

HIGH-QUALITY EARLY CHILDHOOD EDUCATION:

Opening the Books on its True Costs



EXECUTIVE SUMMARY

While public investment in early education has, in recent years, increased, it remains inadequate to meet the quality needs of children, the affordability concerns of parents, and the operational costs of early childhood education providers. This is evidenced by – among other indicators – the paradoxical coexistence of high fees paid by parents with low wages paid to educators and an exceptionally fragile financial position of providers. Understanding the fundamental cost of providing high-quality early childhood education is the first step to rectifying a very broken funding model for the child care sector. To shed light on what it costs ECE providers to offer high-quality early learning programming to children, this brief: (1) provides a summary and analysis of recently published cost estimation studies commissioned by the Commonwealth of Massachusetts and undertaken by the Center for Early Learning Funding Equity (CELFE); and (2) illustrates the financial constraints that providers currently operate under, through the results of a series of case studies undertaken by Neighborhood Villages that demonstrate how labor and operating costs are reflected in ECE programming, child care center operations, and administrative decision making.

KEY FINDINGS

Center for Early Learning Funding Equity (CELFE) Cost Estimation Study

CELFE produced cost estimates of daily amounts incurred by providers for the cost of educating children in their care. Estimates accounted for differences by age, setting, and geographic region in the Commonwealth. CELFE assessed cost for providers' actual spending, as well as cost based on the addition of high-quality inputs. CELFE's analysis confirms that the cost of the highest quality of care is well above what providers are actually able to spend based on available revenue from tuition and public investment.

- Annualizing CELFE's daily cost estimates, Neighborhood Villages calculates that, if early educators were paid fair wages and providers were staffed to quality capacity, **an annual cost of high-quality care per child ranges from \$16,417 per year for a preschooler in center-based care in Western Massachusetts to up to \$49,916 per year for an infant in center-based care in Metro Boston.**
- Annualizing CELFE's daily cost estimates and multiplying them by the number of children in each age group (birth to five) and each region, Neighborhood Villages estimates that the cost to provide high-quality early childhood education statewide would be **\$3.64 billion.**

KEY FINDINGS

Neighborhood Villages Case Study Series

Neighborhood Villages conducted in-depth interviews with 11 providers across the Commonwealth to understand the details of their expenses. The study demonstrates that provider spending is largely driven by core operational costs, with additional expenses incurred for wraparound supports for children and families in low-income areas. Importantly, there is a gap for all providers between what they are currently spending and what they would like to spend, were funding available; the difference is comprised of items that would contribute to higher quality.

- Comparing providers' overall spending by income profile of families served reveals that providers participating in the Neighborhood Villages' study who serve high-poverty populations¹ have higher levels of per-child spending as compared to providers who serve low-poverty populations.
 - The **current average per-child spending among programs that serve a high-poverty population is \$20,426.**
 - The **current average per-child spending among programs that serve low-poverty populations is \$17,267.**
- Providers struggle to reach the level of comprehensive programming they aim for, given financial constraints. There is a gap for all providers between what they are currently spending and what they would like to spend (to account for desired quality services and a \$26/hour wage floor).
 - The aspirational **average per-child total expenses, accounting for desired quality services and a \$26/hour wage floor across all programs would be \$23,889.**
 - The aspirational **average per-child total expenses for providers serving high-poverty populations, when accounting for desired quality services and a \$26/hour wage floor would be \$28,016.**
 - The most commonly desired quality service cited by providers was behavioral and early relational health training for teachers.
- Providers are challenged to balance their budgets with revenue from tuition (Case Study A) and there are numerous expenses that go into high-quality education and care, including many that programs would like to offer if they had sufficient financial resources to do so (Case Study B).

Both CELFE's cost estimation studies and Neighborhood Villages' case study series reveal that **the cost of providing high-quality care far exceeds both what families are currently paying in the market and what most providers are currently able to spend on operating their programs.** Families cannot afford to cover the true cost of high-quality care for their children. Rather, a substantial commitment of additional public funds is required to bridge the gap.

¹ Here, high-poverty is defined as a population with more than 45% of children from families who receive state financial assistance or are income-eligible for state financial assistance. Providers serving high-poverty populations incur additional expenses – such as food and transportation – to support quality education and care.

INTRODUCTION

While public investment in early education has, in recent years, increased, it remains inadequate to meet the quality needs of children, the affordability concerns of parents, and the operational costs of early childhood education providers. This is evidenced by – among other indicators – the paradoxical coexistence of high fees paid by parents with low wages paid to educators and an exceptionally fragile financial position of providers. Understanding the fundamental cost of providing high-quality early childhood education is the first step to rectifying a very broken funding model for the child care sector.

Knowing the total cost of providing early childhood education in the Commonwealth of Massachusetts is essential to informing the amount of public funding required to ensure accessible, affordable high-quality education and care for all children in the Commonwealth. More, understanding total cost and its components is also essential to determining how best to finance the early childhood education sector accurately and adequately, through both (a) providing child care financial assistance to families² and (b) simultaneously investing public, direct-to-provider capital into the system to build supply and support early childhood education providers' operations costs.³ **To help answer the question "What is the true cost of early childhood education?" this brief (1) summarizes an external cost-of-care analysis commissioned by the Massachusetts Department of Early Education and Care and (2) analyzes a series of case studies conducted by Neighborhood Villages. Together, these studies illuminate the overall cost of providing high-quality early childhood education to children in Massachusetts, as well as all of the sub-costs that go into that.**

First, this brief provides a summary and analysis of a recently published cost model and cost estimation studies commissioned by the Commonwealth of Massachusetts and undertaken by the Center for Early Learning Funding Equity (CELFE). CELFE's statewide report details current operations and labor expenses of early childhood education providers in the Commonwealth and estimates what true regional costs would be for provision of high-quality care to infants, toddlers, and preschoolers, were compensation and other expenses to be elevated to optimal levels.

Second, to illustrate the constraints that providers currently operate under, this brief then offers the results of a series of case studies undertaken by Neighborhood Villages that demonstrate how costs are reflected in programming, child care center operations, and administrative decision making. When reviewed together, the CELFE studies and Neighborhood Villages' research unpack the practical inputs that comprise the high costs of providing the quality programming that all children deserve to access.

To analyze the cost of delivering high-quality early childhood education, the brief refers to **three key concepts**:

- **Cost of care to those who require care** (the 'market price' of purchasing care). The market price of care is what families and the public are collectively paying for care;⁴
- **Cost to those who supply care** (the 'actual cost' of providing care) – The actual cost of providing care reflects what is currently being spent by early childhood education providers to run their programs within current market constraints; and
- **Cost of high quality** (the 'true cost of providing high-quality care'). The cost of providing high-quality care reflects, amongst other investments, higher wages for educators.⁵

² Child Care Financial Assistance, or CCFA, is the name of the program through which the Commonwealth uses federal and state dollars to reimburse providers for the care of low-income and other high-needs children. The federal funds for this program are governed by the rules outlined in the Child Care and Development Block Grant. Eligible families select a provider who participates in the CCFA program and the Department of Early Education and Care reimburses providers for a portion of what it costs to provide care for those children.

³ In Massachusetts, federal stabilization funds for child care during the COVID-19 pandemic took the form of direct-to-provider operations grants, a program called Commonwealth Cares for Children (C3). The Massachusetts legislature took over where the federal government left off, and for fiscal year 2024 allocated \$475 million in funds for C3, which provides direct funding to child care providers for the use of such expenses as payroll, repairs, and other operation costs.

