

Best Practices for Estimating the Costs of Early Childhood Education

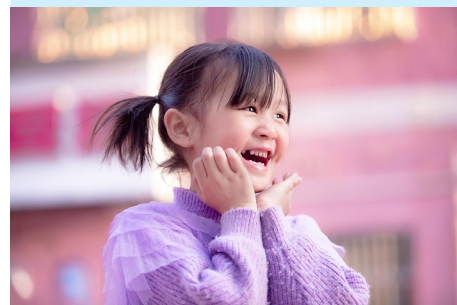
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Estimating the Costs of Early Childhood Education

Understanding the estimated costs of early childhood education (ECE) programs and systems is critical for informing policy and funding decisions. With varied definitions of terms and cost-estimation approaches in the field, producing accurate estimates can be complicated. Whether the focus is child care subsidy rates, a state or local preschool program, or other ECE programs, the following 10 Best Practices can help states and local governments determine their next steps—whether estimating costs internally, hiring a contractor, or partnering with research organizations. This document is intended for states and local governments seeking cost-based information to guide ECE policy and program decisions, whether they are new to cost modeling or refining an existing cost model. It also provides researchers with more detailed guidance on methodological considerations for estimating the costs of ECE programs and policies.¹

Cost Information is Essential

State, local, and private business leaders need accurate cost information to inform ECE policy, funding, and investment decisions.



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The [Cost Analysis Standards Project](#) (CASP), led by the American Institutes for Research[®] (AIR[®]), released [a comprehensive set of general standards for economic evaluation](#) in 2021. Although designed for researchers, the standards do not fully address the complexities of estimating the costs of child care and other ECE programs.² This document builds on CASP to describe best practices for state leaders and researchers interested in estimating ECE costs across diverse care settings and includes a glossary to standardize terminology.

There are two common sources of information for estimating ECE costs: (1) a cost study and (2) a cost model tool (i.e., cost model). Both sources require an understanding of what resources are used to provide child care, and both can be used to produce estimates at the program, classroom, or child levels. Following guidance from the Administration for Children and Families (ACF),³ we use the term *cost study*

¹ Although this guidance is not specific to conducting a narrow cost analysis, the information could be applied for that purpose. For more details on conducting a narrow cost analysis, see <https://acf.gov/opre/report/narrow-cost-analysis-three-part-series-ccdf-lead-agencies>.

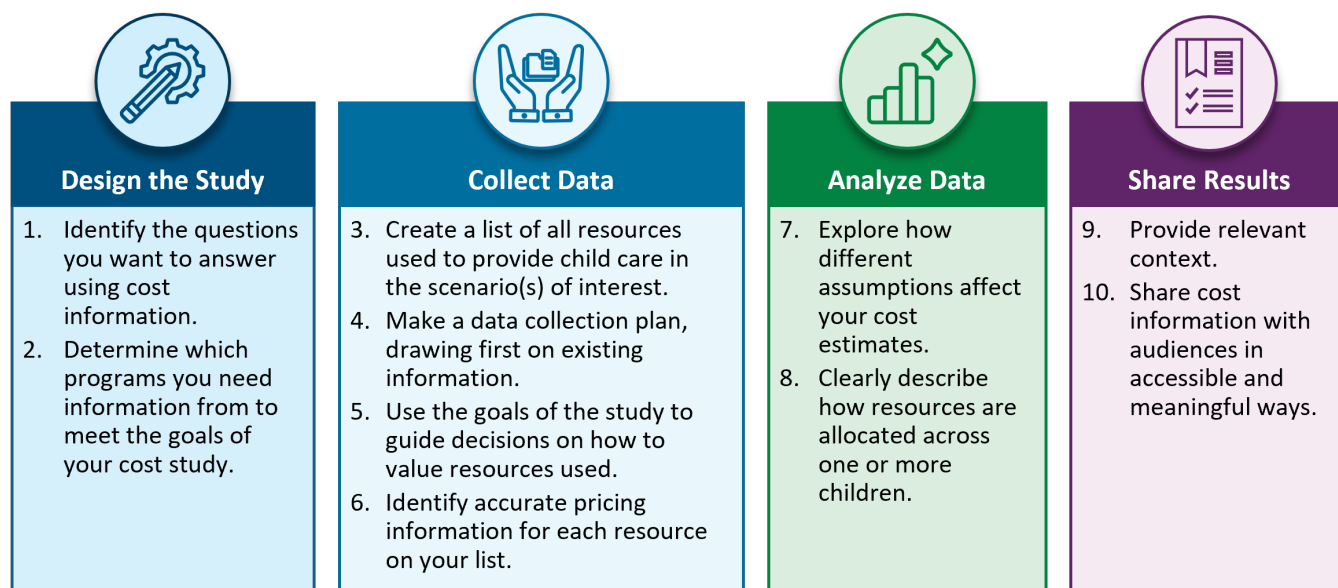
² A cost study can be a stand-alone investigation of costs only or part of a program/policy evaluation that also estimates impact.

³ See <https://acf.gov/opre/topic/child-care>.

to mean an analysis that produces a **cost estimate for a single point in time** based on a specific set of assumptions; we use the term *cost model* to refer to a **tool that allows a user to make changes in assumptions and inputs** to produce cost estimates that reflect changes over time or in program differences (e.g., number of children served, staff credentials, staff compensation). Both approaches aim to estimate the *cost of the resources* typically used in ECE programs, not the cost of a single specific program or provider. The best practices presented here apply to both types of cost information.

