Cost of Preschool Quality & Revenue – User Guide

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There are five categories of data in which the user can alter inputs:

1. Slots
2. Funding
3. Quality Standards
4. State-Level Infrastructure and Costs
5. Provider-Level Infrastructure and Costs

Your first step is to select your state from the drop-down menu in Row 5 of Worksheet B. The CPQ&R is pre-loaded with demographic data by state from national sources. These research-based default assumptions help you to immediately begin to see costs upon entering a slot count—for one year or over several years.

It is also important for you to be aware of the following key to cell shading in the CPQ&R:

- Yellow-shaded cells indicate where you can input or alter data.
- Green-shaded cells identify summary costs and key metrics.
  These cells contain formulas that should not, in most cases, be modified by the user.
- All other white-shaded cells, and in particular any white-shaded cells containing formulas, should only be modified if the user possesses a thorough understanding of the implications of such modifications to other cells within the model. However, the CPQ&R was designed to accommodate customization by states and such changes are anticipated by more experienced users.

The following sections of this User Guide describe how to enter annual slot counts as well as other variables including quality indicators and infrastructure level costs at both the state and provider level. To enter an annual slot count, you may begin with the HOME Page of the CPQ&R, which provides the most intuitive way to navigate the calculator.

A depiction of the HOME Page is show below, formatted around the five categories of data:
Each of the blue boxes under a data category is an actionable button, which, when pressed, takes the user to the selected area of the CPQ&R input assumptions in Worksheet B. The green/red sidebar of each button tells the user whether or not the input assumptions appear incomplete or illogical; in some cases the assumptions may be correct and complete, but these are indicators serve to remind you of areas of the CPQ&R where a review is warranted.

Pressing the “Annual Slots” button will take you directly to Table B.2.a.1 of Worksheet B.

On the HOME Page, you will also see 10 buttons under the Quality Standards category corresponding to the 10 NIEER quality benchmarks. The benchmarks section is customizable so that a user can choose whether to use any one of these quality standards. For example, if you were to
press the “Screening /Referral and Support Svcs” button, then you are taken to Table B.2.b.10 of Worksheet B, the area of the model where the you can alter assumptions for screening costs and the percentage of slots “participating” in providing services.

The cells highlighted in yellow in the figure above indicate variables for which the user can alter data. You will note there are currently no negative numbers entered in the yellow cells and the percentage of slots participating is neither less than 0% (negative) nor in excess of 100%; therefore, this area of the model does not contain any illogical input assumptions and the green bar next to the button for “Screening/Referral and Support Svcs” on the HOME Page states “TRUE.”

After completing each section of the model, the user can return to the HOME Page and choose other areas of the CPQ&R in which to alter default assumptions. A description of each of these assumptions is presented below, grouped by data category as presented on the HOME Page.

**Advanced Users:** Rows and Columns in Worksheet B can be expanded or hidden by clicking the ▶️ or ▶️ boxes above Row 1 and to the left of Column 1. This makes it easier for you to show/hide the detail in calculations and make comparisons between scenarios.

With the exception of a small number of drop-down menus, there are no protected cells or formulas in the CPQ&R; therefore, take care when changing formulas without first understanding their purpose. It is good practice to save an original copy of the model, populated with your assumptions, prior to changing any formulas.
Annual Slots

On the HOME Page, there is only one button under the Slots data category. Pressing this button takes the user to Table B.2.a.1 of Worksheet B in the CPQ&R: the Annual Preschool Slot Plan. You will only be entering modeling data in Worksheet B, and this is the area of the model where you enter data regarding enrollment.

- **Step 1.** Name the scenario and system, and select your state from the drop-down menu, in Rows 3-5 of Worksheet B (Implementation Plan).
- **Step 2.** Scroll down through Table B.2.a.1, the Annual Preschool Slot Plan, and in the yellow-shaded cells, enter a number of child slots, by year, by delivery model (Child Care Centers, Public Pre-K, and Head Start), and by dosage (Part Day, Full Day, and Extended Day).

Because the CPQ&R is preloaded with default assumptions, you will see results in green-shaded cells in Table B.1 (Model Outputs and Key Performance Metrics) at the top of Worksheet B immediately upon entering data for Step 2, above.

The annual slot plan can be easily updated. Therefore, if you are uncertain about the exact volumes to apply in future years, then choose any slot volume and observe the effect of changing subsequent default inputs. You can then finalize the slot counts at a later date after reviewing and editing the other input assumptions in Worksheet B.