⁴ As noted herein, the public contribution to the price for care paid by families primarily comes through the Commonwealth's Child Care Financial Assistance Program (CCFA). CCFA contributes to family tuition costs; the amount of assistance for which a family is eligible is based on income, geography, and family size.

⁵ Wages are the largest component of the larger category, "compensation." Throughout this brief, Neighborhood Villages accounts for the other components of compensation – namely, benefits and payroll taxes – where applicable; however, the brief intentionally draws out wages because they are the largest component of compensation and they are unique, compared to benefits and payroll taxes. Wages are not optional – unlike benefits – and providers have control over them – unlike payroll taxes.

Years of studies of market price and the actual cost of providing care indicate that the latter – what providers spend on care under current conditions – exceeds the former, in nearly all cases.⁶ **Most notably, the cost of providing high-quality care far exceeds what families are currently paying in the market and what most providers are currently able to spend on operating their programs.** The difference between the market price of care and both the actual and high-quality costs of care can be attributed to the fact that providers have finite resources and are unable to independently increase revenues from families or government in order to increase quality. (Available revenue is dictated by what families can afford and/or what the government provides through public child care financial assistance, both of which fall below the operations expenses associated with high-quality programming. Indeed, many providers, facing revenue shortfalls, must turn to philanthropic support to cover operations costs.)

In order to shepherd the positive growth and success of the Commonwealth’s youngest residents, promote workforce participation and higher earnings, and attend to the needs of the early childhood educators and caregivers, Massachusetts must continue to grow public investments in early childhood education. Given the complexities of the child care system, it may not be immediately apparent why market prices are so high and actual costs even higher. The goal of this brief is to help answer that question.

I. CENTER FOR EARLY LEARNING FUNDING EQUITY (CELFE) COST ESTIMATION STUDY

In September 2023, the Center for Early Learning Funding Equity (CELFE) at Northern Illinois University released a report commissioned by the Massachusetts Department of Early Education and Care (EEC) entitled, ‘Cost Estimation Study Final Report.’ The report details the process and results of CELFE’s task **to study and develop a model to understand the cost of providing child care in the Commonwealth of Massachusetts**. The goal of the work was to leave the Commonwealth with a tool that would allow the state to evaluate regional costs of care, adjust cost-of-care inputs (such as wages and labor expenses), and seamlessly understand the change to total cost of making those adjustments. As such, CELFE developed a cost model and produced cost estimation studies informed by that model.

CELFE constructed a cost model for each of these types of care: Center-Based Care and Family Child Care (FCC), which are the two prototypical types of care under which providers in the Commonwealth are licensed. Center-Based programs are settings that typically have more than 10 children in care, usually in multiple groups, and that occupy typical classroom settings; FCCs typically have fewer than 10 children in care and occupy part of a provider’s home.⁷ CELFE’s two cost models served as tools for generating cost estimates (referred to by CELFE and in this brief as “cost estimation studies”). CELFE’s cost estimation studies are the analytical results of populating its models with specific information. CELFE’s models were designed to illustrate different levels of costs for each type of provider (Center-Based and FCC) and accounted for the different geographies in the Department of Early Education and Care’s licensing system (Western; Central; Northeast; Metro; Southeast; and Metro Boston)⁸ and different ages of children served.

- **For the Center-Based care cost model**, CELFE studied the probable costs of providing care for three different operating scenarios: (1) the actual cost of care (as defined above); (2) a quality cost of care in which the only quality change came from incorporating into the model higher wages for educators;⁹ and (3) a quality cost for care in which the quality changes incorporated the same higher wages for educators as in operating scenario 2, as well as the cost of employing additional staff – such as teachers and operations staff – in the center.

⁶ See, for example, the Center for American Progress’ analysis: <https://www.americanprogress.org/article/true-cost-high-quality-child-care-across-united-states/>

⁷ The business models associated with these types of care are different enough to warrant distinct models.

⁸ As of the writing of this report.

- **For the Family Child Care cost model**, CELFE studied the probable costs of providing care for three different typical FCC home configurations or staffing/enrollment patterns. An overall estimate for FCC programs was then calculated using a weighted average of the costs for each pattern.¹⁰ In each pattern, the educators/owners' wages were held the same as the current median salary of a center director; the variation came from the composition of educators and children.

Table 1. Expenses for Child Care Providers Included in CELFE Cost Model

In addition to wages, the expense items included in CELFE's cost models included the following:

Center-Based Care	FCCs
FICA (Social Security & Medicare) Health Insurance Worker's Compensation Retirement State Unemployment Tax Federal Unemployment Tax Food (include food and kitchen supplies) Office supplies & equipment Education supplies Child Assessment + Screening Advertising Rent/Lease Utilities (gas, electric) Maintenance/Repair/Cleaning Fees/Permits/ Licenses/Accreditation/Taxes Background Checks Staff training & education Consultation services: mental health, nutrition, health, etc. IT support Legal/Audit/Accounting/Other Prof support Insurance/Liability Telephone & Internet Payroll Service Software	FICA (Social Security & Medicare) Health Insurance Worker's Compensation State Unemployment Tax Federal Unemployment Tax Food (include food and kitchen supplies) Legal/Audit/Accounting support Equipment/Maintenance/Repair Supplies & Equipment Insurance/Liability Staff training & education Rent/Lease/Mortgage (including homeowners' insurance) Utilities (gas, electric) & cleaning Consultation services: mental health, health, educational support Transportation for field trips Miscellaneous (including cell phone)

From its modeling, CELFE's cost estimation studies detailed estimates of daily rates for the cost of care by age, setting, and geographic region in the Commonwealth. Annualizing CELFE's results, Neighborhood Villages estimates that, if early educators were paid fair wages and providers were staffed to quality capacity, the **annual cost of high-quality care per child would be up to \$49,916 per year per infant** (see Table 2). For regional comparison, Western Massachusetts and Metro Boston are shown below as the lowest and highest cost regions, respectively.

When compared to current Massachusetts financial assistance reimbursement rates (see Table 2 and Appendix A), CELFE's findings from its cost estimate studies validate the assumption that (1) reimbursement rates to providers for serving children with state financial aid are below the true cost of care; and (2) as quality increases, so too does the estimated cost to deliver that care. (For its comparison, Neighborhood Villages used rates in place at the time of writing, which were for Fiscal Year (FY) 2023. Despite recent increases to the reimbursement rate for Fiscal Year 2024 (see footnote 11), these two conclusions remain true.)

⁹ CELFE developed a set of "desired" salary inputs for each geographic region that were anchored by estimates of a "living wage" (for entry-level assistants) and parity with public school teachers (for BA-level teachers) to illustrate the resources that would be needed to raise compensation across the field.

¹⁰ Approximately 30% of Massachusetts FCC providers match Pattern 1 (1 educator, 6 children), 40% match Pattern 2 (1 educator, 8 children), and 30% match Pattern 3 (2 educators, 10 children).