The *AIR Best Practices for Estimating the Cost of Early Childhood Education* identifies and describes **10 best practices**, categorized across four key steps commonly taken in studies and referenced in the CASP standards (**Design, Data Collection, Analysis, Reporting**), and provides considerations for each. These best practices can be applied to estimate or model the costs of a variety of ECE settings—including center-based care; family child care homes; care for children with special needs; state or local preschool programs; or care for children who need overnight, weekend, or evening care, among other circumstances. In addition, the best practices can be used for a variety of information needs, including informing alternative child care subsidy rate models, the federally required narrow cost analysis to inform subsidy rates, the structure of local funding initiatives or ballot measures, supplemental funding decisions, or other endeavors. They can also be used to help states and local governments prepare requests for proposals (RFPs) to hire a contractor to conduct cost analyses, evaluate the responses to those RFPs, and foster more informed participation by states in the research process. Exhibit 1 summarizes the 10 best practices.

Exhibit 1. AIR’s Ten Best Practices for Estimating Costs of Early Childhood Education



The remainder of this document presents in-depth considerations for each of these practices, specific guidance in call-out boxes, and resources that include a discussion guide, commonly used ECE resources, popular pricing data bases, and a glossary.

ECE Cost Study Best Practices

This section describes the best practices across the four commonly used research study steps (Design, Data Collection, Analysis, Reporting). We also include considerations for application and call-out boxes with specific guidance.

Step 1: Design the Study

Before estimating costs, it is important to determine the purpose and goals of your analysis and what questions you hope to answer. Goals can vary widely; for example, a state or local government might need information about the current costs that child care programs incur (including volunteered time and other resources) to make decisions about subsidy rates, or a local county may want to understand the cost of paying early educators a specified higher wage within a local preschool initiative. This section describes the key study design considerations for state leaders and researchers in estimating costs of child care programs.

1. Identify the questions you want to answer using cost information.

- a. Identify the questions you want to answer with cost information and how that cost information will be used.
- b. Determine at what level you want to estimate costs. For example, you may be interested in costs at the county or state level, costs at the program or site level, the cost of each classroom, per-child costs, or some other cost metric.
- c. Decide whether you want to understand overall costs, or costs separated by who pays for them (e.g., state, county, program, families). This is sometimes referred to as the *perspective* that a cost analysis takes.
- d. Decide whether you want to understand overall operational costs (e.g., monthly or annual costs to operate a program), program start-up costs (e.g., initial resources needed to start a program), or costs to support the system (e.g., administrative costs).
- e. Decide whether you want to estimate the cost of care as it is *currently* provided or the projected cost of a scenario of interest (e.g., implementing lower ratios, paying staff higher salaries, establishing different group configurations, offering expanded program hours). Sometimes the scenario of interest is higher overall quality, sometimes referred to as more *adequate* or *aspirational* levels of care.
- f. See the [*Discussion Guide to Establish Early Childhood Education Cost Estimation Goals*](#). This guide is designed to help leaders determine the questions you want to answer and how you can use the resulting information.

Documenting your study goals can help guide and focus your work. Consider sharing study goals publicly for transparency.

2. Determine which programs you need information from to meet the goals of your cost study.

- a. Plan to gather information about all types of programs that your cost estimate will represent. For example, if you want to understand typical or average costs for all child care programs, and you are interested in variation by age, make sure you gather information from programs that serve children of different ages.
- b. Depending on the question(s) you are trying to answer, you may also want to consider variation by other characteristics such as program quality levels, location, size, staffing configurations, ages served, funding sources, and services provided.
- c. If possible, collect information from all (the full universe of) ECE programs of interest. Otherwise, aim to gather information from programs that represent all the child care scenarios in which you are interested (e.g., representation from various regions, program sizes, program quality).

Select a sample that reflects variations in site characteristics relevant to potential cost differences.

A larger sample size yields more accurate information.

Step 2: Collect Data With Intention

To estimate costs, you need to know which resources are used to provide ECE services; this information can come from data that you already have or new data that you gather from programs or providers. You will need information about (1) the quantities of the staff and nonpersonnel resources used (e.g., number of staff hours worked each week, number of infant cribs, number of curriculum booklets needed, square footage of facilities) and (2) the qualities of the resources that affect their prices (e.g., staff credentials, types of curricular materials, facility features). The data collection plan should include approaches that maximize the value of data and minimize the burden on those providing the information. As a first step, reflect on data you already have available and planned data collection activities in which you may be able to gather information to update cost estimates more efficiently or regularly. Data collection activities can be managed by state and local government staff or in consultation with a research partner.

3. Create a list of all resources used to provide child care in the scenario(s) of interest.

- a. Create a list of resources that providers might use or need—for example, staff time, facilities, materials and equipment, and food. See [*List of Common Resources to Account for in Early Childhood Education Cost Estimates*](#) for guidance on resources commonly used that will need to be accounted for in cost estimates.
- b. Licensing or quality rating standards can be a good starting point in understanding resources typically used. However, discussions with ECE program leaders are recommended to understand how they actually implement these requirements, especially regarding staffing patterns (e.g., number and types of staff employed).

- c. To understand what resources are used (or needed) to provide ECE, it is important to have conversations directly with program leaders, policy experts, parents, community members, philanthropic organizations, a workforce wages advisory panel, and other important interest groups in your community.

4. Make a data collection plan, drawing first on existing information.

- a. To produce a cost estimate, you will need information on the types of resources, their quality and quantity, and their price.
- b. Leverage existing data sources to the extent possible. These may include licensing data, regulatory or quality rating data, local workforce study results, or other types of administrative data held by the state or local agency or its partners.
- c. Collect additional data necessary to supplement existing data. Information can be gathered through surveys, interviews, or focus groups.
- d. Consider how you can gather information with the least burden on providers, such as holding focus groups during already scheduled meetings, adding questions to already planned surveys, surveying only a sample of providers, or offering gift cards or other incentives to participate.

