

## CPQ&R User Guide: Adding Scenarios

You can create an unlimited number of **Scenarios** within the CPQ&R if you want to compare two or more preschool program models, describe a more complex preschool program as a sum of multiple scenarios, or employ some combination of the two. You can name your scenarios in Row 3 of Worksheet B. These names are then shown at the top of each of the other worksheets of the CPQ&R.

The CPQ&R is designed to easily allow you to add and review multiple scenarios side-by-side. Cell references are in most cases not absolute (i.e., the "\$" indicating an absolute reference is removed from cell formulas). In addition, a single scenario is arranged vertically and occupies only 13 columns. Finally, you can collapse or expand the visibility of columns, to facilitate comparisons of multiple scenarios by line item, by clicking the 🗖 or 🛨 boxes located above Row 1 in each worksheet.

There are two methods for adding scenarios. The first is a manual process, which does not require the use of Excel macros. You may use this method if you prefer to use the CPQ&R without enabling macros (your version of Excel may ask you this question upon opening the CPQ&R). If you disable macros in the CPQ&R, then all buttons on the HOME Page will stop working, including those provided to help navigate Worksheet B (but you can still navigate through this Worksheet manually).

The second method is to use the **Add a Scenario** button located on the HOME Page. This method is much simpler and automatically performs all operations necessary for adding a scenario. It places

the new scenario immediately to the right of the default scenario, or else to the right of the last scenario you created, and copies the contents of that scenario, thus preserving any information you have entered and reducing the need for you to re-enter data. You can press the **Add a Scenario** button as many times as desired to create an unlimited number of side-by-side scenarios.

The process for manually adding a second scenario involves a series of simple steps that must be completed in the following order:

You can add a scenario manually or by pressing the button to **Add a Scenario** on the HOME Page.

Add a Scenario

Pressing this button will automatically add another scenario to the right of the default scenario, or to the right of the last scenario you created. If you disable macros on your version of the CPQ&R, then you will want to use the manual method instead.

NOTE: if you disable macros, then all buttons on the HOME Page will stop working, including those provided to help navigate Worksheet B.

- 1. Highlight Columns D-P in the Implementation Plan in Worksheet B,
- 2. Copy these Columns and paste them in Columns Q-AC.
- 3. Repeat these Steps 1 & 2 in the following worksheets in the order shown below:
  - a. Worksheet D (this should always follow the steps for Worksheet B),
  - b. Worksheet E,
  - c. Worksheet F,
  - d. Worksheet A.

When performed correctly, the new set of Annual Schedule Tables in Worksheet D is linked to the corresponding new columns in the Implementation Plan in Worksheet B. This information then feeds the corresponding new scenarios copied and pasted in Worksheets E & F. The modeling output for the new scenario is summarized in Worksheet A. You do not need to perform any copy-and-paste steps on the HOME Page or in Worksheet C (State Data and Research).

The manual process described above can be repeated as many times as desired to create an unlimited number of side-by-side scenarios. For example, a third scenario would occupy Columns AD-AP. You can also add more than one scenario simultaneously by pasting several adjacent scenarios in Worksheet B, then repeating this operation in Worksheet D, etc.

If the user deviates from this order described above, error values may result. The occurrence of error values is a sign that you should delete the new columns and start again. In addition, you should take care to ensure the same columns are copied and pasted in each worksheet; if you copy different column ranges, then the CPQ&R formulas may not reference the correct cells between worksheets. Finally, it is important that you copy the entire column range listed above (in the first scenario this is Columns D-P). Column D, for example, contains the logic required for the "Assumptions Complete?" feature in Worksheet A and the green/red indicators on the HOME Page.

Before copying additional scenarios to the right, it is recommended that users first complete their review and editing of input assumptions in the first scenario. This lessens the need to manually re-enter assumptions in each scenario that is added.

The CPQ&R employs "grouped" columns and rows to facilitate viewing and navigation within the Excel worksheets. After creating additional scenarios, the you can hide columns so that only the "Total" columns are showing. This can help your to easily compare a large number of scenarios side by side. *Grouping* is an Excel utility that allows the user to hide rows or columns by clicking on the  $\Box$  boxes shown above certain columns or to the left of certain rows on a worksheet. Upon clicking this box, the symbol will change to  $\Box$  and the grouped columns or rows will be hidden. Clicking the symbol again will unhide the rows or columns.

*Creating Multiple-Scenario Systems.* The term **System** applies to situations wherein the user wants to vary assumptions between subsets of their overall preschool slot plan in a manner that is not accommodated by the structure of a single scenario. Essentially, a System is a combination of two or more Scenarios. For example, you may want to model some of your preschool slots as rural and some as urban, and use different unit cost assumptions for each. Row 4 of Worksheet B provides space for you to enter a common system name for each of these two scenarios; the sum of these two scenarios would represent the total volumes and costs within your preschool program.

A single system can contain any number of scenarios. Furthermore, you can model two or more systems side-by-side, each comprised of multiple scenarios. This design consideration gives the CPQ&R a high degree of flexibility in meeting the diverse needs among state preschool programs.

If you create a system comprised of multiple scenarios, then there are a few tables within the Implementation Plan (Worksheet B) to consider so that you avoid double-counting:

- Table B.2.a.2 (Available Funding Streams), if you are using lump sum funding (i.e., "Statewide"),
- Table B.2.b.6 (Professional Learning and Support), under "Other State-Level Implementation Supports for Professional Learning,"
- Table B.2.b.7 (Early Learning & Development Standards), under "Initial ELDS Development" and "Technical Assistance,"
- Table B.2.b.8 (Continuous Quality Improvement System), under "Upfront Development Costs," "Assessment Tools..." and "Technical Assistance,"
- Table B.2.b.9 (Curriculum), under "Upfront Development Costs" and "Technical Assistance,"
- Table B.2.c.4 (Additional System Supports),
- Table B.2.c.5 (External Technical Assistance), if you are entering dollar amounts by implementation year,
- Table B.2.c.6 (Program Evaluation), if you are entering dollar amounts by implementation year.

In each of these tables, you are asked to enter an absolute dollar amount by implementation year. You could enter the total dollars for the system in the first scenario and leave the corresponding tables in the remaining scenarios blank. Alternatively, you could pro-rate the dollars across the different scenarios in a manner that sums to the correct total for the system. In either case, you should review the input assumptions when creating a multiple-scenario system to ensure there is no double-counting of costs or funding.

The CPQ&R does not sum scenarios for multiple-scenario systems. You must complete this operation manually, but it is not difficult. The blank worksheet included at the end of the CPQ&R provides space for you to perform such calculations without having to alter the other worksheets. Although all of Worksheets A-F are unprotected (and can be edited in any way), the CPQ&R workbook itself is protected so that additional worksheets cannot be inserted or deleted. This protection was necessary for the maintenance of the Cover Sheet, which includes information about CEELO and NIEER and its partners, and the HOME Page, which requires macros for its operation.