Table 2. The Annualized Cost of High-Quality Care Compared to Annualized Subsidy Reimbursement in Western MA and Metro Boston ^{11 12}

Age Group	Western MA		Metro Boston	
	CELFE Cost of High Quality	Subsidy Reimbursement (EEC)	CELFE Cost of High Quality	Subsidy Reimbursement (EEC)
Infant (Center-Based)	\$39,489	\$17,487	\$49,916	\$25,317
Toddler (Center-Based)	\$30,615	\$15,921	\$38,602	\$22,446
Preschooler (Center-Based)	\$16,417	\$12,267	\$19,967	\$17,748
Child age 0 to 5 in FCC	\$13,089	\$11,438 (mean)	\$16,195	\$13,628 (mean)

Annualizing costs for all regions, age groups birth to five, and current EEC system capacity, CELFE’s estimates suggest that the cost to support provision of high-quality early childhood education statewide would be \$3.64 billion. Additionally, if the estimated 87,000 children in families not currently participating in the formalized care system were to enroll in care, the cost of a high-quality early childhood education system in Massachusetts would increase overall by around \$2.1 billion, bringing the total to slightly more than \$5.7 billion.¹³ (Note: The total annualized cost that Neighborhood Villages calculated from CELFE’s estimates is independent of and does not address revenue sources to cover this cost; as such, the cost identified herein is not necessarily the cost to government, if one assumes that parents, employers, and/or other parties contribute to the total system cost (i.e., through parent fees, employer contributions, etc.))

II. NEIGHBORHOOD VILLAGES RESEARCH: IN-DEPTH INTERVIEWS WITH PROVIDERS

From January to July of 2023, Neighborhood Villages undertook a research initiative that aimed to capture the nuances of the cost of providing child care and illuminate how programs allocate revenue within their budgets. Its research was designed to identify the unique circumstances and differences among current providers, as well as the day-to-day financial trade-offs they are making, to paint a fuller picture of the cost of quality care.¹⁴

Neighborhood Villages held in-depth interviews (IDIs) with 11 early childhood education center-based providers across Massachusetts. The goal of the IDIs was to get a full picture of providers’ operating expenses, as well as new (or enhanced) goods/services for which they would spend money, were it available to them. Providers in the sample represent various geographies, sizes, and business models. A snapshot of the providers comprising the sample follows:

¹¹ CELFE’s report included daily rates for the cost of care, which Neighborhood Villages then annualized for this brief; EEC’s reimbursement rates are also daily (see: <https://www.mass.gov/info-details/daily-reimbursement-rate-for-early-education-and-care-programs>), which Neighborhood Villages also annualized for the purposes of its analysis. Numbers are rounded.

¹² Subsidy reimbursement rates reflect FY23 rates and corresponding regions. As of January 2024, EEC’s Board voted to consolidate rates into three. The new rates will align rates among regions that are similar economically and, in addition to all providers receiving a 55% “across the board” increase, center-based providers’ rates will reach at least 81% of the actual cost of care (see definition of “actual cost of care,” above).

¹³ The figure 87,000 is derived from a 2022 estimate calculated from data obtained through the Bipartisan Policy Center regarding unmet demand in Massachusetts. The process to calculate the additional cost that enrollment of those 87,000 would incur was: Neighborhood Villages simulated the distribution of 87,000 across EEC’s geographic regions and age groups (based on regions’ current share of overall enrollment), calculated the additional annual costs for those slots using CELFE’s highest quality cost estimates for each region and age group, and, finally, summed those totals.

¹⁴ Neighborhood Villages’ findings supplement the data put forth by CELFE, whose methodology, though it included focus groups, did not include in-depth review of individual provider budgets and their financial constraints. When reviewed together, these reports unpack in detail the interlocking components that comprise the full cost of quality care.

Table 3. Characteristics of Center-Based Child Care Providers in Neighborhood Villages Sample

<p><u>Providers by Child Capacity.</u></p> <ul style="list-style-type: none"> • <20: 0 • 25-50: 3 • 51-75: 2 • 75-100: 1 • 100-200: 3 • >200: 2 	<p><u>Providers by Percent of Students with Subsidy.</u></p> <p>0%: 4 1 to <10%: 3 10 to 20%: 2 21 to 40%: 0 40 to 50%: 1 >75%: 1</p>
<p><u>Social Vulnerability Index¹⁵ of Providers</u></p> <ul style="list-style-type: none"> • SVI 0-.5: 1 • SVI .51-.75: 5 • SVI .76-1.0: 5 	<p>Providers in Metro Boston: 5 Providers outside of Boston: 6 <i>Head Starts:</i> 1</p>

In speaking with providers, Neighborhood Villages asked about three categories of expenses:

1. **Core expenses**, without which programs could not keep their doors open, such as, for example, wages and building maintenance;
2. **Wraparound expenses**, which supplement the core functions of early childhood education, such as, for example, on-site family engagement; and
3. **Quality services**, which largely reflect services that would address an observed need of the school community, such as, for example, a full-time social worker.

Neighborhood Villages’ analytical approach was manual and relied mainly on identifying trends among programs with like characteristics. While no two providers exhibited the same list of current expenses or identified the same list of desired quality services, the variety lends validity to trends observed by looking at averages. Neighborhood Villages’ analysis applied costs equally across ages. While this approach does not show the range of costs across age groups nor illustrate the higher cost to care for young children, it does reflect the reality that higher costs in young children are offset by lower costs in older children. Thus, averages serve as a close approximation of overall per-child cost.¹⁶ (Neither did Neighborhood Villages gather sufficient data from FCCs in order to draw conclusions. The significant differences between provider types requires a separate undertaking.)

Notably, all providers spoken to indicated a desire to pay their teachers higher wages; in an effort to account for this, Neighborhood Villages included a calculation of the additional per-child expenditure it would take to raise the wages of all instructional educators (i.e., classroom teachers and assistant teachers) at a given program to a minimum of \$26/hour.¹⁷⁻¹⁸ To benchmark a wage floor, Neighborhood Villages looked to Washington, D.C. as an active model, given that Washington, D.C. has similar costs of doing business as Massachusetts and has done significant work on early childhood education pay equity. Washington, D.C. has currently established \$54,262 as the minimum salary for a full-time lead teacher. Converted to an hourly wage, that is approximately \$26 per hour. (While Neighborhood Villages believes that a reformed early childhood education system requires parity with K-12 salary approaches, a minimum floor was chosen for purposes of this analysis. As a point of comparison, recent analysis by the federal Bureau of Labor Statistics puts the median hourly wage for a Massachusetts early educator at just \$18.30.¹⁹ \$26 per hour, then, represents a minimum hourly increase of nearly \$8 per hour for staff.)

¹⁵ SVI, or Social Vulnerability Index, refers to the ranking of a census tract on 16 social factors, including poverty, lack of vehicle access, and crowded housing. The CDC uses U.S. Census data to determine the social vulnerability of every census tract. Social vulnerability is the potential negative effects on communities caused by external stresses on human health and .75 and above are considered high social vulnerability index scores.

¹⁶ Note, the report undertaken by CELFE differentiated cost according to age group.

¹⁷ In contrast, CELFE’s approach for its cost model was to model the cost of wages that represent parity with K-12 educators.

¹⁸ Wages have a direct impact on payroll taxes – another part of the cost of “compensation,” as previously noted. As such, when wages go up, so too will payroll taxes. In calculating program costs with aspirational higher wages, Neighborhood Villages accounts for increased payroll taxes by adding 9% of the cost of the pay bump (to reach \$26/hour); this is the approximate payroll tax rate for providers in the sample.

¹⁹ https://www.bls.gov/oes/current/oes_ma.htm#25-0000

Findings

Providers participating in the Neighborhood Villages' study serving high-poverty populations have higher levels of per-child spending as compared to providers serving low-poverty populations. (See Figure 1.)