Survey or focus group questions might ask providers about child care as they currently provide it and/or resources they would need to provide care under different conditions (e.g., lower adult-to-child ratios, higher wages), depending on the questions you want to answer.

5. Use the goals of the study to guide decisions about types, quantities, and prices to use for resources.

- a. Assumptions and pricing data sources should be grounded in the goals of the study. For example, if your goal is to estimate the cost of higher quality programs, you'll need to include prices for staff time that reflect the levels required to recruit and retain staff who can provide higher quality services. To represent the cost of a higher quality program, you may also need to include greater quantities or different types of nonpersonnel resources, such as curricular materials or expanded facility space.
- b. Many ECE programs depend on some donated resources (e.g., staff time, space, materials). To estimate replication costs without donated resources, include the value of all resources regardless of whether a resource is fully paid for, discounted, or donated. This often requires collecting data—such as through provider interviews or focus groups—to identify which resources are donated, along with their quantities (e.g., number of staffing hours, square footage of donated space) and qualities (e.g., staff credentials, facility characteristics).

Staff wages make up most of the cost of child care, so the wage levels you use in the cost estimate are a critical assumption. Depending on the question you want to answer, you may choose to use current wages, wages comparable to those of K–12 teachers, wage information from the [MIT Living Wage Calculator](#), or another wage index that most closely aligns with the goals of the cost estimate.

- c. Some resources may be subsidized by specific revenue sources. For example, food is often subsidized by Child and Adult Care Food Program (CACFP) reimbursements. Regardless of your study goals, it is best to estimate the cost of resources before separately considering revenue sources (subsidies, grants, etc.) that will cover some of the cost.

6. Identify accurate pricing information for each identified resource.

- a. To estimate costs, you will need to apply a value (price) to the quantities of each personnel and nonpersonnel resource. Consultation with cost estimation experts can help you identify and apply appropriate prices for resources that can be more difficult to estimate (e.g., staff benefits, facility space).
- b. An inflation calculator (e.g., the U.S. Bureau of Labor Statistics [CPI Inflation Calculator](#)) can help you adjust prices known from prior years into real dollars that reflect the current value of those resources.
- c. You may use regional, state, or national prices depending on the resource so the cost estimate reflects the value of that resource in the locations of interest. The prices of some resources may vary by region (e.g., staff wages or facilities) or by state (e.g., insurance or food), while others show little variation nationwide (e.g., materials, equipment, and accreditation fees). For example, you may use national prices for National Association for the Education of Young Children (NAEYC) accreditation and classroom materials, state prices for liability insurance and food, and regional prices for facilities and staff wages to accurately estimate the cost of your ECE program(s). Exhibit 2 illustrates how these price differences can affect your estimates.
- d. See [Pricing Data Sources for Early Childhood Education Cost Estimation](#).

It is best to determine a standard value of a center, home, or classroom based on its present-day regional market value. Data such as fair market housing values and local real estate leasing rates can help you estimate facility costs accurately.

Exhibit 2. Resources Price Considerations



Regional Prices

- Allow you to examine regional variations in price
- May be appropriate for items such as wages and facilities



State Prices

- Capture average prices that are equivalent across the state
- May be appropriate for expenses such as insurance and food



National Prices

- Capture prices of items that are bought at equivalent prices across the country
- Appropriate for expenses such as accreditation fees, materials, and equipment

Step 3: Analyze the Data

Data analysis for a point-in-time cost estimate involves multiplying the price of each resource by the quantity of that resource and then allocating those costs across children based on how each resource is used. You may also choose to develop a tool that lets users adjust assumptions and update resource quantities and prices over time. Regardless of the approach, it is essential to use an organized system that accounts for all resources and prevents double counting.

7. Explore how varying assumptions affects your cost estimates.

- a. Estimating costs involves making some assumptions, such as the number of slots currently filled at a typical center, the number of teachers who will need or participate in a particular training, and the square footage of a child care facility. Examining how your cost estimates change when you adjust these assumptions can provide valuable insights for policy decisions. You may find, for example, that small changes in wages have large impacts on overall costs, while variations in other inputs have minimal impact.
- b. If you are building a cost model tool, consider a flexible structure that allows the user to change the quantities or prices of resources to explore the resulting changes in estimates.
- c. For a cost study, consider reporting a range of cost estimates and include a description of how and why they differ from one another.

Engagement with providers, policy experts, advocates, families, and program administrators can help identify reasonable assumptions for the cost estimate based on the study goals. Be prepared to describe for different target audiences how you arrived at your assumptions and how they potentially affect the cost estimates.

