FREQUENTLY ASKED QUESTIONS ABOUT THE CPQ&R
FEBRUARY 2019

We have assembled responses to the most frequently asked questions (FAQ) about using the Cost of Preschool Quality and Revenue (CPQ&R). Please review this document and the related resources on the website. Feel free to contact us if you have additional questions. Click on a topic below to find answers to your questions:

[Getting Started Using the CPQ&R](#)
[Understanding Annual Slots and Dosage](#)
[Adjusting for Program Types and Child Characteristics](#)
[Understanding CPQ&R Default Data](#)
[Inputting Data and Modifying the CPQ&R](#)
[Funding Data](#)
[Creating Scenarios](#)

Getting Started Using the CPQ&R

1. What information do I need to get started?

The CPQ&R uses state-level demographic and employment data, and builds costs based on volume estimates derived from an annual slot plan; so, to get started all you need is to select a state and specify an annual number of children served by delivery model (Child Care Centers, Public Pre-K, and Head Start) as well as by dosage (Part Day, Full Day, and Extended Day). See also ["Before You Start"](#) and ["Orienting Yourself to the CPQR"](#)

2. How do I create a plan to collect data about my state's preschool program for use in the CPQ&R?

One way to think about this is to break the process into two steps. First, begin with identification of key dimensions, including which delivery settings and dosages will be used, and how many children will be served in the learning slot plan (multi-year or for one year). This is followed by an initial "quick-pass" review of the model default inputs

in the Implementation Plan (Worksheet B) and an initial evaluation of the modeling output (Worksheets A & B). See also "CPQRDataChecklist".

During the first step, default inputs can be assigned into one of **three categories**:
1. those for which data and sources are readily available,
2. those for which the data is not available, but the defaults are deemed reasonable,
3. and the remaining inputs, i.e., those for which the user believes additional research is merited.

After classifying the inputs in this way and reviewing the category assignments with stakeholders and your team, the focus shifts to the third category and the assumptions therein can be prioritized for further investigation.

In the second step, a more thorough review can take place focusing on the validity/sensitivity of this third category of input assumptions. If updates are made, then the results may be more aligned with stakeholder expectations.

3. How much time does conducting a CPQ&R cost projection take?

One state's experience was 98 hours over 3 months, which is equivalent to approximately 1 day per week for 3 months (20% of one Full-Time Equivalent). The hours were broken down as shown below:

6 hours – CPQ&R orientation/training
6 hours – briefings with state agency leaders
10 hours – initial data collection, working meeting with SEA
16 hours – prep, conduct, and follow up from advisory group meetings/webinars
30 hours – prep, conduct, and follow ups from site visits
12 hours – running scenarios
10 hours – developing communication materials
8 hours – presentations, briefings

4. What if I am uncertain about what slot numbers to use in future years?

If you are uncertain about the exact volumes to apply in future years, then any slot volume can be entered temporarily to observe the effect of changing subsequent default input assumptions, and you can then finalize your slot plan at a later time.

Understanding Annual Slots and Dosage

5. How does the CPQ&R use annual slot plan to build its cost projections?

Virtually all cost estimates are built from unit costs and preschool volumes ultimately derived from the annual slot plan. Annual slot counts and expected class size drives the

number of classes required, the number of classes by dosage drives number of classrooms required, and the number of classrooms and the average facility size drives number of facilities required. Separately, the number of classes by dosage and adult-child ratios drives the number of teaching staff required.

6. What does dosage mean?

Dosage is the amount of service delivered. In the case of the CPQ&R, it refers to both the duration of a class day and the number of days of classroom instruction provided to children per year. The CPQ&R allows you to break out slots between Part Day, Full Day, and Extended Day classes and set a different annual number of days of instruction for each. You are asked to input the number of calendar weeks the teaching staff is employed and the number of days within that period when classes are not in session (including holidays, administrative days, etc.). The remaining days are allocated to classroom instruction.