- The current **average per-child spending annually across all programs is: \$18,416.**
- The current **average per-child spending among programs that serve a high-poverty population is: \$20,426.**
- The current **average per-child spending among programs that serve a low-poverty population is: \$17,267.**

While there is a gap for all providers between what they are currently spending and what they would like to spend (to account for desired quality services and a \$26/hour wage floor), **the gap between actual spend and aspirational spend is greater for providers serving high-poverty populations as compared to those serving low-poverty populations.**

- The aspirational **average per-child total expenses, accounting for desired quality services and a \$26/hour wage floor across all programs would be \$23,889** (\$5,473 greater than current, actual average per-child expenses).
- The aspirational **average per-child total expenses for providers serving high-poverty populations, when accounting for desired quality services and a \$26/hour wage floor would be \$28,016** (\$7,590 greater than current, actual average per-child expenses).
- The aspirational **average per child total expenses for providers serving low-poverty populations, when accounting for desired quality services and a \$26/hour wage floor would be \$21,311** (\$4,043 greater than actual average per-child expenses).

With respect to wraparound programming, providers' current spending on these services appears correlated with the proportion of their total spending on instructional wages: providers serving higher-poverty populations spend significantly more per-child on wraparound services and, therefore, significantly less of their total spending on instructional wages, as compared to low-poverty providers.²⁰ (See Figures 2 and 3.)

- The **average current spending on wraparound expenses across all programs** per-child annually is **\$842, representing 4% of total expenses.**
- The **average current spending on wraparound expenses across high-poverty programs** per child annually is **\$2,065, representing 9% of all expenses.**
- The **average spending on wraparound expenses across low-poverty programs** per child per year is **\$143, representing 1% of all expenses.**

On the whole, programs already spending money on wraparound services identified more additional services that they would like to spend resources on, were revenue to do so available. **The most commonly desired quality service cited was behavioral and early relational health training for teachers.**

²⁰ On average, 49% of all provider costs go toward instructional wages; in comparison, 37% of all high-poverty provider costs and 56% of all low-poverty provider costs go toward instructional wages. When the full compensation package is included (i.e., wages for instructional staff and for other staff, benefits, and payroll taxes), 79% of all provider costs go toward wages. In comparison, 69% of all high-poverty provider costs and 85% of all low-poverty provider costs go toward wages.

Figure 1. Provider Actual Spending Compared to Aspirational Spending per Child, Annually

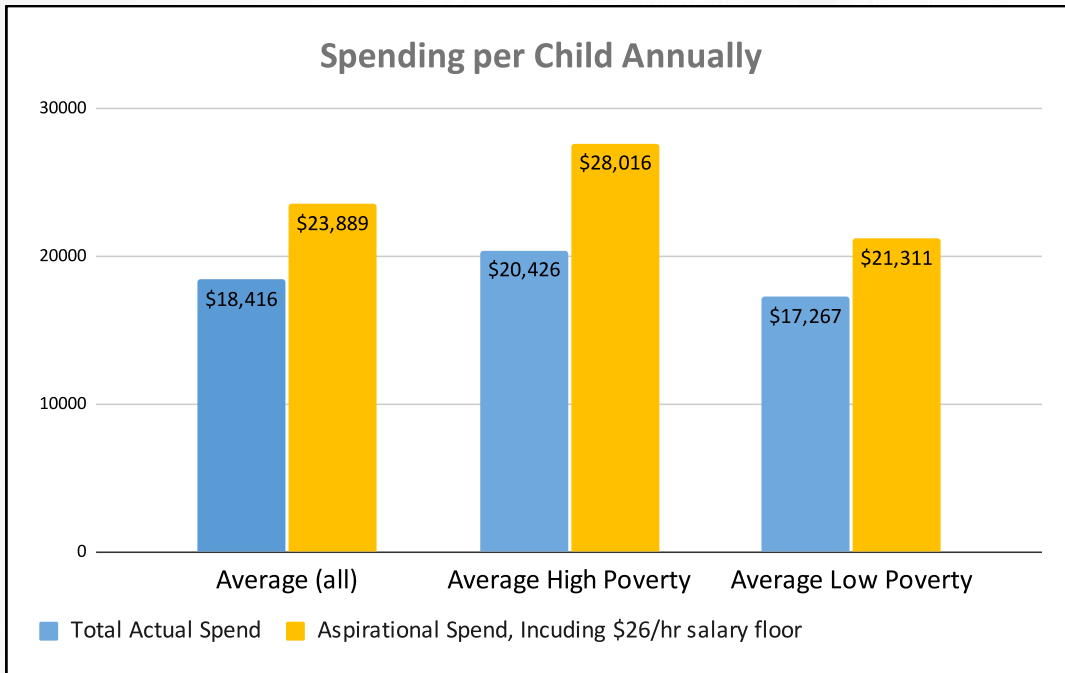


Figure 2. Provider Actual Spending and Proportion of All Spending on Wraparound Services

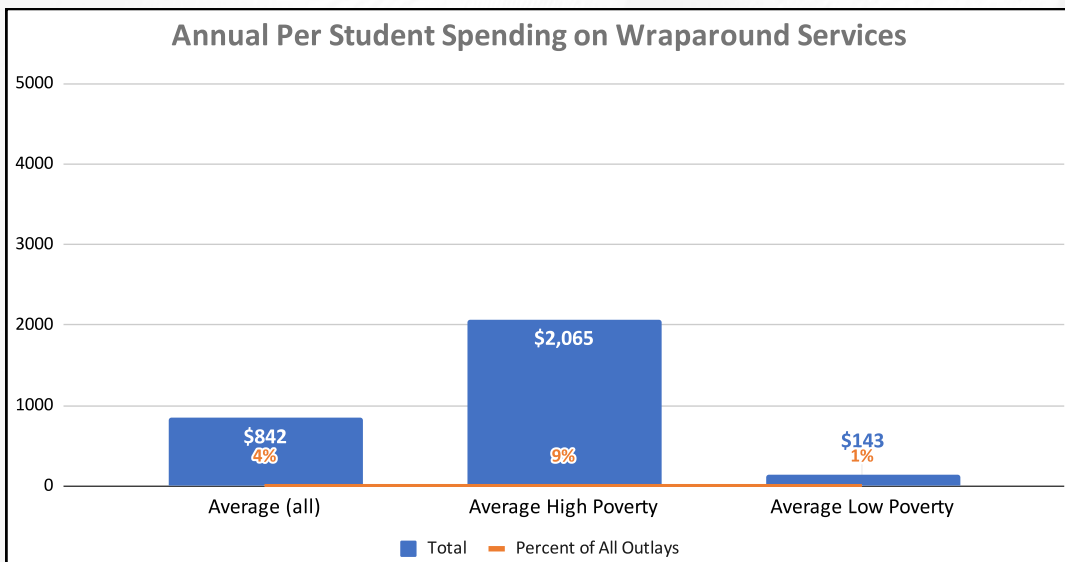
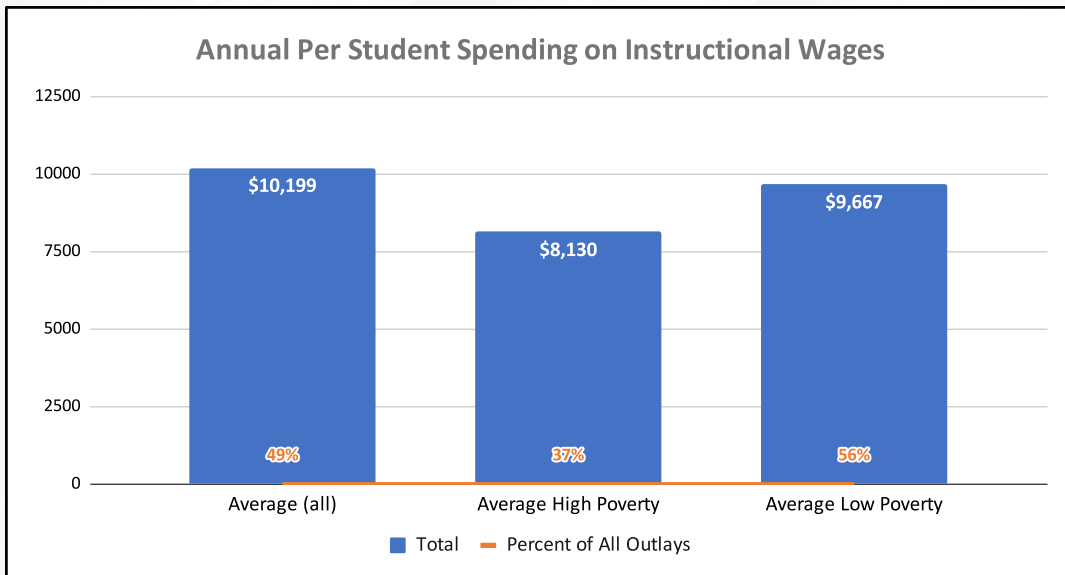