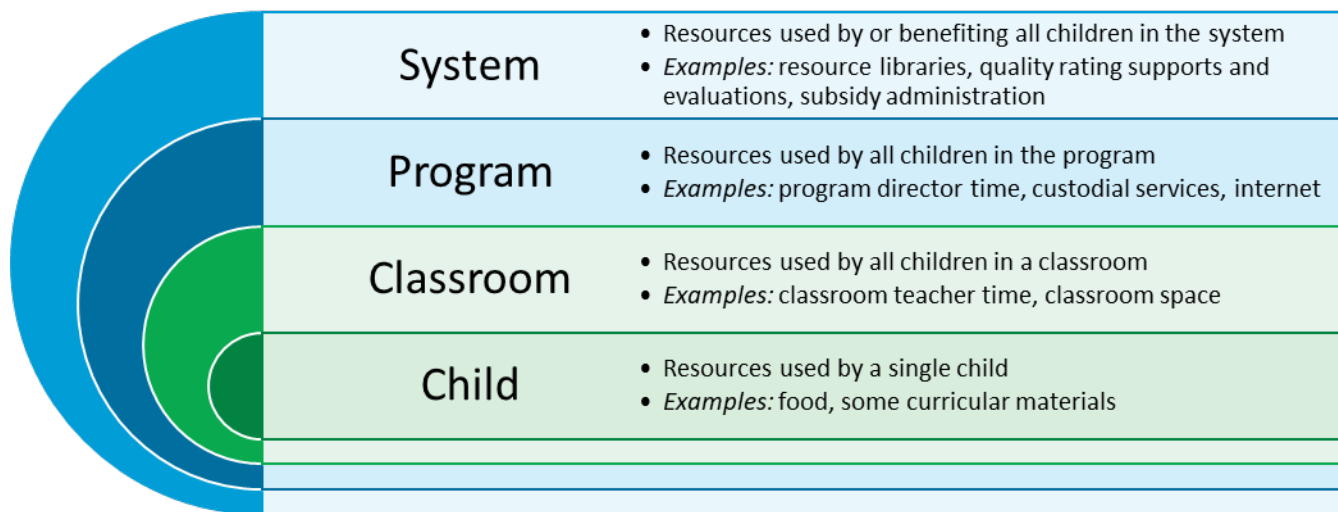
8. Be clear on how resources are used across one or more children.

- a. How resources are used, and by which children, should be accounted for in cost estimates. For example, the price of a center director (i.e., salary plus benefits) would be applied to all children in a center, but the price of a crib might only be applied to infants.
- b. Sometimes resource usage increases in direct relation to the number of children served, like per-child food costs.
- c. Other resources only need to increase after you reach a certain threshold. For example, you only need one classroom teacher until you reach a certain number of children, at which point a second teacher or assistant is needed to meet staff-to-child ratio requirements or goals.
- d. The cost of some resources, like internet and phone service, remains the same regardless of how many children are served.

The level at which resources are used (e.g., child, classroom, program) determines the denominator across which costs should be divided to estimate a per-child cost. For example, wages for one classroom's teacher would be divided across the number of children in that classroom, while the cost of the program's internet and phone service would be divided across all children in the program.

- e. Some resources are devoted to serving all children within a system and are associated with system-level costs; that is, the cost would be divided across all children participating in a specific state or local program (e.g., administration of child care subsidies or the state’s preschool program). Shared services within that system could include, for example, resource libraries, quality rating supports and evaluations, and system administrative costs. Exhibit 3 illustrates the different levels at which resources are used and examples of the resources commonly allocated at each level.

Exhibit 3. Resource Usage Across One or More Children



Step 4: Report Findings

When sharing your cost analysis results with partners or the public, it is important to provide relevant context and present the information in a way that is accessible to the audiences who will use or need to understand it.

9. Provide relevant context.

- a. Estimates of child care or other ECE costs have limited meaning to some readers without relevant context and comparisons. When reporting cost estimates, it is important to include information about the assumptions used to arrive at those estimates. The assumptions around resource usage and pricing can be important context for interpreting the results and can highlight considerations for future updates.
- b. Comparisons of estimated costs to the level of current public funding (e.g., child care subsidies, scholarships, operational grants) or other revenue sources (e.g., average tuition charged in an area, CACFP reimbursements, business partnerships) can be helpful in contextualizing the cost estimates and how those costs may vary by location.
- c. Other comparisons might include how the estimated cost of care compares to widely understood economic metrics such as median household income, the average per-student K–12 education expenditures, or average state university tuition.

10. Share cost information with audiences in accessible and meaningful ways.

- a. Depending on your target audience, you may choose to share details such as the data sources used for the estimates, the functionality and features of the cost model tool, findings from sensitivity analyses (such as how results change when assumptions vary), implications of potential or pending policy changes, or limitations of the information you used in the estimates. Different documents can include varying levels of detail to meet the needs of specific audiences.
- b. Guided by the decisions that the cost estimates are intended to inform, you may present the per-child cost and program level costs separately and describe what is included in each. For example, you may report the per-child cost at the program level (by setting and age) alongside an estimate of a system-level cost (e.g., cost of state-facilitated professional development).
- c. Effective communication strategies can include infographics, recorded information sessions, or a “frequently asked questions” document. All communication strategies should use language and terms that are familiar and meaningful to each specific audience.
- d. Transparency through public presentations and other forms of public communication may be important to build buy-in from community partners who will be affected by funding or policy changes that the cost estimate is intended to inform.
- e. Discussions with legislators and other decisionmakers, rather than simply providing them with written information, can help them better understand the cost estimates and have greater confidence in the funding or policy decisions.
- f. The use of clearly defined terms can help make information more understandable. See the [Early Childhood Education Cost Study Glossary](#) for commonly used terms and their definitions.

A cost study report and a cost model tool user guide both should include a detailed appendix or an accompanying document that describes all assumptions included in the estimates along with pricing sources.

The use of these 10 best practices can support state and local government leaders and their research partners in developing accurate and useful child care cost estimates.