7. Does the CPQ&R require that Part Day care is always 3 hours of instruction per day, Full Day is always 6 hours, and/or Extended Day care is always 10 hours?

No, the exact amounts are less important than the distinction that two consecutive Part Day classes can share a single classroom (i.e., morning and afternoon sessions), while Full Day and Extended Day classes each require a single classroom. For example, if you entered a 4-hour class as Full Day, then the CPQ&R would assume it would have its own dedicated classroom, but if you entered it as Part Day, then the CPQ&R would assume that one classroom could serve two such classes per day.

Adjusting for Program Types and Child Characteristics

8. Is Family Child Care included as a delivery model?

The CPQ&R was not developed with Family Child Care as a default delivery model, but it is flexible enough to accommodate FCC Homes (and other delivery models) with only minor enhancements.

9. Can I use the CPQ&R for programs serving infants and toddlers?

Yes. The basic approach to modeling early learning costs and funding is similar, whether it is for infant, toddler, or preschool care. The greatest difference typically lies in maximum class size and adult-child ratio assumptions. However, you should also note that the CPQ&R has several components based on preschool program data, including teacher salaries and child populations by state. You can update or override these sources with your own data—the CPQ&R lists its data sources and provides salary factor assumptions allowing you to increase or decrease salary statistics.

10. Does the Federal Poverty Guidelines (FPL) threshold % in the Annual Slot Plan result in an increase or decrease in the Fully Loaded Cost per Slot?

> The FPL threshold identified in the Annual Slot Plan (Row 37) is not linked to cost calculations in the default model. Instead, it is employed to identify the % of children in the state living below the FPL threshold who would be served by the slot plan if all slots targeted these children. This is useful when developing an annual slot plan that seeks to serve a specified % of children living below a FPL, annually, within a certain period of time (e.g., expanding a program to serve 80% of all FPL-eligible children within 5 years).

11. Does the CPQ&R include costs associated with serving children with Special Needs or English/Dual Language Learners?

> Yes. There are assumptions for the additional number of teaching staff required to serve the % of Special Needs and ELL/DLL children (specified on Rows 38 and 39). These staffing assumptions can be found under the section for Staff-Child Ratio (Table B.2.b2), and could address the need for interpreters on staff for ELL children, or higher adult-child ratios for SPED children. There may be other cost implications for serving ELL/DLL or SPED children that are not explicitly built into the default model; therefore, you should check to ensure that your other cost assumptions are consistent with the percentage of slots you are targeting to these children.
>
> Within the funding section of the CPQ&R (Table B.2.a.2), there are funding implications for serving ELL/DLL or SPED children. This section can estimate funding streams for qualifying ELL or SPED children based on percentages specified by delivery model in that section.
>
> Other options to address costs for ELL/DLL and SPED children include creating separate scenarios in the CPQ&R to model dedicated classrooms for these children, or modifying the CPQ&R to explicitly link additional cost assumptions to the slot plan allocations for ELL/DLL and SPED children within a single scenario.

Understanding CPQ&R Default Data

12. Can I still use the CPQ&R if I don't have a lot of state specific data on costs?

> The CPQ&R can be a powerful tool for informing stakeholders on the type of information they require about their early learning program. It accomplishes this by clearly laying out the volume and cost drivers for the expansion and/or improvement of early learning quality. The CPQ&R comes pre-loaded with default demographic information and default input assumptions so that users can immediately begin working with it, and it is expected that users will amend the default assumptions as needed to better represent the cost data they have on-hand.

However, users may find that their information is insufficient, perhaps because it is not collected and reported in a meaningful way. In this case, the CPQ&R helps by highlighting the data issues. For example, a state may publish an annual workforce report containing summary statistics on early learning teacher qualifications, but if the information is not easily translated into the input assumptions required by the CPQ&R, then this may educate the state on how it can improve its workforce surveys and reports in the future.

