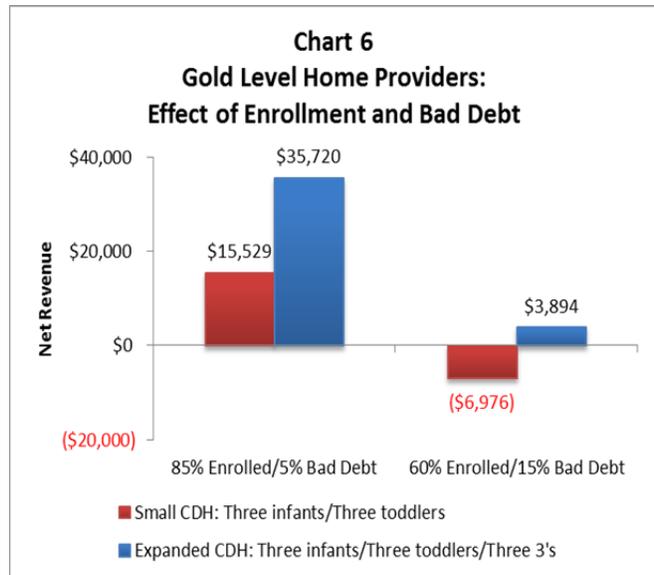
Modeling was also used to test the cost and revenue gap in child development homes, including homes that serve 6 children, as well as expanded child development homes that may serve up to 12 children. Findings were similar to those for center-based care; infants and toddlers are the most expensive children to serve due to lower staff to child ratios. Limiting the number of infants and toddlers increases net revenue in home-based care, especially for child development homes that serve six children.

Full enrollment appears to be the most salient factor when modeling the cost of family child care. Chart 5 shows likely net revenue in a child development home with enrollment levels at 85 percent, which is the industry



standard. Assuming the provider is able to collect the full tuition for every child (resulting in a bad debt of only 5 percent), net revenue is positive in both cases but significantly higher in a home that serves only 3- and 4-year-old children.

However, basing family child care revenue projections on full enrollment and low bad debt is challenging. A telephone survey of child development home providers indicated that current enrollment is on average only about 60 percent of licensed capacity. Additionally, given the frequent gaps in subsidy eligibility and the financial challenges faced by many families, bad debt is more likely around 15 percent. When these factors are taken into consideration, the economic impact is significant, as Chart 6 indicates.



Next Steps: Explore Policy, Practice, and Alternative Rate-Setting Solutions

The cost model allows for a deeper analysis of the impact of regulations, standards, and likely revenues and takes into consideration additional factors that impact costs – such as enrollment levels, program size, gaps in subsidy eligibility, and fee collection. The findings in the cost model will be used by OSSE, in partnership with the SECDCC, and other key stakeholders to inform and guide subsidy policy, innovative practices, and alternative rate-setting solutions in early care in education. OSSE will help facilitate strategic discussions with the SECDCC’s Finance and Policy Committee and the Public and Private Partnerships Committee with the goal to provide a set of concrete recommendations to the SECDCC by October 2016. These recommendations will move the District forward in ensuring that our youngest and most vulnerable children have access to the highest quality early care and education services and supports.

Appendix 1

The tool used to model costs is based on a set of assumptions about the cost of delivering services, and likely revenues, for programs of varying sizes. The assumptions are summarized below.

Staffing Assumptions in Child Development Centers

- The number of teachers per classroom is based on the staff to child ratios required by District child care licensing regulations.
- Lead teacher wages were increased as the programs' quality level increased. We assumed a base wage of 120 percent of the Bureau of Labor Statistics (BLS) wage for a Child Care Worker at Bronze-level (\$31,764), 125 percent at Silver-level (\$33,088), and 135 percent at Gold level (\$35,735). Teacher aides were assumed in Bronze classrooms at \$21,528. Assistant teacher wages increased from \$26,470 at Silver-level to \$29,117 at Gold-level.
- Classroom staffing was further adjusted to allow for increased coverage during opening and closing (assuming a 10-hour day), daily breaks, and annual leave. As the program's quality level increased, the amount of coverage was increased to cover the cost of additional staff time "off the floor" to engage in planning, reflective supervision, child assessment, and other activities related to strengthening teaching to improve child outcomes. Paid time to attend training was also included in the model, based on DC's licensing requirements. All of these adjustments resulted in higher personnel costs as the quality level increased.
- A full-time director was included in all models; however, the wages of the director increased as the programs' quality level increased. We assumed a base wage of 80 percent of the BLS average wage for a preschool administrator at Bronze-level (\$44,336), 100 percent of the BLS average wage for a preschool administrator at Silver-level (\$55,420), 120 percent at Gold-level (\$66,504); and 140 percent (\$77,588) for a preschool administrator at Gold-level with special needs.
- Gold level II sites included an eligibility coordinator. Gold level II with special needs also included a disability coordinator.
- We assumed additional staffing for security and reception, based on program size, and also increased this investment as revenues and quality levels increased.