The following resources include additional information for reference:

Discussion Guide to Establish Early Childhood Education Cost Estimation Goals	The Discussion Guide helps states and local leaders—whether they have existing child care cost information or are just starting to consider it—to identify what questions they want to answer with a cost estimate, what information is needed, and how to plan for an effective study or cost model.
List of Common Resources to Account for in Early Childhood Education Cost Estimates	This resource provides a starting list of commonly used ECE program resources—including staff, materials, and facilities—along with key considerations for program operations and external supports to include in cost estimates.
Pricing Data Sources for Early Childhood Education Cost Estimation	This database outlines data sources for pricing resources commonly used in child care and ECE, emphasizing alignment with cost estimation goals and the use of full market values—even for discounted, donated, or subsidized items.
Early Childhood Education Cost Study Glossary	The glossary defines key terms used in ECE cost estimation to ensure consistent understanding and effective communication among states, local governments, and researchers.

Please visit www.air.org/estimating-ece-costs for more information.

Discussion Guide to Establish Early Childhood Education Cost Estimation Goals

This brief discussion guide offers questions that leaders can ask themselves or others involved when planning an early childhood education (ECE) cost estimation project.

Goals of Estimating Costs

- For what purpose do you want to conduct a cost study? What policy or funding decisions do you hope to inform?
 - Are you interested in estimating the cost of child care or other ECE programs as they are currently provided or under some other scenario you are hoping to implement (e.g., lower staff-to-child ratios, higher staff salaries, different age group configurations)?
 - Are you interested in understanding the variation in cost by program quality rating, program size, geographic location, ages served, or other factors?
 - Are there challenges the child care market in your state or local area is experiencing that you hope a cost estimate will shed light on? What information is needed about those challenges?
- What is your “big picture” strategy for using this cost information? In other words, how does the development of this cost information fit into your larger strategy to support ECE providers, families, children, and employers?

Logistics

- What is your anticipated timeline for developing cost information, and what are the drivers of that timeline?
- What funding is available to support your cost estimation? Are there specific requirements for this funding?
- Do you anticipate engaging with a contractor to support your goals? If so, what components do you want to make sure you include in the request for proposals?

Functionality of Cost Information

- Do you want a single-point-in-time cost study or a cost model tool through which inputs (e.g., staff salaries, group size) can be updated or changed over time?
- For a **cost model tool**:
 - What features do you want the cost model tool to offer? Features you might consider include:
 - » data visualizations
 - » ability to vary assumptions

- » modeling revenue alongside costs
- Which assumptions do you want to be able to vary? For how many and which different scenarios do you want to estimate the cost?
- Which staff will need to use the cost model tool in the future? What training or instructions will those staff need to use the cost model tool effectively?
- **For a single-point-in-time cost study:**
 - For how many and which different scenarios do you want to estimate the cost?
 - What assumptions underlying the cost estimate do you want to be able to change to demonstrate how costs vary?
- In what ways and how often do you want the cost estimates to be updated to reflect changes over time (e.g., inflation, differences in wage levels needed to recruit and retain staff)?

Informing the Target Audience

- In what ways and by whom will the cost information be used?
- Who are the key audiences for your cost estimates, and how can you share findings in an accessible way?
- What unit of cost is of greatest interest to your audience?
 - Estimates could focus on per-child costs, per-program costs, costs of running the overall child care system, etc.
- What meaningful comparisons can you make to the estimated cost of care that would resonate with your audience(s) of interest? When reporting cost estimates, you might consider including comparisons to:
 - Current subsidy rates
 - Area median income
 - College tuition rates
 - K–12 per student expenditures

Data Sources and Stakeholder Engagement

- What administrative data can be leveraged to understand resource usage and associated cost?
- Whose input is needed to ensure the cost model tool or cost study has maximum functionality?
- Which types of programs need to be included in primary data collection to ensure an understanding of resources used in the scenario(s) of interest?
- What other groups should be engaged to understand the cost of child care and address other goals of your study (e.g., parents, local businesses, county commissioners, advocacy groups)?

List of Common Resources to Account for in Early Childhood Education Cost Estimates

This section presents brief definitions and characteristics of resources commonly used to provide Early Childhood Education (ECE) services. State and local governments can use these lists as a starting point when deciding which resources to explore and potentially include in their ECE cost estimates. This list is not exhaustive; rather, it highlights resources that are typically considered in child care cost estimation.

When deciding which resources to include, keep the goals of your cost estimation in mind (see Best Practice 1). Be sure to account for all relevant resources, regardless of how they are funded or provided, including those that are discounted, donated, or subsidized.

Staff Roles and Supports

Exhibit B1 describes commonly included staff and staff supports. Staff compensation (wages plus any applicable benefits) typically constitutes the largest share of child care costs. The pricing source you use to value staff time (see [Pricing Data Sources for Early Childhood Education Cost Estimation](#)) will depend on the assumptions in your cost estimate (e.g., whether you intend to align staff salaries with K–12 salaries).

Exhibit B1. Staff Roles: Definitions and Characteristics

Role	Definition and Characteristics
Staff Commonly Included	
Center director	An individual who meets necessary licensing requirements at the center level and is responsible for daily operations and often manages hiring, staff training, interaction with parents, scheduling, and other management tasks.
Assistant director	An individual who meets necessary licensing requirements at the center level and is responsible for supporting the activities of the center director.
Lead teacher	An individual who meets necessary licensing requirements and is primarily responsible for the education and safety of the children in the classroom. In some states, there are differences in required qualifications and/or training between lead teachers and assistant teachers.
Assistant teacher	An individual who meets necessary licensing requirements and is responsible for supporting the work of the lead teacher in the classroom. In some states, there are differences in required qualifications and/or training between lead teachers and assistant teachers.