**The Alterable Variables in the Slots Section**

**Cumulative Number of 3- and 4-Year Old Slots:** Annual enrollment for up to 10 years in Child Care centers, Public Pre-K centers, and Head Start centers. Enrollment data is entered by dosage—part day, full day, and/or extended day—and incremental annual growth is determined by the difference in cumulative enrollment from the prior year. Enrollment counts are not differentiated by age; if the user wishes to model 3- and 4-year-olds separately, or develop separate cost estimates for

**Dosage** is intended to reflect not only the number of days of classroom instruction but also the number of weeks teaching staff are employed in a calendar year. The CPQ&R asks you to include Holidays and In-Service Days (and other administrative days) to help explain the difference between these two amounts.
preschoolers and infants/toddlers, this can be done by creating separate scenarios for each age group and adjusting the input assumptions in each scenario accordingly.

**Table B.2.a.1: Annual Preschool Slot Plan**

<table>
<thead>
<tr>
<th>Cumulative Number of 3- and 4-year-old Slots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 0 (Pre-Existing Slots)</td>
</tr>
<tr>
<td>Year 1</td>
</tr>
<tr>
<td>Year 2</td>
</tr>
<tr>
<td>Year 3</td>
</tr>
<tr>
<td>Year 4</td>
</tr>
<tr>
<td>Year 5</td>
</tr>
<tr>
<td>Year 6</td>
</tr>
<tr>
<td>Year 7</td>
</tr>
<tr>
<td>Year 8</td>
</tr>
<tr>
<td>Year 9</td>
</tr>
<tr>
<td>Subtotal: Cumulative Slots by Delivery Model</td>
</tr>
</tbody>
</table>

Slot Targets for FPL/ELL/Special Needs/Rural (See Table B.2.a.2 for Slot Allocations Driving Funding Cals)

- Target % FPL Eligibility Threshold (See Table B.2.a.2 for Allocations)
  - TRUE 185%
- Target % of Slots for ELL (See Table B.2.a.2 for Allocations)
  - TRUE 5%
- Target % of Slots for Special Needs (See Table B.2.a.2 for Allocations)
  - TRUE 5%
- Target % of Slots for Rural Areas (See Table B.2.a.2 for Allocations)
  - TRUE 50%

**Dosage: Teaching Employment Weeks and In-Session Class Days per Year**

- Part Day Care
  - TRUE 32 160 10 150 32 weeks
- Full Day Care
  - TRUE 40 200 15 185
- Extended Day Care
  - TRUE 52 260 20 240
  - 40 weeks

**Table B.2.a.2: Model Outputs and Key Performance Metrics**

**Target FPL Eligibility Threshold (% FPL):** The targeted upper limit of Federal Poverty Level (FPL) for qualifying families to participate in the early learning program. Entering a target FPL eligibility threshold enables you to estimate the percentage of your state’s eligible child population that will be served by your slot plan, which is reported in Table B.1 (Model Outputs and Key Performance Metrics).

**Advanced Users:** This percentage utilizes combined population data for 3- and 4-year-olds found in Table C.1 of Worksheet C (Demographic Tables). If you intend to model other age groups or want to model 3-year-olds and 4-year-olds separately, and you want to preserve the calculation of this percentage, then you should update the source data in Table C.1 to fit with your desired populations.

**Target % of Slots for ELL:** The proportion of English Language Learner (ELL) slots within each year of the preschool slot plan targeted to children classified as English Language Learners.

**Target % of Slots for Special Needs:** The proportion of slots within each year of the preschool slot plan targeted to children classified as having special needs.

**Target % of Slots for Rural Areas:** The proportion of slots targeted within each year of the Preschool Slot Plan to children classified as living in rural areas.
**Advanced Users:** Although your unit cost assumptions in the CPQ&R should be consistent with your targets for FPL-Eligibility, ELL, Special Needs, and Rural Areas in Table B.2.a.1, these assumptions are not directly linked to any cost or funding calculations in the default version of the CPQ&R. The Funding Streams section of Worksheet B will ask you to separately establish more detailed allocation assumptions (note the distinction between ‘target’ and ‘allocation’ that will be used in calculating the available funding based on enrollment under your preschool slot plan. If you do not plan to use the CPQ&R to estimate funding, then you will not need to specify these allocations.

**Dosage (Part Day, Full Day, and Extended Day Care):** Expressed in two parts, first, the total number of weeks per year the teaching staff is employed to support and deliver care; second, the number of days within this period that classes are not offered, which can reflect administrative days, days for home visiting, holidays, etc. Separate assumptions are provided for programs of different durations, i.e., Part Day versus Full Day versus Extended Day care.

**Advanced Users:** Unless specified otherwise, an assumption in Worksheet B will apply to all dosages, delivery models, and implementation years. This is typically identified by the use of the word, “fixed.”

**Advanced Users:** The CPQ&R takes data on full-year employment wage estimates for teaching staff from the BLS and the National Head Start Association, based on 2,080 hours per year (8 hours per day, 5 days per week, for 52 weeks inclusive of vacation and holidays), and then pro-rates this annual amount based on the period of employment (in calendar weeks) specified under dosage by the user.

