## Cost Models: EIKING Critical Tools for EC Financing

Center for
Early Learning
Funding Equity
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## What is a cost model?

A cost model is a budget built with the capacity to answer critical questions that are relevant to operations and forecasting

What is the annual cost per child to serve infants, toddlers, preschoolers, and school age children?

What might happen to my center's bottom line if I converted some preschool classrooms to 2 -yr old classrooms?

What percentage of this program's budget is going to the classroom vs to administrative costs?

How much more revenue per child (or per classroom) would I need to increase my teacher's wages to a competitive level?

## A Cost Model starts with a basic budget

| PERSONNEL COSTS |  |  |
| :---: | :---: | :---: |
| Salaries/Wages |  |  |
| Owner/FCC Educator | \$ | 48,880 |
| Assistant | \$ | - |
| Substitute | \$ | 3,205 |
| Other | \$ | - |
| Other | \$ | - |
| Total Salaries/Wages | \$ | 52,085 |
|  |  |  |
| Benefits/Payroll Taxes |  |  |
| FICA | \$ | 3,985 |
| Health Insurance | \$ | 1,064 |
| Worker's Compensation | \$ | 21 |
| Retirement | \$ | - |
| State Unemployment Tax | \$ | 46 |
| Federal Unemployment Tax | \$ | 192 |
| Other Fringe | \$ | - |
| Total Benefits/Payroll Taxes | \$ | 5,308 |
|  |  |  |
| NON-PERSONNEL COSTS |  |  |
| Food | \$ | 10,200 |
| Legal/Audit/Accounting support | \$ | 700 |
| Child Care Equipment Repair/Depreciation | \$ | 661 |
| Supplies \& Equipment (Incl. Office \& Educational) | \$ | 1,070 |
| Insurance: Liability/Business | \$ | 700 |
| Staff training \& education | \$ | 513 |
| Telephone \& Internet | \$ | 1,272 |
| Rent/Lease/Mortgage | \$ | 7,133 |
| Homeowner's Insurance | \$ | 288 |
| Utilities (gas, electric) \& general home repairs | \$ | 1,777 |
| Repairs and Maintenance, cleaning for home | \$ | 317 |
| Consultation Services | \$ | 500 |
| Transportation for field trips | \$ | 306 |
| Miscellaneous | \$ | 1,634 |
| Total Non-Personnel Costs | \$ | 27,071 |
|  |  |  |
| OTHER EXPENSES/RESERVES |  |  |
| Reserves/Capital Recoup | \$ | - |
| Indirect Admininstration | \$ | - |
| Total Other Costs | \$ | - |
|  |  |  |
|  |  |  |
| TOTAL HOME EXPENSES | \$ | 84,464 |

Costs can be
allocated across age groups to produce per-child costs

Allocation of costs by age group

| Personnel | FTE |  |  | Total Expense | Infant/Toddlers | Twos | Preschool |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Site Director |  | 1 | 80,000 | 80000 | 16,410 | 12,308 | 51,282 |
| Additional Professional Staff (out of classroom)/Assistant Principal |  | 2.75 | 55,000 | 151250 | 31,026 | 23,269.23 | 96,955 |
| PreK Lead Teachers |  | 5 | 53,000 | 265,000 |  |  | 212,000 |
| Birth - 3 Lead Teachers |  | 6 | 43,000 | 258,000 | 172,000 | 86,000 |  |
| Teacher Assistants |  | 11 | 35,000 | 385000 | 140,000 | 70,000 | 140,000 |
| Classroom Aides |  | 11 | 29,250 | 321750 | 128,700 | 64,350 | 128,700 |
| Lead Floater teacher/sub |  | 2.2 | 50,000 | 110000 | 44,000 | 22,000 | 44,000 |
| Assistant floater teacher/sub |  | 2.2 | 32,000 | 70400 | 28,160 | 14,080 | 28,160 |
| Family Support Specialist |  | 5 | 40,000 | 200000 | 41,026 | 30,769 | 128,205 |
| Cook |  | 1 | 28,000 | 28000 | 5,744 | 4,307.69 | 17,949 |
| Administrative support |  | 1 | 40,000 | 40000 | 8,205 | 6,153.85 | 25,641 |
| Janitor/maintenance |  | 1 | 28,500 | 28500 | 5,846 | 4,384.62 | 18,269 |

## A cost

## model uses

variables and
formulas to answer key "what if" questions

Instead of building a budget with static numbers, a cost model uses Excel formulas

Examples:

- The total cost of educational supplies $=($ per-child cost $) \mathrm{x}(\#$ of children)
- Total lead teacher salaries $=(\#$ of classrooms) $\mathrm{x}(\# F T E$ lead teachers per classroom) x (lead teacher average salary)

In a cost model, each of these variables can be changed to discover what the impact would be on overall cost and program financial viability

Live Demo of Program Cost
Model


## Cost Modeling for Policy

How states are using cost modeling to design child care financing strategy

Historically, the federal
Administration for Children and Families (ACF) has guided states to focus on comparing reimbursement rates to market prices.

Goal: 75th percentile of market rates

Now, federal regulations also require states to look at the cost of providing services.

Goal: Meeting the "true cost of care" for highquality services

| Prices and Costs are two primary sets of information needed to set subsidy rates and overall funding policy for child care | Tool used | Prices \$\$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Market Rate Survey | Basic Cost Analysis | "Cost of Quality" Analysis |
|  | What it answers | How much are providers charging private-pay families for care? | How much does it cost providers to operate their programs while meeting required health and safety standards? | How much does it cost providers to operate their programs with high quality and adequate compensation? |
|  | Why we use it | To understand the extent to which subsidy rates allow parents to access the full market of available care | To understand the extent to which subsidy rates and market rates allow providers to cover the current cost of care | To understand the funding that will be needed to sustainably implement high quality services |

## Prices and costs together give an understanding of how well the child care market is functioning

How we know whether the market is functioning well

The child care market is functioning well when:

The child care market is NOT functioning well when:

Providers are able to charge private-pay families sufficient fees to cover their full costs

Providers are NOT able to charge parents high enough fees to cover the cost of providing high

Rate setting implication
Subsidy rates should focus on ensuring families have access to the largest proportion of the market possible quality services

Setting subsidy rates to match market rates will not be enough to support the viability of the child care market

## What a Policy-Focused Cost Model Is, and What it is Not

## A cost model is

- A representation of a 'typical' child care center or home-based program using strong business practices
- Informed by extensive data collection and analysis of the state's ECEC data and other publicly-available data
- 'Pressure-tested' by providers, state administrators and other state-based experts
- Aligned with the Provider Cost of Quality Calculator (PCQC) data points
- Meant to inform state funding and policy decision-making


## A cost model is not

- A program-by-program representation of actual daily costs of any one child care center or home
- Meant to be used by providers for budgeting purposes
- Meant to be used as the sole driver of reimbursement rates paid to providers by the state
- Only relevant for understanding child care - preschool funding systems need cost models, too!
- Only representative of subsidized child care - rather it is meant to model the entire ECEC system in your state


## Cost for Centers

Personnel Costs


Non-Personnel Costs

| - Occupancy Costs |
| :--- |
| - Food |

- Supplies
- Contacted Service


## Total Costs



## Calculating Daily Costs Per Child



## Business Formula Used for Family Child Care Cost Model



Costs:
Wages \& benefits for assistants

Food, supplies
Business
services
Business use of the home (rent, utilities, depreciation)
Taxes

## COMPENSATION

For the FCC provider

## Calculating Cost in FCC