Figure 3. Provider Actual Spending and Proportion of All Spending on Instructional Wages



In sum, Neighborhood Villages' research indicates that current total spending per child annually is more than \$18,000 on average and more than \$20,000 for providers serving the most vulnerable children, with the most significant expense being wages. There are also considerable costs associated with items listed above in Table 1 and, for providers serving a high number of children in poverty, additional costs – for those who can find funding to cover them – such as:

- Skilled nursing staff
- Family engagement and navigation
- Operations coordination
- Social workers
- Nutrition support
- Enrollment specialists

Case Studies

While no two providers operate exactly the same nor have the same expenses, two case studies of providers from Neighborhood Villages' sample illustrate how current market price (i.e., tuition) does not cover all basic operational costs, let alone the various costs associated with high quality, and identify the foundational elements and services that support high quality – such as higher wages for educators and wraparound services.

Case Study A: Imbalance Between Provider Income and Program Operations Costs

Provider A, a participant in the Neighborhood Villages study, operates a licensed early childhood education center in Western, Massachusetts, in a zip code with a social vulnerability index of .74 and a licensed capacity of 60 children, from 2 to 5 years old. The center currently enrolls 4 children with public child care financial assistance.²¹ The center has 13 teachers and one director, making their child to teacher ratio 60:13 or about 9 children per 2 teachers, a higher ratio than is required, but one that contributes to increased quality of care.

While Provider A's tuition rates vary by age and schedule, the average tuition is \$14,800 per child, resulting in tuition-generated revenue of \$828,800. Provider A also receives \$47,000 from EEC for subsidy (financial aid) reimbursement, for a total of \$875,800 in revenue. However, of this \$875,800, \$25,000 is not collected, as the provider does not require some families with financial hardship to pay full out-of-pocket fees. Total income, then, is: \$850,800.

Provider A pays its instructional staff, on average, \$38,000 per year, or about \$18.27 per hour; it spends another \$125,000 per year on the equivalent of two full-time staff in administrative roles. This results in a total of \$619,000 in labor expenses for wages; another \$57,000 is incurred for payroll taxes. From its revenue, Provider A is left with \$174,800. The center spends another \$156,500 for staff benefits, such as health insurance. When these costs are subtracted, the balance of the provider's income is \$18,300. Classroom supplies cost Provider A \$10,000 per year and building maintenance costs \$25,000 per year. When classroom supplies and building maintenance costs are subtracted, the result is a negative balance of \$16,700 (see Table 4). Thus, based on tuition-generated revenue alone, Provider A is operating at a negative balance and this is before multiple additional expenses not reflected in Table 4 have been accounted for, such as rent/mortgage, facilities, insurance, utilities, professional development for staff, IT, office supplies, property taxes, and other costs.

Indeed, a large expense for many providers is a rent or mortgage payment. While Provider A benefits from owning its property and does not carry this substantial expense, it nevertheless operates in the red based on tuition income alone. Given its tight financial position, Provider A is not able to offer wraparound services and is not able to spend money on services that would support their work, such as transportation and enhanced professional development for staff.

²¹ One of the barriers to serving additional children with financial assistance is the rural location of the center, which makes transportation a challenge for families.

Table 4. Financial Profile of Provider A

	Amount	Balance
Income	\$850,800	\$850,800
Instructional Staff Wages	-\$494,000 (13*\$38,000)	\$356,800
Administrative Staff Salaries	-\$125,000	\$231,800
Employee Payroll Taxes	-\$57,000	\$174,800
Staff Benefits	-\$156,500	\$18,300
Classroom Supplies	-\$10,000	\$8,300
Building Maintenance	-\$25,000	-\$16,700

Over the past few years, Provider A has been able to - more or less - close the gap between its expenses and its income through participation in the Commonwealth Cares for Children (C3) grant program, which provides state-supported public funds to eligible licensed early childhood education programs. While C3 funds have been essential to Provider A, they unfortunately have not been sufficient enough to enable substantial increases to educator wages nor the addition of other desired services and wraparound supports.

Provider A's reality illustrates a common financial challenge faced by providers and sheds light on the limitations of available revenue. Provider B, profiled below, provides a closer look at common expenses, detailing the numerous inputs required to adequately serve children in care and translating those expenses into per-child annual spend. Provider B also illuminates expenses required to serve high-poverty areas with high cost of living.

Case Study B: In-Depth Look at Per-Student Annual Spend

Provider Profile:

- Type: Licensed Early Education and Care Center
- Region: Metro Boston
- Number of Students Aged 0-5: 161
- Number of Educators: 33

Provider B serves a high-poverty area, where the social vulnerability index is .94 and 87% of its enrolled children come from families receiving public child care financial assistance. The provider's ratio of teachers to children is 1:5. Given that it serves a population with high needs, Provider B carries expenses for necessary and essential wraparound supports and services.

Table 5. Provider B’s Core Per-Student Expenses

	Expense	Per- Student Annual Spend
Compensation	Instructional Staff Wages	\$12,329
	Non-Instructional Staff (Admin) Salaries	\$1,529
	Staff Benefits	\$1,135
	Payroll Taxes	\$1,029
Supplies	Food	\$1,619
	Kitchen Supplies	\$70
	Classroom Supplies	\$248
	Personal Protection Equipment	\$10
Facilities	Rent/Mortgage	\$621
	Building Cleaning and Maintenance	\$870
	Utilities	\$311
	IT Work	\$78
Administration	Insurance	\$363
	Professional Development	\$62
	Staff CPR Certification, Fingerprinting and Other Licensing Fees	\$37
	Office Supplies and Postage	\$152
	Audit	\$248
Other	Transportation	\$754
	Sub-total	\$21,466²²

For core, basic expenses, Provider B spends \$21,466 annually per child, across all children ages 0 to 5. As noted, Provider B expends additional resources on needed wraparound supports.