**Advanced Users:** The CPQ&R assumes two Part Day classes can be accommodated with a single classroom by offering separate morning and afternoon sessions, whereas a single classroom can accommodate only one Full Day or Extended Day class. Modeling classrooms accommodating more than two sessions per day is possible but would require minor changes to CPQ&R formulas in Worksheet D.
Advanced Users: The CPQ&R assumes teaching staff are working full-time within their employment period. As a result, the exact hourly duration of a class is less important than its program categorization—as Part Day, Full Day, or Extended Day—in generating staffing costs.¹ The default input assumptions identify these programs as 3-, 6-, and 10-hours in duration, respectively, but the CPQ&R can accommodate different durations so long as the user understands how other assumptions may be affected adjusts them accordingly.

Advanced Users: The CPQ&R is designed to accommodate up to three delivery models and three dosages per scenario, but users can repurpose any or all models and dosages to fit their particular situation, with the appropriate changes to the other default input assumptions within the model.

Funding Streams

On the HOME Page, there is only one button in the Funding category. Pressing this button on the Home tab takes the user to Table B.2.a.2 of Worksheet B: Available Funding Streams. This is the area of the model where you enter funding data. This section allows the user to compare estimated funding with expected costs, and is designed to accommodate the disparate nature of funding sources for early learning programs. You are not required to estimate funding to use the CPQ&R for cost estimation.

The Available Funding Streams component of the CPQ&R is organized into four sections:

1. Expanded Child Eligibility Assumptions for Funding Restrictions. This section contains a table dedicated to establishing the proportion of children expected to meet various eligibility criteria by delivery model. In this section, you can define income eligibility thresholds and

¹ A small change in the class duration, e.g. 2.5 hours per day instead of 3, is not material to the model unless it results in a change in user input assumptions for either the number of classes that can be taught within a single classroom per day or the number of teaching staff required to support each class. Extended Day care can present situations wherein the class duration exceeds normal working hours and additional staff must be rotated into the class to relieve the daytime staff.
specify the percentage of slots by delivery model that fall within these thresholds. You can also specify expectations for ELL, special needs, and urban versus rural splits by delivery model.

2. **Federal, State, and Local Funding with Associated Restrictions.** This section allows you to list all sources of funding and identify the amount, timeframe, and restrictions associated with said funding. You can specify the name of a funding source, the funding unit (per child, per classroom, per site, or statewide), the amount of funding per unit, sources of matching funds, years of funding, child eligibility and delivery model restrictions, pass-through share, and the percent of eligible funding units that are actually funded (for cases where budget limitations place a cap on the total funding available).

3. **Available Funding by Source by Implementation Year.** This section restates the assumptions from the previous section in an annual schedule of funding amounts by source and by year. There are no user entries required here, but you can review this section to confirm that the funding patterns are consistent with your expectations. If patterns do not meet expectations, then you should consider reviewing the assumptions entered in the previous two sections.

4. **Available Funding Applicable by Delivery Model by Implementation Year.** The Available Funding Streams table summarizes the results of the previous three sections and identifies the total annual funding available to providers by delivery model, followed by the total funding available for state infrastructure and support activities. It then shows the total estimated cost to providers by delivery model, and separately to the state, and indicates whether there is a projected surplus or deficit in each case.

**The Alterable Variables in the Funding Streams Section**

**FPL Eligibility Thresholds and % of Slots by Delivery Model:** This area allows the user to define up to four Federal Poverty Limit (FPL) Eligibility thresholds and then estimate the split of child populations along these specified thresholds by delivery model. The sum of these splits and the additional splits for ELL and Special Needs assumptions should sum to 100% of the children in each case. At the bottom of **Cumulative Eligibility Table**, the CPQ&R identifies a number of common FPL thresholds: ≤85% State Median Income (SMI), >185% FPL, ≤100% FPL, ≤130% FPL, ≤185% FPL, and ≤200% FPL. Unlike the user-defined thresholds at the top of this section, the common thresholds do not change; when you choose your four user-defined thresholds and input them in ascending order, the CPQ&R will linearly interpolate from these values as necessary to arrive at estimates for the common thresholds. This design consideration provides a great deal of flexibility in accommodating the disparate funding stream restrictions applicable in support of your annual preschool slot plan. For simplicity, the default input assumptions, the four FPL Eligibility Thresholds, are listed with the same values as the common thresholds (but as mentioned above these are designed to be changed by the user).
Federal, State, and Local Funding with Associated Restrictions: The list of funding streams applicable to your annual preschool slot plan. This table is prepopulated with a number of typical funding streams for illustrative purposes, but you can amend this list to suit your purposes and edit or delete the contents of the yellow-shaded cells so that only the funding streams you seek to include are listed. The CPQ&R has compiled several state-level funding tables by funding source, contained in Tables C.8-C.17 of Worksheet C, that can assist you in preparing your list.
**Funding Unit:** The volume driver for funding calculations. If you select Statewide, then the funding is treated as a lump sum and will not change with program size. If you select per Child, per Classroom, or per Site, then the available funding will be calculated based on those volumes in your annual preschool slot plan. You can also model more complex funding formulas. For example, you can model a funding stream that has both a fixed (lump sum) and variable component using two rows: the first row would have Statewide as its Funding Unit, representing the fixed component; the second row would have per Child, per Classroom, or per Site as its Funding Unit to account for the variable component.