Non-Personnel Cost Assumptions in Child Development Centers

Non-personnel costs were based on the national industry norms embedded in the Provider Cost of Quality Calculator, adjusted by data provided by the DC Fiscal Policy Institute and DC Appleseed. The cost of ECE is determined largely by personnel costs; thus, the percentage of total cost derived from non-personnel cost varies significantly as the program quality level increases. Economies of scale also play a role in non-personnel costs, resulting in lower expenditures, as a percentage of overall cost, as program size increases.

**Non-Personnel Cost Assumptions, Child Development Center
(Four classrooms, 56 children)**

| | |
|--|------------------|
| Annual costs per classroom (e.g., rent, utilities, maintenance) | \$42,188.50 |
| Annual costs per child (e.g., food, supplies, education equipment) | \$1,749 |
| Annual costs per center (e.g., telephone, Internet, audit) | \$11,750 |
| Total costs | \$278,448 |

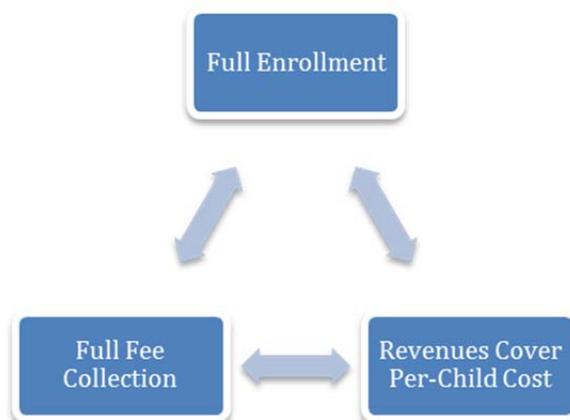
Child and Adult Care Food Program Participation

The United States Department of Agriculture’s Child and Adult Care Food Program (CACFP) provides financial reimbursement for meals served to children at nonprofit programs or for-profit centers, in which at least 25 percent of the children enrolled are from low-income families. All of the budgets we modeled assumed that the provider participated in the CACFP and that 10 percent of the children served were from families whose income was greater than 300 percent of the federal poverty level (FPL); 10 percent were between 186 percent and 300 percent of the FPL; 20 percent were between 130 percent and 185 percent of the FPL; and 60 percent were below 130 percent of the FPL. These assumptions were informed by current participation in the District’s child care assistance program administered by OSSE.

Enrollment Efficiency

Financial sustainability in a child development center is largely determined by three factors, which Stoney and Mitchell refer to as the “Iron Triangle” of early care and education finance. To be financially viable, it is essential that child care centers are fully enrolled – every day, in every classroom – and also collect tuition and fees in full and on time, and ensure that the per-child tuition will cover costs or that they are able to raise third-party funding to fill the gap.

The Iron Triangle of Early Care and Education Finance



District cost modeling underscored the power of the Iron Triangle, especially full enrollment. Most industry leaders suggest that a center director budget for 85 percent

enrollment, which is the industry standard. This level of enrollment allows for typical revenue losses due to gaps in service (e.g., a child drops out or becomes ineligible for child care subsidy and it takes time to fill the slot with another eligible child), and enrollment lags during the summer, excessive absences, etc. However, the cost models we ran for District child development centers all showed significant losses at the 85 percent industry standard. Most programs were able to break even, or realize positive net income, only when we boosted enrollment to 98 percent. Enrollment levels this high may require the District to enter into contracts to purchase slots or base subsidy payments on enrollment instead of attendance as it is currently done.