Role	Definition and Characteristics
Staff Commonly Included (cont'd)	
Teaching assistant	An individual who supports the work of the lead teacher in the classroom. In some states, teaching assistants have different roles and responsibilities and different associated licensing requirements and salary scales than assistant teachers; in other states, these might refer to the same role.
Floater/substitute teacher	An individual who meets necessary licensing requirements and is not assigned to a specific classroom but instead manages classroom and center-level duties as needed to cover teacher and teacher assistant absences (e.g., lunch, sick or vacation days, training time out of the classroom).
Family child care home owner/operator	An individual who meets necessary licensing requirements to own and operate the family child care home business and is responsible for daily operations, instructional programming, communication with parents, and other licensing requirements (based on the state).
Family child care assistant	An individual who meets necessary licensing requirements to support the work of the family child care home owner/operator in providing child care.
Family child care substitute teacher	An individual who meets necessary licensing requirements to carry out the work of a family child care home owner/operator when that individual is away from work (e.g., sick, vacation, training).
Other Staff Who May Be Included	
Cook	An individual who manages the purchase and preparation of food for children within a program/set of programs.
Office staff	An individual who supports the daily operations of a program through activities like taking daily attendance, filing required documents, responding to parents, and scheduling conferences. These staff may also handle enrollment tasks (e.g., processing registration fees, leading facility tours, managing program marketing activities).
Family engagement coordinator	An individual who manages engagement with families through activities like conferences, field trips, informational packets, and referrals to services needed.
Transportation coordinator	An individual who manages a program's transportation services.
Behavioral specialist	An individual with specialized training (as determined by the state/local government) who supports teachers in managing child behaviors and/or works directly with specific children (and/or their families) to encourage appropriate behaviors.
Related service provider (e.g., speech language therapist, occupational therapist, physical therapist)	An individual with specialized training (as determined by the state/local government) who support teachers in supporting growth of specific skills. This may include speech language therapists, occupational therapists, physical therapists, or other professionals.

Role	Definition and Characteristics
Staff Supports	
Required training	Staff training that is necessary for a program to be licensed and operational. Examples include CPR training and other health and safety training requirements.
Professional development	Training and other supports for staff at different levels to grow their capacity to provide high-quality care and education.
Benefits	Components of child care program staff compensation that might include health insurance, retirement contributions, tuition reimbursement, discounted child care, and paid time off, among others. State-mandated benefits, like disability, unemployment, and Social Security, should be included appropriately for all staff, whereas additional fringe benefits should align with program staff compensation policies and/or goals of the cost estimate (such as modeling the cost of higher quality programs or efforts to reduce staff turnover).

Materials

Exhibit B2 describes material resources commonly used to provide ECE. These resources may include classroom level supplies (e.g., curricula and classroom materials), program level materials (e.g., office or kitchen supplies), or child level resources (e.g., food). The cost of these resources should be divided across the children for whom the resources are used to produce a more accurate per-child cost estimate.

Exhibit B2. Materials Commonly Used in ECE

Materials	Resources such as classroom materials, office supplies, and kitchen supplies. Materials used to provide child care may include toys, books, diapers, wipes, rugs, paper, crayons or markers, disposable cutlery, plates, bowls, napkins, and paper towels.
Food	Resources to provide safe, nutritious, and age-appropriate meals and snacks. Depending on the program structure and services, food for children can include breakfast, lunch, snacks, and/or dinner.
Curricula	Items purchased to support instruction and facilitate educational activities for young children.
Cleaning supplies	Resources used to provide a clean and healthy environment for children. These may include specific items that are safe for use around children (based on licensing and local health and safety guidelines).
Equipment	Resource items that are often used across multiple years because they are durable. Examples include cribs, cots, outdoor play equipment, and classroom furniture.
Safety equipment	Durable resources used to ensure the safety of children being served. These may include items such as smoke detectors or child safety door handles; some safety equipment may be explicitly required for licensing.

Facilities

Exhibit B3 describes resources commonly included in cost estimates to account for facilities. When using an existing data source for facility pricing, make sure you understand what the price of the building space captures. Some (but not all) rental agreements bundle utilities, cleaning, maintenance, outdoor space, parking, and other services into the monthly rental fee, while others do not. It is important to know which services are included. For any services not covered, such as cleaning or utilities, obtain accurate pricing so these costs can be properly reflected in the cost estimate.

Building space costs are often amortized or depreciated over time to capture the annual value of the space in the cost estimate.

When facility information is collected through administrative data, surveys, or focus groups, program leaders may report a discounted rental rate based on an agreement with the landlord to operate their child care business or ECE program. In these cases, you should represent the full market value of the space used to provide care, not the discounted amount.

For family child care homes, whose facility costs often rely on the fair market rent value for the state or locality, be sure to distinguish between personal and business expenses. One way to approach this is to prorate costs based on the portion of time and space used for child care in the home (commonly called the *time–space percentage*).

Exhibit B3. Facilities Resources Commonly Accounted For in Cost Estimates

Building space: Center-based care	The value of the space where ECE services are provided, typically measured in square feet.
Building space: Family child care homes	The value of the space where child care is provided in family child care settings.
Utilities	Operational resources including gas, electric, water, internet, phone, and building insurance, whose costs are often incurred monthly.
Cleaning	Effort and resources required to maintain a clean facility where child care services are provided. Some programs hire a cleaning company to service classrooms and common areas daily or weekly. The cost of these services varies depending on what is included in the cleaning contract.
Maintenance	Effort and resources required to maintain the child care facility. Maintenance costs vary depending on the space but may include services like snow removal; grass cutting and landscaping; pest control services; and upkeep of electrical, heating, and plumbing systems.

Program Operations

Exhibit B4 describes characteristics of program operations that can affect cost estimates. The examples included here can help you think through what operational decisions or goals to account for in your work.