²² Original values were generated in Excel and rounded decimals, which explains the slight discrepancy between the sum of numbers in the chart and the total.

Table 6. Provider B's Per-Student Expenses for Wraparound

Expense	Per Student Annual Spend
Operations Manager	\$410
Family Navigator	\$455
Instructional Coaching/Curriculum Support	\$354
Enhanced Professional Development	\$75
Early Relational Health	\$248
Family Nutrition	\$124
Economic Mobility	\$19
Social Worker(s)	\$217
Sub-total	\$1,902

For context, the role of Provider B's Operations Manager is to relieve administrative burden from the center's instructional leadership. For many providers, there is insufficient funding for operational staff, so the Director – akin to a school principal – is required to perform, in addition to their main role, operations and administrative tasks, such as scheduling, transportation, and facilities oversight and management, amongst others. Provider B's Family Navigator supports the families of the children in the provider's care by, for example, connecting them to wraparound resources such as health, nutrition, and housing supports. While not widely acknowledged as a responsibility for child care, supporting the families of children in care has a positive impact on children, improving their ability to succeed in school. Provider B also invests in early relationship health supports (sometimes referred to as mental or behavioral health) for educators who are supporting children demonstrating relational health challenges and/or experiencing the repercussions of various adverse childhood experiences (ACES),²³ as well as in family nutrition, economic mobility for the family, and a social worker to provide additional care for vulnerable children. Together, these expenses total \$1,902 per-child annually, bringing the total per-child cost to more than \$23,000.

Despite its current investment in wraparound services, Provider B indicated that there are other investments it would like to make, which it is not currently able to, due to financial constraints. For example, Provider B would like to employ a full-time special education teacher to address increasing special needs of the children it serves. It would also like to support educators more robustly with funds to advance their careers and provide them with services for their own mental health. Finally, despite average wages that are relatively high (this is due in part to hosting some Boston Universal Pre-Kindergarten classrooms, which require higher salaries for educators), Provider B would like to raise wages for all of its educators. Those hypothetical, optimistic expenses and associated annual per-child costs are outlined below.

²³ ACES are traumatic events that occur in childhood; for more information, see: <https://www.childwelfare.gov/topics/preventing/overview/framework/aces/#:~:text=ACES%20are%20traumatic%20events%20that,%2C%20incarceration%2C%20and%20domestic%20violence>

Table 7. Provider B’s Aspirational Expenses

Expense	Per Student Annual
Mental Health Services (i.e., counseling) for Teachers	\$248
Behavior Management Training for Teachers	\$31
Special Education Teacher	\$652
Behavior Management Training for Teachers	\$31
Funds to Support Teacher Career Advancement	\$124
Quality Boost to Increase Educator Wages to \$31.50/hour (across the board) ²⁴	\$2,255
Sub-total	\$3,310

CONCLUSION

The addition of these expenses would **bring the total per child spending for this provider to \$26,679 per year.**²⁵ Note: for the purposes of this illustration, the more than \$26,000 per child is spread across all children. In actuality, Provider B would have a higher per-child cost for infant classrooms and a lower per-child cost for preschool classrooms.

While the providers profiled here are not representative of all providers they highlight the real inputs that contribute to quality care and carry substantial costs. Moreover, they illuminate the challenges providers face with respect to having to balance a budget based not on true cost of care, but rather on available revenue (i.e., the maximum tuition level that families can tolerate before being priced out). This imbalance between available revenue and cost of quality care is most acute for programs serving high-poverty communities and the consequences of this imbalance - depressed wages and insufficient supports for both educators and families - are felt by the staff who are the bedrock of children’s early education experience. Unfortunately, families cannot afford to cover the true cost of high-quality care for their children. Rather, a substantial commitment of additional public funds is required to bridge the gap.

Appendices begin on following page.

²⁴ The CELFE study uses \$65,520 as the target salary for Lead Teachers in Metro Boston. That annual amount divided by 2080 (business hours in a standard calendar year) equals \$31.50 per hour. The calculated additional per-student expense to reach \$31.50 per hour includes a corresponding additional expense for higher payroll taxes (9% of cost of raise).

²⁵ See Appendix B for all expenses combined for Provider B.

APPENDIX A

CELFE Study Results

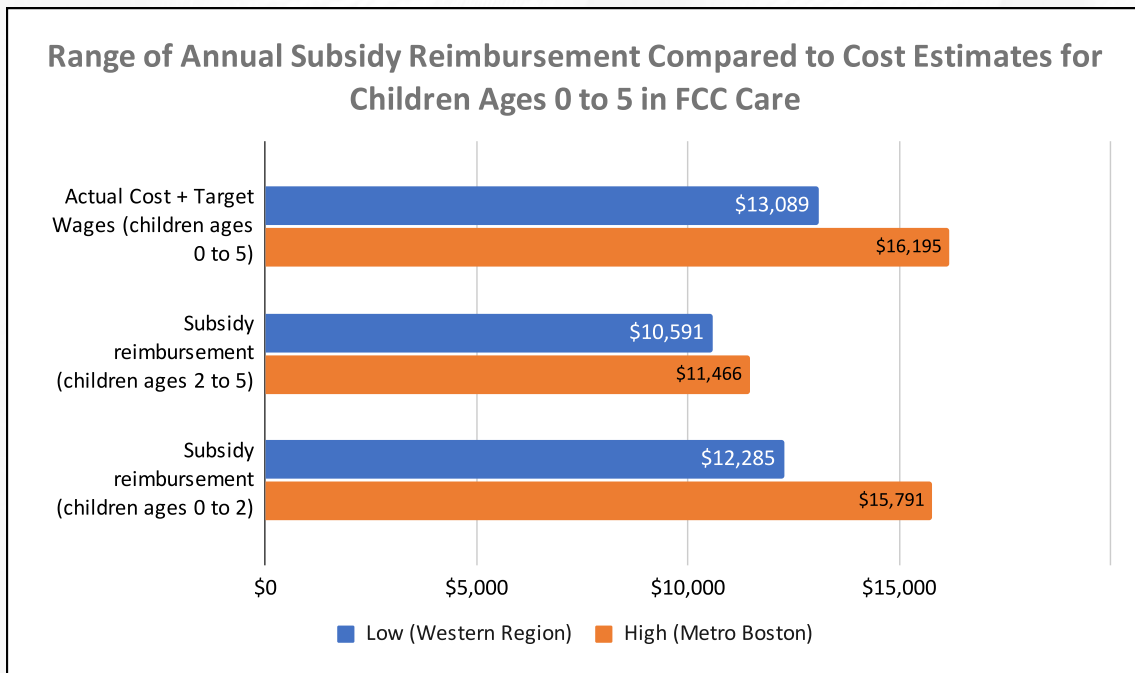
The charts below show Neighborhood Villages’ annualized findings based on CELFE’s calculations of daily rates for the cost of care across different models/scenarios.²⁶ Depicted are the lowest and highest rates for subsidy reimbursement across regions in the Commonwealth and for each of CELFE’s models.

The Center-Based labels presented in the charts below can be understood as follows:

- **Subsidy Reimbursement:** The amount a provider receives from the state for the care of a child with financial assistance.
- **Actual Cost:** The cost of care with current conditions, including current wages and staffing.
- **Cost + Fair Wages:** The cost of care with current conditions, except for wages, which are increased to at least “living wage” (for entry-level assistants) and up to parity with public school teachers (for BA-level teachers).
- **Cost + Fair Wages + Quality Staffing:** The cost of care with increased wages (see preceding bullet) and additional educators/school staff to improve services and the quality of care.