Bad Debt

Bad debt is the proportion of revenue (tuition, fees and copayments) that is uncollectable. The industry standard is to limit bad debt to less than 3 percent of revenue. We chose to use the industry standard in the District models, largely due to the fact that our budgets were focused on child development centers that primarily serve subsidized children and the District co-payments appear to be affordable for families. If, however, the model is adjusted to include a larger percentage of private, fee-paying families, the level of bad debt may need to be increased (although revenues also may increase, based on the possibility of charging higher prices to tuition-paying families).

Program Size and Ages of Children Served

The net revenue of a child development program can vary widely, based on the size of the program as well as the age mix of children served and whether or not the children have special needs. We modeled a range of options and presented charts of our findings. Below are tables that show the detail underneath each of these charts, including the number and ages of children served, number of staff employed, wage and non-personnel expenses, likely revenue, and net profit/loss.

Chart 1
Net Revenue:
Four Classrooms at Gold Level Center

| | Mixed Ages with no pre-K \$ | Only Infants and Toddlers | Mixed Ages with pre-K \$ |
|-------------------------------|--|--------------------------------------|-------------------------------------|
| Infant Classrooms | 1 | 2 | 1 |
| Infant Staffed Capacity | 8 | 16 | 8 |
| | | | |
| Toddler Classrooms | 1 | 2 | 1 |
| Toddler Staffed Capacity | 12 | 24 | 12 |
| | | | |
| 3's Classrooms | 1 | | 1 |
| 3's Staffed Capacity | 16 | | 16 |
| | | | |
| 4's Classrooms | 1 | | 1 |
| 4's Staffed Capacity | 20 | | 20 |
| | | | |
| Total Classrooms | 4 | 4 | 4 |
| Total Staffed Capacity | 56 | 40 | 56 |
| Total Staff | 16 | 16 | 16 |
| | | | |
| Personnel Expense | \$647,409 | \$644,165 | \$681,248 |
| Non-Personnel Expense | <u>\$279,284</u> | <u>\$251,060</u> | <u>\$279,284</u> |
| Total Expense | \$926,693 | \$895,225 | \$960,532 |
| | | | |
| Tuition Revenue (90% subsidy) | \$719,070 | \$629,000 | \$605,837 |
| CACFP Revenue | <u>\$63,953</u> | <u>\$45,681</u> | \$63,953 |
| PreK Revenue | | | <u>\$441,298</u> |
| Total Revenue | \$783,023 | \$674,681 | \$1,111,088 |
| | | | |
| Net Revenue | (\$143,670) | (\$220,543) | \$150,556 |

Chart 2
Net Revenue:
Four Classrooms at Three QRIS Levels and with Pre-K

| | Bronze | | Silver | | Gold | | Gold |
|------------------------------|-----------------------------|---------------------------|-----------------------------|---------------------------|-----------------------------|---------------------------|--------------------------|
| | Mixed Ages with no pre-K \$ | Only Infants and Toddlers | Mixed Ages with no pre-K \$ | Only Infants and Toddlers | Mixed Ages with no pre-K \$ | Only Infants and Toddlers | Mixed ages with pre-K \$ |
| Infant Classrooms | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| Infant Staffed Capacity | 8 | 16 | 8 | 16 | 8 | 16 | 8 |
| Toddler Classrooms | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| Toddler Staffed Capacity | 12 | 24 | 12 | 24 | 12 | 24 | 12 |
| 3's Classrooms | 1 | | 1 | | 1 | | 1 |
| 3's Staffed Capacity | 16 | | 16 | | 16 | | 16 |
| 4's Classrooms | 1 | | 1 | | 1 | | 1 |
| 4's Staffed Capacity | 20 | | 20 | | 20 | | 20 |
| Total Classrooms | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Total Staffed Capacity | 56 | 40 | 56 | 40 | 56 | 40 | 56 |
| Total Staff | 12 | 12.5 | 13.5 | 14 | 16 | 16 | 16 |
| Personnel Expense | \$371,190 | \$378,603 | \$478,231 | \$488,378 | \$647,409 | \$644,165 | \$681,248 |
| Non-Personnel Expense | \$279,284 | \$251,060 | \$279,284 | \$251,060 | \$279,284 | \$251,060 | \$279,284 |
| Total Expense | \$650,474 | \$629,663 | \$757,515 | \$739,438 | \$926,693 | \$895,225 | \$960,532 |
| Tuition Revenue (90% subsid) | \$526,714 | \$483,302 | \$626,717 | \$562,066 | \$719,070 | \$629,000 | \$605,837 |
| CACFP Revenue | \$63,953 | \$45,681 | \$63,953 | \$45,681 | \$63,953 | \$45,681 | \$63,953 |
| PreK Revenue | | | | | | | \$441,298 |
| Total Revenue | \$590,667 | \$528,983 | \$690,670 | \$607,746 | \$783,023 | \$674,681 | \$1,111,088 |
| Net Revenue | (\$59,806) | (\$100,680) | (\$66,845) | (\$131,692) | (\$143,670) | (\$220,543) | \$150,556 |