Exhibit B4. Program Operation Factors That Can Affect Cost Estimates

Operational Hours	The hours that a program is open affects the resources needed to run it (e.g., early morning and evening hours, overnight care, 10- versus 12-hour days). Longer hours of operation increase demands regarding staff time, meals provided, utilities, maintenance and cleaning services, and materials.
Services Provided	ECE programs can differ in the services they offer, which can affect costs. Programs that specialize in providing care for children with special or complex needs require staff with specific credentials or additional training, as well as individualized materials and custom equipment.
Marketing	Programs often incur costs to recruit families to their program. The extent to which this active marketing—through social media, printed materials, dedicated staff time, or paid advertising—is needed by a typical child care program will influence costs.
Margin/Reserves	Sustainable business models ideally involve having some amount of margin or reserves that can be used to weather lean times (e.g., when enrollment declines), manage unexpected expenses (e.g., a major repair), or expand the program (e.g., adding more classrooms or serving more age groups). Assumptions about an appropriate margin to include in cost models may be developed in consultation with local child care leaders or their financial partners.
Accreditation	Some programs choose to become accredited by an organization such as the National Association for the Education of Young Children (NAEYC) to document the quality of their program. Accreditation often comes with up-front and ongoing costs.

External Supports

Some programs rely on regional supports, such as lending libraries of materials and equipment for child care homes, professional development courses, or business operations support or mentoring. In addition, state agencies or partners may provide services such as licensing and quality review visits. In a cost estimate, the costs of these types of external supports can be divided among programs who use them, depending on the question your study is trying to address.

Pricing Data Sources for Early Childhood Education Cost Estimation

You can use the following data sources to identify prices when estimating the cost of early childhood education (ECE) programs. Be sure to align the decisions about input prices in your cost model with the goals of your cost estimation. For example, when estimating the costs of high-quality care, you may choose to use state or district teacher salary scales rather than current wages to value lead teacher time, if your state has a goal of ultimately paying ECE teachers at the same level as elementary teachers. There may be multiple options for specific pricing information, so it is important to understand the qualities and characteristics of resources as you explore pricing information. Note that this is not an exhaustive list of available pricing information. Remember always to include the full price or market value of each resource, regardless of how it is funded or provided (e.g., discounted, donated, or subsidized).

Data Sources	Description and How to Use in a Cost Model	Links
Provider Cost of Quality Calculator (PCQC)	Developed by the Administration for Children & Families, the PCQC is a user-friendly, web-based tool that helps center-based and family home child care providers estimate the costs of running their programs. It uses state-specific and national prices, along with assumptions about resource quantities, to help users understand both program costs and revenues. While PCQC prices are often helpful for estimating non-personnel resource costs, the tool can also be used to estimate personnel costs and staffing quantities when other data sources are not available.	Provider Cost of Quality Calculator
Bureau of Labor Statistics Operational Outlook Handbook	An online resource with data on state-specific and national median salaries and hourly wages for many different positions. This handbook can be used to identify typical wage ranges for different types of staff in child care programs.	Direct Services: Preschool Teachers Kindergarten and Elementary School Teachers Special Education Teachers Program-Level Staff: Directors and Administrators

Data Sources	Description and How to Use in a Cost Model	Links
		Other Support Staff: Food Preparation Building Maintenance Office and Administrative Support
State or district teacher salary scales posted online	Depending on the goals of the cost estimates, states may desire to set early educator salaries equal to K–12 salaries in their cost models. Many districts have publicly available salary schedules that can be used as guidance for setting these wage assumptions.	Examples: Milwaukee, Wisconsin Denver Public Schools Oakland Unified School District
National retailer websites	Websites of national retailers can be used to identify prices for materials and equipment that do not vary by location, such as diapers, curricula, and cleaning supplies. These sites can also be used to compare or triangulate prices with other sources, including the PCQC.	Examples: Amazon Walmart
Insurance websites	Insurance companies that serve child care programs may advertise their range of prices for insurance. These price ranges can be helpful in triangulating and validating the standard costs included in the PCQC or other pricing sources.	Some examples of sources to help identify typical ranges of ECE insurance costs include: Next Insurance Fit Small Business
Accreditation websites	The costs of acquiring these accreditations can be found on specific accreditors' websites.	Key national organizations that offer accreditation include: National Association for the Education of Young Children (NAEYC): provides national accreditation for center-based child care providers through its Early Learning Program Quality Assessment & Accreditation National Association for Family Child Care (NAFCC): provides pathways to national accreditation for family child care educators.

Data Sources	Description and How to Use in a Cost Model	Links
Department of Housing and Urban Development (HUD) Fair Market Rent	HUD maintains a database that provides annual estimates of monthly rent set at the 40th percentile of gross rent for standard housing units within each state or local housing market. These data offer useful information about locality-specific monthly rental rates to support facilities pricing for family child care homes.	HUD Fair Market Rent
LoopNet	LoopNet is a commercial real estate database that offers real-time information on rental rates for commercial buildings. Its listings of prices per square foot can be used to obtain information about rental rates for child care facilities in various localities.	LoopNet
Training Organization Websites	Organizations like the American Red Cross and the American Health Care Academy offer a variety of online and in-person classes, often with options tailored for child care providers. These offerings can be used to determine the cost of required trainings, including CPR and other health and safety certifications for child care staff.	American Red Cross American Health Care Academy

Early Childhood Education Cost Study Glossary

The following terms are commonly used when estimating the costs of child care and early childhood education (ECE) programs. A shared understanding of these terms helps states, local governments, and researchers communicate more effectively and compare cost estimates. *Terms with multiple possible meanings are shown in italics.*

Budget. The planned expenditures of a program. Budgets are typically estimated monthly or annually and represent anticipated spending during a specified period. They usually do not include the value of volunteered resources (e.g., staff time) or donated resources (e.g., facilities, materials). Budgets are spending plans, and spending may change over time based on program needs. Budgets are not the same as expenditure reports, and both budgets and expenditure reports differ from (though may inform) cost estimates.