13. What state-specific data are used in the CPQ&R?

Data include population estimates of 3- and 4-year-old children, the percentage of children under age 6 by FPL level, occupation-specific wages, Head Start teacher degree and certification percentages, minimum wage laws, and specific federal funding streams (e.g.: Head Start, Title 1, TANF, CCDF), Head Start teacher churn rates, tuition costs for continuing education, coaching costs, child screening costs, child meals costs, child transportation costs, and real estate costs.

14. What if I don't know if a default assumption is accurate for my state?

Some assumptions impact costs more than others, and you can use high/low values to observe the sensitivity of total costs to the assumption in question. For example, if the default assumption is a value of 50%, then you could assume 0% or 100% and note the impact on total cost per slot in each case (if the difference is not large then you might feel more comfortable with the default assumption as a reasonable estimate). You can also do this with several variables, noting in each case the relative impact, and then prioritize them for further research with those having the largest potential impact given first priority. See also "Checking CPQR Cost Assumptions and Testing for Reasonableness".

15. What if the federally reported state average salaries provided by the CPQ&R disagree with what I have gathered independently from my providers?

Salary data can be adjusted by use of a factor in the section of the CPQ&R for provider-level personnel costs. For Child Care Centers and Public Pre-K, this factor is labeled as "% of BLS Statistic" (the source of the salary data is the Bureau of Labor Statistics). For Head Start the factor is labeled as "% of PIR Statistic" (the source of the data is the Head Start Performance Indicator Reports). For example, if the CPQ&R provides an annual salary for a director of $50,000 and you believe it is closer to $55,000, then you would enter a factor of 110% (110% * $50,000 = $55,000).

16. What if I don't know the percentage by degree level for the existing workforce?

The default values are based on national averages from Head Start for the split of teachers in that program by degree level. You can also use the state-specific values shown for Head Start in the CPQ&R, and further use high/low values to understand the impact of varying degree level splits on your cost per slot. You can vary the assumptions between 0% and 100% (or some other high and low value) and note the impact on costs; if you consider the impact to be significant, then this suggests that teaching credentials may be an important area for research in your state in determining the cost of high-quality preschool. You should not delete the values in these assumptions entirely, as this is equivalent to assuming that all lead teachers and assistant teachers have the lowest level of credentials.

17. Can the CPQ&R estimate the percentage of FPL-eligible children in the state served by my slot plan if I change the age grouping?

Yes, if you replace the child population data in one of the demographic tables from the U.S. Census (Table C.2), which is currently loaded with population data for 3- and 4-year-olds. The state-specific values in this table are multiplied by FPL splits in the following table (Table C.3), which are estimates by FPL for children under 6; therefore, Table C.3 does not require editing if your age grouping is comprised of children under 6, and you simply need to overwrite the data in Table C.2 with your age-specific data (using the same source and approach described below the title of Table C.3).

18. Why are some assumptions of the default data formatted to allow the user to vary inputs by delivery model, dosage, or implementation year, but not all three, whereas other assumptions are fixed across all these dimensions?

If every default data assumption could be varied by delivery model, dosage, and implementation year, within a single scenario, then the number of assumptions in the CPQ&R would be significantly larger. The designers structured each scenario based on their knowledge of early learning and enabled users to utilize multiple scenarios in cases where the dimensions offered within a single scenario do not meet their needs.

Inputting Data and Modifying the CPQ&R

19. Can I change the assumptions in Worksheet B?

Yes, you can and should change these default input assumptions to better represent the cost data you have. The default assumptions are provided so that you can instantly see costs upon entering a slot count.

20. Do I have to change the assumptions in Worksheet B?

No, the defaults in the calculator will support the CPQ&R calculations.

21. Why do I get error values when I delete default assumptions that are not within the scope of my early learning program? What should I do?

If an assumption is not within the scope of your program, then you have two options. The CPQ&R only applies assumptions that are relevant to the delivery model and dosage of your slot plan; you do not need to delete the assumptions for the delivery models and dosages you are not using because they will simply not factor into calculations.