Chart 3
Effect of Scale on Net Revenue:
Gold Level Center
20% Private Pay Families

| | Small | Medium | Large | Large with Out of School Time |
|-------------------------------|--------------------|--------------------|--------------------|----------------------------------|
| Infant Classrooms | 1 | 3 | 5 | 5 |
| Infant Staffed Capacity | 8 | 24 | 40 | 40 |
| Toddler Classrooms | 1 | 2 | 5 | 5 |
| Toddler Staffed Capacity | 12 | 24 | 60 | 60 |
| 3's Classrooms | 1 | 2 | 4 | 4 |
| 3's Staffed Capacity | 16 | 32 | 64 | 64 |
| 4's Classrooms | 1 | 1 | 2 | 2 |
| 4's Staffed Capacity | 20 | 20 | 40 | 40 |
| OST Classrooms | | | | 2 |
| OST Staffed Capacity | | | | 40 |
| Total Classrooms | 4 | 8 | 16 | 18 |
| Total Staffed Capacity | 56 | 100 | 204 | 244 |
| Total Staff | 16 | 28 | 54 | 55.3 |
| Personnel Expense | \$647,409 | \$1,093,939 | \$2,086,416 | \$2,116,068 |
| Non-Personnel Expense | <u>\$279,284</u> | <u>\$525,650</u> | <u>\$1,046,606</u> | <u>\$1,177,055</u> |
| Total Expense | \$926,693 | \$1,619,589 | \$3,133,022 | \$3,293,123 |
| Tuition Revenue (80% subsidy) | \$747,626 | \$1,395,328 | \$2,843,036 | \$3,096,930 |
| CACFP Revenue | <u>\$56,633</u> | <u>\$101,130</u> | <u>\$206,306</u> | <u>\$222,118</u> |
| Total Revenue | \$804,259 | \$1,496,458 | \$3,049,342 | \$3,319,048 |
| Net Revenue | (\$122,434) | (\$123,131) | (\$83,680) | \$25,925 |

Children with Special Needs

Cost modeling reveals that even when the higher child care subsidy reimbursement rate for children with special needs is included, child development centers still incur losses. The table below provides more detail on the cost drivers of those losses. Note that the tuition revenue included in this table represents only child care subsidy. Centers may potentially fill the gap with additional early intervention subsidy; however, these dollars are typically not available for infants and toddlers.

Chart 4
Serving Children with Special Needs:
156 Children, Mixed Ages

| | Gold Level II | Gold Level II with pre-K \$ | Gold Level II with Special Needs and pre-K \$ |
|----------------------------------|----------------------|------------------------------------|--|
| Infant Classrooms | 6 | 6 | 6 |
| Infant Staffed Capacity | 48 | 48 | 48 |
| Toddler Classrooms | 6 | 6 | 6 |
| Toddler Staffed Capacity | 72 | 72 | 72 |
| 3's Classrooms | 1 | 1 | 1 |
| 3's Staffed Capacity | 16 | 16 | 16 |
| 4's Classrooms | 1 | 1 | 1 |
| 4's Staffed Capacity | 20 | 20 | 20 |
| Total Classrooms | 14 | 14 | 14 |
| Total Staffed Capacity | 156 | 156 | 156 |
| Total Staff | 51 | 51 | 55 |
| Personnel Expense | \$1,974,263 | \$2,005,844 | \$2,179,544 |
| Non-Personnel Expense | <u>\$877,559</u> | <u>\$877,559</u> | <u>\$886,559</u> |
| Total Expense | \$2,851,822 | \$2,883,403 | \$3,066,103 |
| Tuition Revenue (90% low income) | \$2,388,108 | \$2,258,085 | \$2,258,085 |
| PreK Revenue | \$0 | \$450,304 | \$450,304 |
| CACFP Revenue | <u>\$178,154</u> | <u>\$178,154</u> | <u>\$178,154</u> |
| Total Revenue | \$2,566,262 | \$2,886,543 | \$2,886,543 |
| Net Revenue | (\$285,560) | \$3,140 | (\$179,560) |

Child Development Homes

The tables below provide more detailed information regarding likely costs and potential revenues in child development homes.