**Annual Funding per Unit Volume:** The amount to be multiplied by the volume of Funding Units to estimate total annual funding before restrictions. If you select Statewide as your Funding Unit, then the Annual Funding per Unit Volume is the same as the total annual funding. If the Annual Funding per Unit Volume is to be the form of Matching Funds, then you can employ a formula to establish the correct proportional relationship to another row in the funding table. An example of this is shown in the default list of funding sources, under “CCDF Matching Funds.”

**Matching Funds (to):** A drop-down menu allowing the user to select another row—by name—to which to link a matching fund. It is used to calculate the value in the column, % Match.

**Beginning/Ending Year:** When the funding defined on each row begins and ends. Such timing is an important and common issue in projecting future a funding deficit or surplus. More complex timing of funding streams can be modeled using multiple rows. For example, if you anticipate changes in funding rules over multiple periods, then you can specify a unique Beginning and Ending Year for each row, with each row representing a particular funding level.

**% Pass-Through to Providers:** The percentage of funding that is available to providers, with the remainder applied to state-level infrastructure and support costs.

**Child Eligibility Restriction/Delivery Model Restriction:** Drop-down menus linked to the thresholds—including both user-defined thresholds and the common thresholds—defined in the Cumulative Eligibility Table. If no Delivery Model Restriction is chosen, then a selected Child Eligibility Restriction will apply to all delivery models. Conversely, if a Delivery Model Restriction is chosen but not a Child Eligibility Restriction, then the funding formula will apply to apply to all children attending that delivery model regardless of eligibility. If neither is selected, then the funding formula applies to all children in the annual preschool slot plan. More complex situations can be accommodated using multiple rows to model a funding stream. For example, if you wanted funding to apply to two delivery models, but not the third, then you can use two rows and specify a single Delivery Model Restriction for each row.
% of Eligible Funding Units that are Funded: The funding rate applied to the funding formula in cases where less than 100% of the funding can be distributed, typically because of budget constraints existing at the source of funding. If you expect there to be no budget constraints on funding, then enter 100% in this column for your funding streams. You can also model situations where the funding rate is expected to vary by Implementation Year by using multiple rows. The default values of this column are 0% so that funding amounts are not automatically populated in the CPQ&R, based on the illustrative list of funding streams, upon entering a slot count in Table B.2.a.1: the Annual Preschool Slot Plan.

Apply Annual Inflation to Funding Projections: Select yes or no to apply the selected inflation rate to future funding levels.

The CPQ&R does not present funding estimates immediately upon entering a preschool slot count because the default values in % of Eligible Funding Units that are Funded are set to zero.

When you press a button on the HOME Page for a modeling section of the CPQ&R, you are taken to Worksheet B and only the selected area of the model is shown. You can reveal all remaining sections of Worksheet B by pressing the button to Unhide all Sections on the HOME Page.
There are 10 buttons in the Quality Standards category. Pressing any one of these buttons on the HOME Page takes the user to the appropriate sub-table under Table B.2.b: NIEER Preschool Quality Standards and Benchmarks. This section is positioned first—after the slot plan and available funding tables but before the state-level and provider-level cost tables—to promote the use of high quality standards in the estimation of costs. Users can adjust the default inputs, which reflect the NIEER Quality Standards Benchmarks, to align with the quality standards in their own state.

**Maximum Class Size.** This table establishes the cumulative number of classes required based on the preschool slot plan, the maximum allowable class size, and an estimated enrollment efficiency factor. The number of classes required is calculated separately by dosage and delivery model. The NIEER Standard for maximum class size is 20 children (with a staff-child ratio of 1:10). If the user assumes that only 85% of available class slots are filled, on average, then the expected class size is 17 (average class size is rounded up to the nearest whole number).
The Alterable Variables in the Maximum Class Size Section

**Maximum Number of Preschool Children per Class:** An upper limit to the number of children allowed per class, equally applied to all delivery models. This upper limit is applied to all years unless the user selects “Yes” from the drop-down menu for the assumption stating, “Enter Separate Maximum Class Size Assumptions by Year Instead?”