Therefore, the first (and recommended) option is to leave the default values in place. If the default assumption is driving costs, then the other option is to enter a zero value. Deleting a value entirely (leaving a blank cell) may confuse the logic within the CPQ&R that checks for whether the assumptions in each section are complete.

22. Can I add yellow-shaded cells to customize my user input assumptions in Worksheet B, without having to edit other worksheets in the CPQ&R?

Yes, in many cases you can. Any table with a "Subtotal" row immediately below the rows with yellow cells should allow for inserting additional rows. This allows you to create more space to enter additional assumptions or to perform side calculations to "build" your assumptions. As long as the Subtotal row is pulling from the correct rows, no other worksheets in the CPQ&R will require editing after you insert these rows. If there is not a Subtotal row in the table in question, then you will most likely need to edit other worksheets in the CPQ&R; however, you may find that using multiple scenarios can meet your modeling needs without having to edit the other worksheets.

23. What can I do if a range of values could apply for an assumption? For example, what if Transportation Costs vary widely in different regions of my state?

When a range of values can apply, you have the choice between using a single expected value (the average or median) for the assumption, or else using separate scenarios based on values from the range (and compare the results). The former makes more sense when your goal is to arrive at a single cost per slot metric; the latter is preferable when you want to illustrate the drivers affecting variable cost per slot estimates. Although a user could conclude that more than one cost per slot should be offered within a program (aside from different rates by dosage and possibly delivery model), from a logistical standpoint this tends to be more difficult to implement.

24. How do I include the costs of functions in our Quality Rating and Improvement System (QRIS) in the costs projections using the CPQ&R?

> The CPQ&R contains the NIEER quality standards benchmarks, all of which are research-based and included in most QRIS systems. However, if your state has different quality benchmarks, they can be entered in Worksheet B. Additional costs related to your QRIS can be accounted for as implementation supports for these quality standards.
>
> Finally, if you want to model costs that are incurred based on the proportion of providers rating at different levels, then this will require more major modifications to the CPQ&R. However, the tool was designed with customization in mind, and provides an excellent foundation on which to build these modifications for the remaining aspects of your QRIS.

25. What is a reasonable Baseline Admin Cost?

> The CPQ&R comes populated with a reasonable estimate of $250 for the baseline administrative cost per slot. This cost is for essential administrative personnel at the state level, executive management, supplies and other direct expenses, and any agency indirect charges (for office space, computers, etc.). It does not include additional costs for monitoring and oversight related to the quality standards benchmarks, which are addressed separately in those sections of the CPQ&R. The $250 per slot is equivalent to a state administrative budget of $1M to oversee a preschool program of 4,000 slots. If you have an existing preschool program, then you can derive current baseline cost per slot by taking your total budget for state-level administration, subtracting any amounts you intend to account for under the quality standards of the CPQ&R, and dividing by your current enrollment.

26. How do I adjust cost for inflation?

> The primary inflation assumption is found in Table B.2.c.1. If you do not want to assume inflation in your unit costs over time, then enter 0% in this table (Row 444). You also have the option to separately exclude any inflation assumptions from your funding projections. In Table B.2.a.2, Row 92, you can elect to include or not include inflation in future funding estimates; this can be useful if you wanted to show the effect of increasing costs without a corresponding increase in funding over time.

Funding Streams

27. Why don't I see default funding estimates after I enter slot counts?

> The funding sources listed in the default CPQ&R are illustrative of several types of federal and state funding applied to early learning but are not intended to immediately

calculate funding based on your slot plan.

For that reason, the values in the assumptions column, "% of Eligible Funding Units that are Funded," are set to zero (0%). You must enter a non-zero value in this column to result in a positive funding stream: you can assume 100% so that all eligible funding units are funded, or less than 100% if, due to budget constraints, only a portion of eligible funding units can be funded.