**Chart 5
Small Gold Level Home Provider:
85% Enrollment/Low Bad Debt**

| | Infants/ Toddlers | 3's/4's |
|-------------------------------|------------------------------|-----------------|
| Staffed Capacity: Infants | 3 | |
| Toddlers | 3 | |
| 3's | | 3 |
| 4's | | 3 |
| Total Staffed Capacity | 6 | 6 |
| Personnel Expense | \$25,918 | \$1,525 |
| Non-Personnel Expense | <u>\$21,670</u> | <u>\$21,670</u> |
| Total Expense | \$47,588 | \$23,194 |
| Tuition Revenue (63% subsidy) | \$58,376 | \$46,584 |
| CACFP Revenue | <u>\$4,741</u> | <u>\$4,741</u> |
| Total Revenue | \$63,117 | \$51,325 |
| Net Revenue | \$15,529 | \$28,131 |

*Personnel expense does not include the child development home caregiver.

Chart 6
Gold Level Home Providers:
Effect of Enrollment and Bad Debt

| | 85% Enrollment/ 5% Bad Debt | | 60% Enrollment/ 15% Bad Debt | |
|-------------------------------|--------------------------------|-----------------|---------------------------------|-----------------|
| | Small CDH | Expanded CDH | Small CDH | Expanded CDH |
| Staffed Capacity: Infants | 3 | 3 | 3 | 3 |
| Toddlers | 3 | 3 | 3 | 3 |
| 3's | | 3 | | 3 |
| 4's | | | | |
| Total Staffed Capacity | 6 | 9 | 6 | 9 |
| Personnel Expense | \$25,918 | \$25,918 | \$25,918 | \$25,918 |
| Non-Personnel Expense | <u>\$21,670</u> | <u>\$27,025</u> | <u>\$21,670</u> | <u>\$27,025</u> |
| Total Expense | \$47,588 | \$52,943 | \$47,588 | \$52,943 |
| Tuition Revenue (63% subsidy) | \$58,376 | \$81,551 | \$37,265 | \$51,817 |
| CACFP Revenue | <u>\$4,741</u> | <u>\$7,111</u> | <u>\$3,347</u> | <u>\$5,020</u> |
| Total Revenue | \$63,117 | \$88,662 | \$40,612 | \$56,837 |
| Net Revenue | \$15,529 | \$35,720 | (\$6,976) | \$3,894 |

*Personnel expense does not include the child development home caregiver.

Appendix 2

Current Provider Rates: Effective October 1, 2013

GOLD TIER CENTER RATES

| CHILD DEVELOPMENT CENTER GOLD RATES | | | | | | |
|--|------------------------------|------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------------------------|
| Age Group | Full-time traditional | Part-time traditional | Extended Day Full-time | Extended Day Part-time | Non-traditional Full-time | Non-traditional Part-time |
| Infant | \$62.57 | \$37.55 | \$68.83 | \$43.80 | \$78.21 | \$46.93 |
| Toddler | \$58.50 | \$35.10 | \$64.35 | \$40.95 | \$73.13 | \$43.87 |
| Preschool | \$42.00 | \$25.20 | \$46.20 | \$29.40 | \$52.50 | \$31.50 |
| Preschool Before and After | \$42.00 | \$25.20 | | | | |
| School Age Before and After | \$32.00 | \$19.20 | \$35.20 | \$21.12 | \$38.91 | \$23.35 |
| School Age Before or After | \$32.00 | \$14.40 | | | | |

| CHILD DEVELOPMENT HOME GOLD RATES | | | | | | |
|--|------------------------------|------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------------------------|
| Age Group | Full-time traditional | Part-time traditional | Extended Day Full-time | Extended Day Part-time | Non-traditional Full-time | Non-traditional Part-time |
| Infant | \$40.25 | \$24.15 | \$44.28 | \$28.18 | \$50.31 | \$30.19 |
| Toddler | \$39.10 | \$23.46 | \$43.01 | \$25.81 | \$47.44 | \$28.46 |
| Preschool | \$28.00 | \$16.80 | \$30.80 | \$19.60 | \$35.00 | \$21.00 |
| Preschool Before and After | \$28.00 | \$16.80 | | | | |
| School Age Before and After | \$25.80 | \$15.48 | \$28.38 | \$17.03 | \$30.51 | \$18.31 |
| School Age Before or After | \$25.80 | \$11.61 | | | | |