<table>
<thead>
<tr>
<th>Maximum Number of Preschool Children per Class</th>
<th>By Implementation Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUE</td>
<td>Fixed</td>
</tr>
<tr>
<td>Maximum Class Size by Implementation Year</td>
<td>TRUE</td>
</tr>
<tr>
<td>Expected Enrollment Efficiency</td>
<td>TRUE</td>
</tr>
<tr>
<td>Subtotal: Average Class Size</td>
<td></td>
</tr>
<tr>
<td>Subtotal: Number of Preschool Classes</td>
<td></td>
</tr>
</tbody>
</table>

**Maximum Class Size by Implementation Year (IF not Fixed, above):** The upper limit to the number of children allowed per class, specified by implementation year, if the user selects “Yes” from the drop-down menu for the assumption stating, “Enter Separate Maximum Class Size Assumptions by Year Instead?”

**Expected Enrollment Efficiency:** A classroom capacity use factor applied to the Maximum Number of Preschool Children per Class to estimate an expected average class size net of vacancies. Vacancies can arise from turnover resulting from children entering and leaving a program over the course of a calendar year, children “aging in and out” (e.g. a toddler moving into a preschool classroom upon age 3), and other challenges preventing a provider from filling 100% of available slots 100% of the time.

**Staff-Child Ratio.** After determining the number of classes that will be required, the staff-child ratio assumptions establish the number of teachers and assistant teachers that will be required—as well as the number of classrooms that will be required (because a Part Day classroom can accommodate more than one class per day). The NIEER Quality Standard Benchmark for staff-child ratio is one classroom adult per 10 (or fewer) children. Users can further establish whether the classroom teaching staff is comprised entirely of lead teachers, assistant teachers, or a mix of lead teachers and assistant teachers. In addition, users can separately specify how many classes a lead teacher and an assistant teacher can each accommodate per day. Finally, the user can specify the average number of preschool classrooms per facility to establish the volume of preschool facilities (sites) that will be required to meet the annual slot plan.

---

**Table B.2.b: NIEER Preschool Quality Standards and Benchmarks**

<table>
<thead>
<tr>
<th>Maximum Class Size (NIEER Benchmark: 20 Children per Class or Lower)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Number of Preschool Children per Class</td>
</tr>
<tr>
<td>Enter Separate Maximum Class Size Assumptions by Year Instead?</td>
</tr>
<tr>
<td>By Implementation Year</td>
</tr>
<tr>
<td>Year 0</td>
</tr>
<tr>
<td>TRUE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expected Enrollment Efficiency (Slot Vacancy Rate Resulting from Child Turnover, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>By Implementation Year</td>
</tr>
<tr>
<td>Year 0</td>
</tr>
<tr>
<td>TRUE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subtotal: Average Class Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative Number of Part Day Classes Required</td>
</tr>
<tr>
<td>Cumulative Number of Full Day Classes Required</td>
</tr>
<tr>
<td>Cumulative Number of Extended Day Classes Required</td>
</tr>
<tr>
<td>Subtotal: Number of Preschool Classes Required to Service Slot Plan</td>
</tr>
</tbody>
</table>

---

14
The Alterable Variables in the Staff-Child Ratio Section

Maximum Number of Children per Classroom Adult: The upper limit to the number of children a single classroom adult can supervise, if the user selects “No” from the drop-down menu for the assumption stating, “Enter Separate Staff-Child Ratio Assumptions by Year Instead?” Each time a multiple of this limit is exceeded, another classroom adult is required. The total number of classroom adults required per class is rounded up to the nearest whole number.

Maximum Number of Children per Classroom Adult by Implementation Year (IF not Fixed, above): The upper limit to the number of children a single classroom adult can supervise, specified by implementation year, if the user selects “Yes” from the drop-down menu for the assumption stating, “Enter Separate Maximum Class Size Assumptions by Year Instead?”

Maximum Number of Lead Teachers per Class: The upper limit placed on the number of Lead Teachers per Class. For example, if the staff-child ratio assumptions result in two classroom adults per class and the user specifies a Maximum Number of Lead Teachers per Class of two (2.0), then both classroom adults will be considered Lead Teachers and subject to the salary and qualifications assumptions specific to that position. If the user instead specifies zero (0) in this example, then both classroom adults would be considered Assistant Teachers in the CPQ&R.