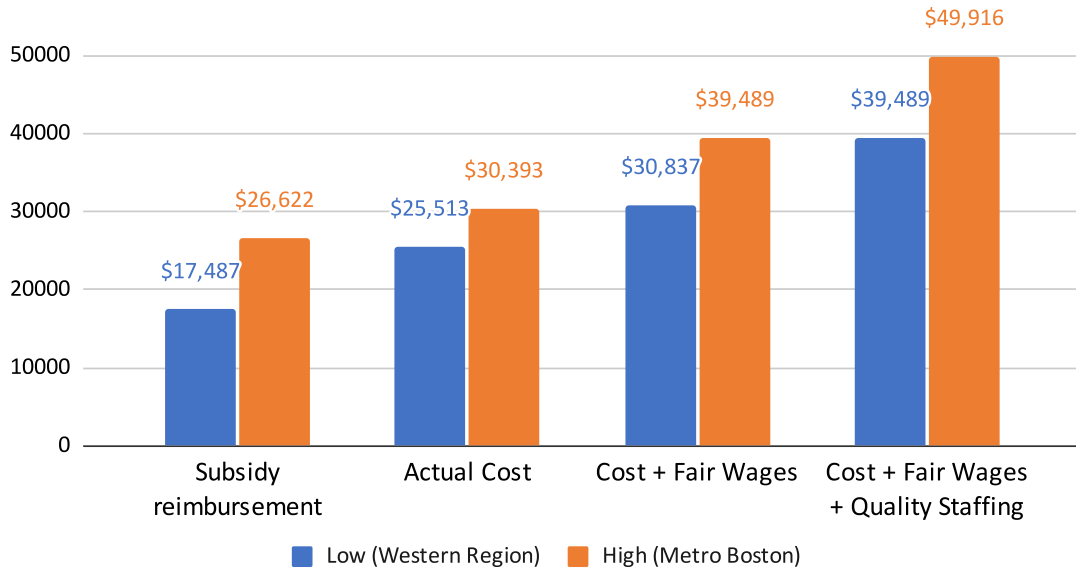
The FCC labels presented in the charts below can be understood as follows:

- **Subsidy Reimbursement:** The amount a provider receives from the state for the care of a child with financial assistance.
- **Actual Cost + Target Wages:** The cost of care with current conditions, except for wages. The wage expense for FCC providers was modeled based on a target “salary” (or small business profit) for the educator/owner that is equal to the current median salary of a center director.

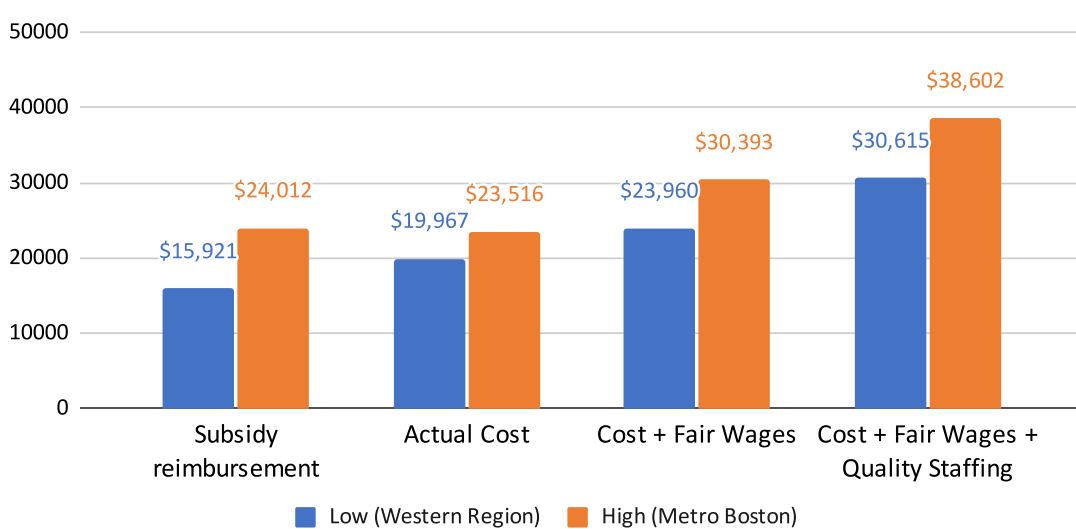


²⁶ It’s important to clarify that CELFE’s process involved generating annual costs at the level of classroom – as classrooms are stratified by age group and have different associated costs, some of which are fixed and some of which fluctuate with enrollment – and subsequently dividing by the number of days in the service/“school” year to come up with daily rates. For the purpose of this summary and to generate annual per-child rates, Neighborhood Villages took the calculated daily rates for individual children and multiplied by the number of days of care annually – 261 – and then multiplied by .85 to account for inflated daily rates; though an imperfect method, it provides a reasonable estimate. See Methodology for further information.

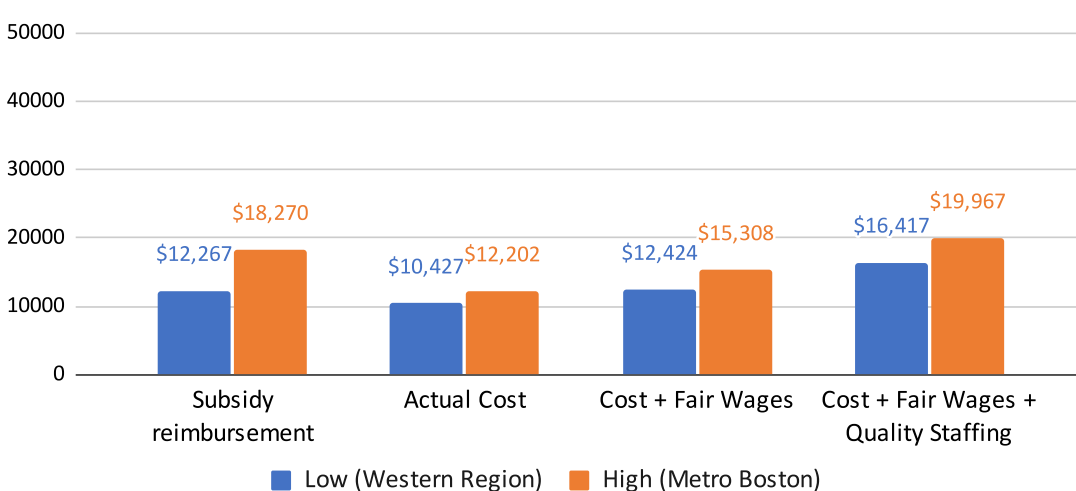
Range of Annual Costs: Infants



Range of Annual Costs: Toddlers



Range of Annual Costs: Preschoolers



APPENDIX B

Provider B Per-Student Costs for all Expenses

	Expense	Per-Student Annual Spend
Compensation	Instructional Staff Wages	\$12,329
	Non-Instructional Staff (Admin) Salaries	\$1,529
	Staff Benefits	\$1,135
	Payroll Taxes	\$1,029
Supplies	Food	\$1,619
	Kitchen Supplies	\$70
	Classroom Supplies	\$248
	Personal Protection Equipment	\$10
Facilities	Rent/Mortgage	\$621
	Building Cleaning and Maintenance	\$870
	Utilities	\$311
	IT Work	\$78
Administration	Insurance	\$363
	Professional Development	\$62
	Staff CPR Certification, Fingerprinting and Other Licensing Fees	\$37
	Office Supplies and Postage	\$152
	Audit	\$248
Wraparound & Quality	Transportation	\$754
	Operations Manager	\$410
	Family Navigator	\$455
	Instructional Coaching/Curriculum Support	\$354
	Enhanced Professional Development	\$75
	Early Relational Health	\$248
	Family Nutrition	\$124
	Economic Mobility	\$19
	Social Worker(s)	\$217
	Mental Health Services (i.e., counseling) for Teachers	\$248
	Behavior Management Training for Teachers	\$31
	Special Education Teacher	\$652
	Funds to Support Teacher Career Advancement	\$124
	Quality Boost to Increase Educator Salaries to \$31.50/hour (across the board) ²⁷	\$2,255
TOTAL	\$26,679	