SILVER TIER CENTER RATES

| CHILD DEVELOPMENT CENTER SILVER RATES | | | | | | |
|--|------------------------------|------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------------------------|
| Age Group | Full-time traditional | Part-time traditional | Extended Day Full-time | Extended Day Part-time | Non-traditional Full-time | Non-traditional Part-time |
| Infant | \$54.34 | \$32.60 | \$59.78 | \$38.04 | \$67.92 | \$40.76 |
| Toddler | \$53.16 | \$31.90 | \$58.58 | \$37.21 | \$65.19 | \$39.11 |
| Preschool | \$35.60 | \$21.36 | \$39.16 | \$24.92 | \$44.50 | \$26.70 |
| Preschool Before and After | \$35.60 | \$21.36 | | | | |
| School Age Before and After | \$25.43 | \$15.26 | \$27.97 | \$16.79 | \$30.92 | \$18.55 |
| School Age Before or After | \$25.43 | \$11.45 | | | | |

| CHILD DEVELOPMENT HOME SILVER RATES | | | | | | |
|--|------------------------------|------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------------------------|
| Age Group | Full-time traditional | Part-time traditional | Extended Day Full-time | Extended Day Part-time | Non-traditional Full-time | Non-traditional Part-time |
| Infant | \$35.73 | \$21.44 | \$39.31 | \$25.01 | \$44.67 | \$26.80 |
| Toddler | \$33.61 | \$20.17 | \$37.38 | \$23.53 | \$42.02 | \$25.21 |
| Preschool | \$24.53 | \$14.72 | \$26.98 | \$17.17 | \$30.66 | \$18.40 |
| Preschool Before and After | \$24.53 | \$14.72 | | | | |
| School Age Before and After | \$22.90 | \$13.74 | \$25.19 | \$15.11 | \$27.08 | \$16.25 |
| School Age Before or After | \$22.90 | \$10.31 | | | | |

BRONZE TIER CENTER RATES

| CHILD DEVELOPMENT CENTER BRONZE RATES | | | | | | |
|--|------------------------------|------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------------------------|
| Age Group | Full-time traditional | Part-time traditional | Extended Day Full-time | Extended Day Part-time | Non-traditional Full-time | Non-traditional Part-time |
| Infant | \$46.81 | \$28.08 | \$51.49 | \$32.76 | \$58.49 | \$35.11 |
| Toddler | \$45.80 | \$27.59 | \$50.38 | \$32.06 | \$57.26 | \$34.35 |
| Preschool | \$29.21 | \$17.53 | \$32.13 | \$20.45 | \$36.51 | \$21.91 |
| Preschool Before and After | \$29.21 | \$17.53 | | | | |
| School Age Before and After | \$19.85 | \$12.25 | \$21.84 | \$13.10 | \$24.59 | \$14.75 |
| School Age Before or After | \$19.85 | \$9.19 | | | | |

| CHILD DEVELOPMENT HOME BRONZE RATES | | | | | | |
|--|------------------------------|------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------------------------|
| Age Group | Full-time traditional | Part-time traditional | Extended Day Full-time | Extended Day Part-time | Non-traditional Full-time | Non-traditional Part-time |
| Infant | \$32.76 | \$19.65 | \$36.01 | \$22.93 | \$40.95 | \$24.58 |
| Toddler | \$31.21 | \$18.72 | \$34.33 | \$21.85 | \$39.02 | \$23.91 |
| Preschool | \$22.03 | \$13.22 | \$24.23 | \$15.42 | \$27.53 | \$16.52 |
| Preschool Before and After | \$22.03 | \$13.22 | | | | |
| School Age Before and After | \$20.00 | \$12.00 | \$22.00 | \$13.20 | \$23.66 | \$14.19 |
| School Age Before or After | \$20.00 | \$9.00 | | | | |