

Generic Cost Model: Centers

This memo accompanies the Excel workbook “GenericCostModel-center2012” which is a cost modeling tool for a center-based ECE program. It can be used to explore how the ‘Iron Triangle’ affects operations and net revenue (profit or loss), the effects of including various revenue sources such as from state-funded prekindergarten or QRIS (quality rating and Improvement systems). It can be used to model budgets for a proposed center and to understand the costs of operating a better quality center.

To access the Excel workbook, go to <http://www.grisnetwork.org/resource/2012/generic-cost-modelcenters-%E2%80%93-excel-workbook-tool>.

Variables

The first worksheet has the major variables. You can vary:

- the size of the center (number of classrooms)
- what ages of children it serves
- the income mix of families
- how efficient it is (enrollment and bad debts)
- level of quality

These variable cells are highlighted in **yellow**.

Regulations

On the ‘variables’ worksheet, you will need to input the ratios and group sizes required in regulation for your jurisdiction. These populate other worksheets.

Revenue Sources

You need to know how the various public funding sources work. If there is prekindergarten funding, and community organizations are eligible to receive it, you need to know for what ages, how much funding per child and per year, whether school-day or part-day, and how it interacts with the child care subsidy system. You need to know how child care subsidy works, principally the rates paid and the rules for the interaction between it and other funding sources. If there is a QRIS, find out what financial awards are offered (if any). The ‘CACFP’ worksheet applies in all states.

Expenses

The two worksheets, 'regulated' and 'better' are set up to model the expense and revenue budget for a center with typical staffing. Read the comments and make adjustments to the yellow shaded cells as you wish.

Personnel expenses are the largest part of any ECE budget. The worksheet 'BLS Wages' contains state wage data for several relevant occupations. You need to input data for your state (or other jurisdiction if your state is large enough to have reliable subsamples and you want to model costs in one locality). Go to the Bureau of Labor Statistics website and get the current data for your state. This URL will go to Minnesota; just replace 'mn' with the 2-letter abbreviation for your state. http://www.bls.gov/oes/current/oes_mn.htm

You will need to check on the rules for employers in your jurisdiction, principally the state (or local) minimum wage and any mandatory benefits calculated on payroll in addition to the federal Social security and Medicare rates.

Nonpersonnel expenses are in the 'Nonpersonnel Pro Forma' worksheet. These are set up as costs per child, costs per classroom, and overall center costs. They represent typical, industry-norms. Change them only if you have data to support alteration.

Throughout the worksheets, cells shaded in pink are the ones that are used in formulas on other sheets. Do not change them unless you intend to affect all those formulas.

Data Needed for the Cost Model

EXPENSE

State child care regulations

Review for cost drivers – mainly ratios/group sizes, staff qualifications, any required consultants, e.g., health, playground, whether family-teacher conferences are required and how often, etc.

Need center, family child care homes (small and large) and school-age (if separate)

State's QRIS Standards

Review for *cost drivers* – mainly ratios/group sizes, staff qualifications, and anything that adds staff time beyond what regulations require, e.g., staff meetings, planning time, child assessment, parent engagement, and any ongoing costs. E.g., child assessment systems have an annual cost per child and take time for staff to conduct/record/report. Some QRIS require benefits. You need to know the variation by quality level – this is a little harder to do in a points system – if state with points system has on-line QRIS application you might be able to create hypotheticals using that. Otherwise, use your judgment. The model focuses on qualifications

(increasing wages) and time (increasing the %age of aides needed to cover classrooms so teachers can do the extra stuff).

State minimum wage and any other state-specific employer rules (e.g., MA has health care insurance mandate, NY has disability insurance mandate).

For payroll taxes, you need the rate calculation which may be on all wages or up to a certain level. FICA (Social Security 6.2% and Medicare 1.45%) are federal and thus standard across states (7.65% of total payroll, no one in child care has wages above the limit for Social Security tax rate which is \$106,800). Usually there's a state website with info for new employers.

Occupational wages

Go to the Bureau of Labor Statistics website and get the most recent wage data for your state for the occupations on the BLS tab in the worksheets.

http://www.bls.gov/oes/current/oes_NY.htm Just substitute the 2-letter abbreviation for your state in place of NY in the above URL. Minimally you need:

- Child Care Workers
- Education Administrators, Preschool and Child Care Center/Program
- Instructional Coordinator
- Office and Administrative Support Workers, All Other

REVENUE

Child care subsidy ceiling payment rates.

If the ceiling rates are set at or close to the 50thile for all age categories, then those rates are a good enough match for what rates the average unsubsidized families are paying. If the ceiling rates are a very low %ile of the market or (more unlikely very high – only 3 states are at 75thile), it is better to use data from a recent market rate survey so you will have a better handle on tuition fees.

Note: The model has been assuming that programs get the ceiling market rates and that private-pay families are charged the ceiling market rates. This assumption is reasonable unless the rates are set low; in that case private-pay families are probably paying more .

State-funded prek revenue

Only if other than public schools can participate; otherwise it's not a revenue source. You need the ages of children, annual amount per child average, required hours/day and year, the interaction between PreK and subsidy (full subsidy plus PreK or part-day subsidy plus PreK). The NIEER yearbook is a pretty good source for the average \$/child.

Any *financial incentives* related to quality within the QRIS, tiered subsidy bonuses, quality awards, wage/retention payments tax credits, etc. that go to the program. These can sometime be very complex calculations. E.g., if there are wage awards by level of education, or quality awards by enrollment size and quality level.

For more information on the Cost Model Tool, email anne.walsh.mitchell@gmail.com.