Table B.2.b: NIEER Preschool Quality Standards and Benchmarks

<table>
<thead>
<tr>
<th>2. Staff-Child Ratio (NIEER Benchmark: One Classroom Adult per 10 Children or Better)</th>
<th>TRUE</th>
<th>Enter Separate Staff-Child Ratio Assumptions by Year Instead?</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Number of Children per Classroom Adult</td>
<td>10</td>
<td>TRUE</td>
<td>10 children</td>
<td></td>
</tr>
<tr>
<td>Maximum Number of Children per Classroom Adult by Implementation Year (IF not Fixed, above)</td>
<td>YEAR 0</td>
<td>TRUE</td>
<td>YEAR 1</td>
<td>TRUE</td>
</tr>
<tr>
<td>Maximum Number of Lead Teachers per Class</td>
<td>1</td>
<td>TRUE</td>
<td>1 lead teacher</td>
<td></td>
</tr>
<tr>
<td>Teaching Capacity: Number of Classes per Day Lead Teacher and Assistant Teacher</td>
<td>Lead Teachers</td>
<td>2</td>
<td>2.0 lead, 2.0 asst.</td>
<td></td>
</tr>
<tr>
<td>Part Day (Each Classroom Can Accommodate 2 Classes per Day)</td>
<td>Assistant Teachers</td>
<td>2</td>
<td>1.0 lead, 1.0 asst.</td>
<td></td>
</tr>
<tr>
<td>Full Day (Each Classroom Can Accommodate 1 Class per Day)</td>
<td>1</td>
<td>0.6 lead, 0.6 asst.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extended Day (Each Classroom Can Accommodate 1 Class per Day)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal: Number of Lead Teachers Required to Service Slot Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal: Number of Assistant Teachers Required to Service Slot Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Number of Preschool Classrooms per Child Care Center Facility</td>
<td>TRUE</td>
<td>2</td>
<td>2 classrooms</td>
<td></td>
</tr>
<tr>
<td>Average Number of Preschool Classrooms per Public PreK Facility</td>
<td>TRUE</td>
<td>2</td>
<td>2 classrooms</td>
<td></td>
</tr>
<tr>
<td>Average Number of Preschool Classrooms per Head Start Facility</td>
<td>TRUE</td>
<td>3</td>
<td>3 classrooms</td>
<td></td>
</tr>
<tr>
<td>Number of Child Care Centers Required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Public PreK Sites Required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Head Start Sites Required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal: Cumulative Number of Sites Required to Service Slot Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Teaching Capacity: Number of Classes per Day Lead Teacher and Assistant Teacher:** The number of Part Day, Full Day, or Extended Day classes a single Lead Teacher or Assistant Teacher are expected to teach per day. For example, if a Lead Teacher attends two Part Day classes per day, then the teaching capacity value is 2.0. But if the Lead Teacher teaches only a morning session of Part Day care and is expected to conduct home visiting in the afternoon, then the teaching capacity is 1.0.

**Average Number of Preschool Classrooms per Facility:** The average expected size of a preschool facility or site (the terms “site” and “facility” are equivalent in the CPQ&R), used for establishing the number of facilities required to service the annual slot plan.

**Lead Teacher Degree.** The NIEER Standard for lead teachers is a Bachelor of Arts (BA) degree, and this table allows you to establish the number of teachers by degree level and set targets for improvement. The table is arranged with assumptions for the current workforce at the beginning, followed by assumptions for new teachers hired to meet the preschool slot plan. Teachers leaving the workforce can have a significant impact on these numbers over time, and so churn (attrition) assumptions are included in this table.

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The default assumptions for **Teaching Capacity** for Part Day, Full Day, and Extended Day are based on a 3-hour, 6-hour, and 10-hour class duration, respectively. If administering a Full Day class requires a full working day (1.0) from a teaching staff member, and if a Part Day class requires only a half day (6 hours ÷ 3 hours = 2.0), then similarly, an Extended Day teaching capacity for a single staff member can be expressed as 0.6 (6 hours ÷ 10 hours = 0.6).
If there is already an active preschool program with an existing workforce of lead teachers, then you can establish how quickly these teachers are expected enroll in BA programs to meet a new quality standard for teacher degrees. You can make a separate set of assumptions for new teachers. For example, a greater proportion of new lead teachers may be hired with BA degrees after the establishment of a new quality standard for teacher degrees. By estimating the typical length of time required to earn a BA—based on whether a participating lead teacher has earned an AA degree at the time of enrollment—you are able to project future volumes of lead teachers by degree level by implementation year.

If you allow lead teacher salaries to vary by degree level (salary assumptions are found in Table B.2.d.1: Personnel Costs), then a change in teacher counts by degree level will impact these provider-level costs over time. Separately, if you assume an annual tuition support cost per participating teacher, then there will be a state-level cost associated with supporting the workforce to meet a new teacher degree standard.
Advanced Users: You can repurpose the Lead Teacher Degree table to reflect any three degree levels, as long as you also review the salary assumptions for these three levels in Table B.2.d.1, Personnel Costs, and correct as needed.

The Alterable Variables in the Lead Teacher Degree Section

% of Lead Teachers in Year 0 with a BA degree or higher (Head Start Data from Table C.6): For lead teachers serving an existing preschool program, the percentage that currently possess a BA degree or higher. Head Start data by state is obtained from the Office of Head Start at the U.S. Department of Health and Human Services; default assumptions for Child Care Centers and Public Pre-K reflect national Head Start statistics and should be reviewed and edited by the user as needed.