²⁷ The CELFE study uses \$65,520 as the target salary for Lead Teachers in Metro Boston. That annual amount divided by 2080 (business hours in a standard calendar year) equals \$31.50 per hour.

APPENDIX C

CELFE Analysis Compared to NV Analysis, Variables included

Variables Included in Cost Estimates	CELFE	NV
Food (Including kitchen supplies)	✓	✓
Office supplies & equipment	✓	✓
Educational supplies & equipment	✓	✓
Child assessment & screening	✓	
Advertising	✓	✓
Rent/lease	✓	✓
Utilities (gas, electric)	✓	✓
Maintenance/repair/cleaning	✓	✓
Fees/permits/licensing/accreditation/taxes	✓	✓
Background checks	✓	
Staff training and education	✓	✓
Consultation – mental health, nutrition, etc.	✓	✓
IT support	✓	✓
Legal/Audit/Accounting/Other prof support	✓	
Insurance/Liability	✓	✓
Telephone & Internet	✓	
Payroll Service	✓	✓
Software	✓	✓
Tuition scholarships		✓
Transportation		✓
Operations Manager		✓
Family Navigator	✓	✓
Instructional Coaching		✓
Other family wraparound		✓
Nutrition Support Specialist		✓
Housing Support Specialist		✓
Mental Health Services (i.e., counseling) – Educators		✓
Mental Health Services -- Families		✓
HR Capacity		✓
Gross Motor Skill Development		✓
Play Therapist		✓
Music Teacher		✓
UPK Director		✓
On-site Nurse		✓
Behavior Management Training for Teachers (PD)		✓
CFO/Financial Planning Capacity/Bookkeeper		✓
Social Worker		✓
Special Education Teacher		✓
Speech Therapist		✓
Child Development Coordinator		✓
Additional [PD] funds for teacher career advancement		✓
Updated Playground		✓
OT/PT		✓
Business Management Training		✓

Note: Absence of a 'check' symbol indicates that the variable was not included.

A 'green check' symbol indicates that the variable was included as part of another variable/category.

APPENDIX D

Description of Methodology

CELFE’s cost models and related cost estimation studies employed a complex methodological approach to accomplish a macro-level understanding of the cost of high-quality early childhood education in the Commonwealth. For a full description of its methodology, please see page 54 of the report, located here: <https://www.mass.gov/doc/massachusetts-child-care-cost-estimation-study-report/download>.

For its study, Neighborhood Villages conducted in-depth interviews with 11 providers and analyzed the case studies resulting from those conversations. Each provider shared its expense line items as well as its annual spend on each line item. Because the most common time frame of budgeting for child care providers, as well as the Commonwealth, is one full year, Neighborhood Villages elected to look at annual costs. Neighborhood Villages categorized expenses, added them all for each provider, and then divided by the number of children enrolled to estimate a per-child cost.

In order to compare Neighborhood Villages results for annual per-child costs to CELFE’s results for daily per-child costs, Neighborhood Villages annualized CELFE’s results. To do this, Neighborhood Villages took CELFE’s daily results, multiplied each by 261 (the number of business days in a typical year), and then multiplied each by .85, to correct for daily rates that had been inflated by CELFE in line with their unique methodology. The number of business days – rather than the number of school days in most K-12 settings – was used to account for the fact that families are often relying on care for their children aged birth to five during all of the days that they work. Neighborhood Villages also annualized EEC daily reimbursement rates for comparative purposes. Subsidy reimbursement rates included in this analysis reflect FY23 rates and corresponding regions. (Note: In January 2024, EEC’s Board of Directors voted to consolidate six rates into three. The new rates will align rates among regions that are economically similar and, in addition to all providers receiving a 5.5% “across the board” increase, center-based providers’ rates will reach at least 81% of the actual cost of care.)

To estimate the number of children not currently being served by the Commonwealth’s licensed care sector – but whose families might want to be included in that formal system – Neighborhood Villages relied on data obtained through the Bipartisan Policy Center in 2022 regarding unmet demand in Massachusetts.²⁸ The figure, 87,000, was calculated based on the estimated proportion of unmet demand relative to the current capacity. Subsequently, to calculate the additional cost that enrollment of those 87,000 would incur, Neighborhood Villages simulated the distribution of 87,000 across EEC’s geographic regions and age groups – based on regions’ current share of overall enrollment – calculated the additional annual costs for those slots using CELFE’s highest quality cost estimates for each region and age group, and, finally, summed those totals.

Despite different methods, both CELFE and Neighborhood Villages undertook analyses to answer the question, “What is the true cost of actual and high-quality care in the Commonwealth?” While CELFE’s highest results (the cost of care for infants in Metro Boston) exceeded Neighborhood Villages estimates, that is likely explained by two facts: 1) CELFE produced results that varied by age, while Neighborhood Villages took averages across ages; and 2) Neighborhood Villages used a lower target wage in its analysis than CELFE. The variable that contributes most to provider costs is staff wages. CELFE developed a set of “desired” salary inputs for each geographic region that were anchored by estimates of a “living wage” (for entry-level teaching assistants) and parity with public school teachers (for BA-level teachers) to illustrate the resources that would be needed to raise compensation across the field. One example of the results of that approach is the \$65,520 target salary (the equivalent of \$31.50 per hour for the 2080 business hours in a standard calendar year) for Lead Teachers in Metro Boston in CELFE’s study. Neighborhood Villages pegged

²⁸ See, Child Care and the Illusion of Parent Choice, available at: <https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2023/04/BPC-Child-Care-and-the-Illusion-of-Parent-Choice-3.27.23.pdf>

its high-quality educator wage to \$26 per hour across the board, a floor chosen based on an analysis of Washington, D.C., which has similar costs of doing business as Massachusetts and has done significant work on early childhood education pay equity. Washington, D.C. has currently established \$54,262 as the minimum salary for a full-time lead teacher. (Converted to an hourly wage, that is approximately \$26 per hour.) While Neighborhood Villages believes that a reformed early childhood education system requires parity with K-12 salary approaches, a minimum floor was chosen for purposes of this analysis.

One of the limitations that Neighborhood Villages acknowledges is the absence of school-aged children in its model. The inclusion of those children would increase overall costs to the sector, estimated costs which could be calculated roughly in the same manner as was done for children aged zero to five in center-based care, but which are missing for school-aged children in Family Child Care programs.