28. Do I need to know all my available funding streams?

Not necessarily. The CPQ&R will allow you to identify the true cost of operating a high-quality program. Funding information is not needed to generate cost estimates, but rather enables the user to understand the structure, needs, and potential sources of funding.

29. What happens when I set FPL Eligibility Thresholds for funding restrictions?

FPL is linked to revenue calculations. These are separate FPL assumptions in Row 51-55. The CPQ&R applies these assumptions to the annual slot plan to segment slots into FPL "buckets"; the buckets are then used to identify the number of total slots under an FPL eligibility restriction for a particular funding stream (identified under Child Eligibility Restriction in Rows 77-90).

Quality Benchmarks

30. How are number of classes, classrooms and facilities calculated?

The Annual Slot Count is divided by the average class size and efficiency as set by the user. This results in the number of classes. The number of classrooms is calculated by the number of classes divided by 1 for a full-day setting or divided by 2 for half-day setting. Efficiency is the percentage of children consistently enrolled through the school year . For example: a class size set at 20 with an efficiency of 85% means the class size throughout the school year is averaged at 17 students. The Annual Number of Facilities is calculated by taking the number of classrooms and dividing it by the number of PreK classrooms per facility as set by the user.

Figure 1 illustrates how the CPQ&R derives the required number of classes, classrooms, and facilities (sites) from an annual slot plan.
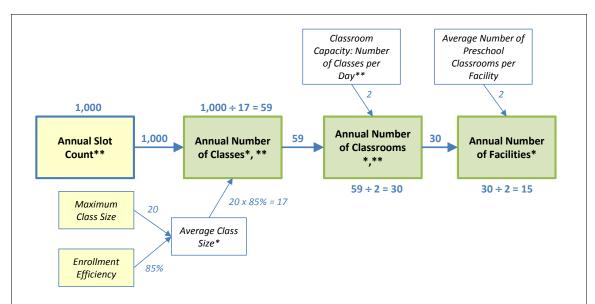
Figure 1. A conceptual diagram of the CPQ&R's derivation of class, classroom and facility counts from an annual slot plan, with an illustration showing 1,000 Part Day slots predicting a volume of 30 classrooms and 15 facilities. Yellow boxes denote user input assumptions, white boxes denote intermediate calculations, and green boxes denote CPQ&R output. A single asterisk (*) indicates formulas rounded up to the nearest whole number; the model addresses the impact of marginal cost by not allowing for fractional classes, classrooms, facilities, or teaching staff headcount. A double asterisk (**) indicates operations that performed separately within the CPQ&R by class duration, e.g., Part Day versus Full or Extended Day.

31. Under Professional Learning & Supports--How are substitute wages calculated?

Substitute wages are calculated by multiplying the hourly wage for substitutes by the number of hours of substitute teaching required. Substitutes are employed when teaching staff is on Paid Leave as well as when they are required to fill in for teaching staff attending training.

Creating Scenarios

32. How do I know I copied and pasted a new scenario successfully?

Copying and pasting a scenario is a manual method best used if you have disabled the use of Excel macros on your version of the CPQ&R. For more information, please refer to the document within the User Guide on "Adding Scenarios". A much easier way to add scenarios is to use the "Add a Scenario" button located on the HOME Page.

33. How do I sum the scenarios comprising a single system within the CPQ&R?

The simplest and cleanest way is to use the Blank Worksheet to perform the summation calculations. You can copy and paste table formats from other worksheets (such as

Worksheet A or B), delete any data that was pasted, and then enter new formulas in the cells that sum the cells you want in the newly created table.

34. How do I model costs at the District Level?

You can include such costs in the state-level or provider-level assumptions (e.g., in the provider-level staffing model), and then subtract them out and report them as district-level expenses. You can use the Blank Worksheet to perform these calculations. Alternatively, you could add a second scenario to model only district level expenses; leaving other expenses in the second scenario blank.