% of Lead Teachers in Year 0 with an AA degree but not a BA (Head Start Data from Table C.6): For lead teachers serving an existing preschool program, the percentage that currently possess an AA degree. Head Start data by state is obtained from the Office of Head Start at the U.S. Department of Health and Human Services; default assumptions for Child Care Centers and Public Pre-K reflect national Head Start statistics and should be reviewed and edited by the user as needed.

% of Lead Teachers without a BA in Year 0 Enrolling in a BA Program in Years 1+: For lead teachers serving an existing preschool program and currently without a BA degree or higher, the percentage that are expected to enroll to earn a BA. Head Start data by state is obtained from the Office of Head Start at the U.S. Department of Health and Human Services; default assumptions for Child Care Centers and Public Pre-K reflect national Head Start statistics and should be reviewed and edited by the user as needed.

% of Lead Teachers in Year 0 Enrolling in a BA Program in Years 1+, with an AA degree: For lead teachers serving an existing preschool program and enrolling in a BA degree program, the percentage that are expected to have already earned an AA degree. The remaining enrolled lead teachers are assumed to lack an AA degree. Head Start data by state is obtained from the Office of Head Start at the U.S. Department of Health and Human Services; default assumptions for Child Care Centers and Public Pre-K reflect national Head Start statistics and should be reviewed and edited by the user as needed.

Entry Schedule for Lead Teachers in Year 0 Enrolling in a BA Program: The percentage of lead teachers enrolling in a BA degree program expected to enroll in the first implementation year. For example, if all lead teachers without a BA degree in Year 0 enroll in Year 1, then you should input a value of 100%. However, if a large volume of lead teacher enrollment is expected and state budget constraints require enrollment be spread over the two years—with 50% of participating lead teachers enrolling in Year 1 and 50% in Year 2—then you should input a value of 50%. Similarly, a value of 33% would reflect three years to enroll all existing teachers, 25% would reflect four years, etc.

Churn: % of Existing Teachers Leaving the Workforce Each Year: The percentage of lead teachers leaving the workforce annually. It includes those leaving prior to completing their degree; the individual may have received tuition support, which contributes to state-level costs, but will
no longer factor into the state's goal to increasing the number of lead teachers with a BA degree. A new lead teacher hired as a replacement may or may not be hired at the same degree level; these statistics are determined by the assumptions for new lead teachers located below the assumption for churn.

**Advanced Users:** Churn increases the number of new lead teachers required each year and can decrease the number of lead teachers graduating from a state-funded BA program. The CPQ&R assumes that the population of teachers who leave the workforce is not skewed toward the most qualified or least qualified but rather mirrors the overall incoming distribution by degree level identified by the user.

**% of New Lead Teachers Hired in Years 1+ with BA or higher:** The percentage of new lead teachers hired with a BA degree or higher to replace existing teachers (churn) or to meet expansion plans. Default assumptions reflect national Head Start statistics for lead teacher degrees and should be reviewed and edited by the user as needed.

**% of New Lead Teachers Hired in Years 1+ with an AA degree but not a BA:** The percentage of new lead teachers hired with an AA degree to replace existing teachers (churn) or to meet expansion plans. Default assumptions reflect national Head Start statistics for lead teacher degrees and should be reviewed and edited by the user as needed.

**% of New Lead Teachers without a BA Enrolling in a BA Program in Years 1+:** For new lead teachers hired without a BA degree to replace existing teachers (churn) or to meet expansion plans, the percentage that are expected to enroll to earn a BA. Default assumptions reflect national Head Start statistics for lead teacher degrees and should be reviewed and edited by the user as needed.

**% of New Lead Teachers Enrolling in a BA Program in Years 1+, Hired with an AA degree:** For new lead teachers hired without a BA degree and enrolling in a BA program, the percentage that are expected to have earned an AA degree prior to being hired. Default assumptions reflect national Head Start statistics for lead teacher degrees and should be reviewed and edited by the user as needed.

**Number of Years Required by Lead Teachers with an AA to earn a BA degree:** The span of time for which participating teachers already possessing a AA degree will receive tuition support, and the length of time before they are expected earn their BA degree and are eligible for a higher salary (if applicable). Partial year increments, such as 5.5 years, are allowed in the CPQ&R.

**Number of Years Required by Lead Teachers without an AA to earn a BA degree:** The span of time for which participating teachers without an AA degree will receive tuition support, and the length of time before they are expected earn their BA degree and are eligible for a higher salary (if applicable). Partial year increments, such as 2.5 years, are allowed in the CPQ&R.
**State-Level BA Program Tuition Support Provided per Lead Teacher per Year ($):** The BA tuition support cost per participating lead teacher, expressed on a per-year basis. The same level of annual tuition support may be applied to both lead teachers with an AA degree and lead teachers without an AA degree.