Cost of ECE. The per-child value of all resources used to provide a defined type of ECE services. Cost estimates should always clearly describe what is included. Cost of ECE can reflect different scenarios, including:

- **Cost of aspirational/high-quality care.** The value of all the resources that would be needed to provide higher quality care, or care at a specified level of quality (e.g., lower ratios, higher wages, family support services). This is sometimes called the *cost of adequate care*.
- **Cost of current care.** The value of all resources used to provide care as it is currently delivered at the time of the cost study or cost model development.

Cost Model. A tool that allows users to explore how changes in input prices and assumptions affect cost estimates. Cost models typically draw on administrative and newly collected data on resource quantities, qualities, and prices. They often inform broad funding or policy decisions and are commonly delivered as Excel tools or other interactive platforms. Cost models can estimate specific scenarios of interest (e.g., inclusion of wraparound services, care for children with special needs, higher staff wages).

Cost Study. An analysis that uses administrative, existing, or newly collected data to estimate the value of resources used to provide clearly defined child care services at a single point in time. Cost studies may include sensitivity analyses showing how estimates change based on assumptions (e.g., staff wages, benefits, facility costs). They typically inform specific funding or policy decisions and are usually delivered as a final report. To remain accurate over time, cost studies must be repeated with updated data.

ECE Quality. Definitions of quality vary by state, territory, or local government. Common elements include staff credentials or training, staffing ratios, and the quality and quantity of educational materials. Cost estimates must clearly define the level of quality assumed, as many components of quality can affect costs.

Enrollment as a Percentage of Licensed Capacity. The percentage of the number of children a program is licensed to care for that is currently filled with enrolled children, calculated as $(\text{current enrollment} \div \text{licensed capacity}) \times 100$. Enrollment as a percentage of licensed capacity can be calculated by age group or overall. Some researchers refer to this as *enrollment efficiency*, but early childhood program leaders may also use this term to describe the ideal enrollment level for a financially stable business. To avoid confusion, “enrollment as a percentage of licensed capacity” is recommended for describing actual enrollment relative to licensed capacity.

Expenditure. The amount of money programs spend in cash to operate. Reported monthly or annually, expenditures show actual spending but exclude the value of volunteered resources (e.g., staff time) or donated resources (e.g., facilities, materials) that help a program operate. As a result, expenditures often differ from total cost.

Market Rate. Sometimes called *market price*, this refers to the tuition that programs charge for child care services in a given region (typically defined by the state). It is often referred to as the *market rate* because it reflects the tuition and fees paid by families in the local child care market (i.e., state-defined region, county).

Per-Child Costs. The total value of resources used to provide ECE services divided by the number of children those costs apply to. Per-child costs help quantify the resources that a program uses (or would need) to serve an individual child.

Program-Level Costs. Sometimes called *direct service costs*. This includes the value of all resources used at the program level (i.e., child care center, prekindergarten program, family child care home). It does not include regional or state-level supports that help the full system operate.

Revenue. The income that a program receives. This may include private tuition; child care subsidies; private grants; and/or federal, state, or local funding to support ECE program operations.

Subsidy Rate. The reimbursement amount that states pay child care providers for serving children from low-income families participating in the subsidy program. Subsidy rates often vary by child age, setting (i.e., center based, family child care home), and state-defined geographic region. The rates may also vary by program quality level (e.g., star rating) or services provided (e.g., nontraditional hours of care, care for children with special needs). Historically, subsidy rates have been tied to market rates, but recent federal guidance encourages the use of cost data to set those subsidy rates.

System-Level Cost. This term can have multiple meanings. It generally refers to costs associated with resources beyond the program level, often a substantial share of the overall cost of a child care system for a state or local government. Depending on study goals, you may or may not want to include these costs in your overall estimate. Examples of “system-level costs” include regional and state-level professional development, resource lending libraries, licensing or quality rating visits, system-level software (e.g., billing or attendance), subsidy payment processes, and business mentoring. For cost

estimates that aim to reflect the overall cost of a state or local child care system, including system-level costs is considered best practice. These types of costs are sometimes called *shared costs*, *overhead costs*, *infrastructure costs*, or *administrative costs*. **It is essential to provide a clear definition of any terms you use for these types of costs.**

True Cost. This term has multiple meanings. “True cost” may refer to the value of (1) the resources needed to sustain an ECE system beyond the status quo,⁴ (2) the resources needed to maintain the current system,⁵ (3) the gap between subsidy/tuition and the cost estimate (i.e., the true cost of operating a program, or (4) the cost of child care to parents⁶ (tuition minus subsidies or required fees). Because of these different uses, **it is important to communicate clearly about what “true cost” means in any given context or to use more precise terms.**

⁴ See, for example: [The True Cost of High-Quality Child Care Across the United States \(Center for American Progress\)](#)

⁵ See, for example: [Child Care in America: 2024 – Price & Supply \(Child Care Aware® of America\)](#)

⁶ See, for example: [True Program Costs: Program Budget and Allocation Template and Resource \(Propel Nonprofits\)](#) and [The True Cost of Childcare \(Flannel Guy ROI\)](#)

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