**Annual State-Level Cost per Participating Teacher to Administrate BA Tuition Support ($):** Additional state-level costs not distributed to participating lead teachers. Such costs should remind you of the need to consider resources for state oversight of a tuition support program. For example, your state may require proof of completing a class before issuing a tuition reimbursement to a lead teacher, and may maintain records of this as part of a quality assurance program.

**Assistant Teacher Degree.** The NIEER Quality Standard Benchmark for assistant teachers is a CDA degree or equivalent, and this table allows you to establish the number of assistant teachers by degree level and set targets for improvement. The table is arranged with assumptions for the current workforce at the beginning, followed by assumptions for new teachers hired to meet the preschool slot plan. Teachers leaving the workforce can have a significant impact on these numbers over time, and so churn (attrition) assumptions are included in this table.

If there is already an active preschool program with an existing workforce of assistant teachers, then you can establish how quickly these teachers are expected to enroll in a CDA program to meet a new quality standard for teacher degrees. You can make a separate set of assumptions for new teachers. For example, a greater proportion of new assistant teachers may be hired with a CDA after the establishment of a new quality standard for teacher degrees. By estimating the typical length of time required to earn a CDA, you are then able to project future volumes of assistant teachers by degree level by implementation year.

If you allow assistant teacher salaries to vary by degree level (salary assumptions are found in Table B.2.d.1: Personnel Costs), then a change in teacher counts by degree level will impact these provider-level costs over time. Separately, if you assume an annual tuition support cost per participating teacher, then there will be a state-level cost associated with supporting the workforce to meet a new teacher degree standard.

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**Advanced Users:** You can repurpose the Assistant Teacher Degree table to reflect any two degree levels, as long as you also review the salary assumptions for these three levels in Table B.2.d.1, Personnel Costs, and correct as needed.
The Alterable Variables in the Assistant Teacher Degree Section

% of Assistant Teachers in Year 0 with a CDA or Equivalent (Head Start Data from Table C.6): For assistant teachers serving an existing preschool program, the percentage that currently possess a CDA degree or equivalent. Head Start data by state is obtained from the Office of Head Start at the U.S. Department of Health and Human Services; default assumptions for Child Care Centers and Public Pre-K reflect national Head Start statistics and should be reviewed and edited by the user as needed.

% of Assistant Teachers without a CDA in Year 0 Enrolling in a CDA Program in Years 1+: For assistant teachers serving an existing preschool program and currently without a CDA degree or equivalent, the percentage that are expected to enroll to earn a CDA. Head Start data by state is obtained from the Office of Head Start at the U.S. Department of Health and Human Services; default assumptions for Child Care Centers and Public Pre-K reflect national Head Start statistics and should be reviewed and edited by the user as needed.

Entry Schedule for Assistant Teachers in Year 0 Enrolling in a CDA Program: The percentage of assistant teachers enrolling in a CDA program expected to enroll in the first implementation year. For example, if all assistant teachers without a CDA in Year 0 enroll in Year 1, then you should input a value of 100%. However, if a large volume of assistant teacher enrollment is expected and state budget constraints require
enrollment be spread over the two years—with 50% of participating assistant teachers enrolling in Year 1 and 50% in Year 2—then you should input a value of 50%. Similarly, a value of 33% would reflect three years to enroll all existing teachers, 25% would reflect four years, etc.

**Churn: % of Existing Assistant Teachers Leaving the Workforce Each Year:** The percentage of assistant teachers leaving the workforce annually. It includes those leaving prior to completing their CDA program; the individual may have received tuition support, which contributes to state-level costs, but will no longer factor into the state's goal to increasing the number of assistant teachers with a CDA. A new assistant teacher hired as a replacement may or may not be hired at the same degree level; these statistics are determined by the assumptions for new assistant teachers located below the assumption for churn.

**Advanced Users:** Churn increases the number of new assistant teachers required each year and can decrease the number of assistant teachers graduating from a state-funded CDA program. The CPQ&R assumes the population of teachers who leave the workforce is not skewed toward the most qualified or least qualified but rather mirrors the overall incoming distribution by degree identified by the user.

**% of New Assistant Teachers Hired in Years 1+ with a CDA or Equivalent:** The percentage of new assistant teachers hired with a CDA or equivalent to replace existing teachers (churn) or to meet expansion plans. Default assumptions reflect national Head Start statistics for assistant teacher degrees and should be reviewed and edited by the user as needed.

**% of New Assistant Teachers without a CDA or Equivalent Enrolling in a CDA Program in Years 1+:** For new assistant teachers hired without a CDA to replace existing teachers (churn) or to meet expansion plans, the percentage that are expected to enroll to earn a CDA. Default assumptions reflect national Head Start statistics for assistant teacher degrees and should be reviewed and edited by the user as needed.

**Number of Years Required by Assistant Teachers to earn a CDA:** The span of time for which participating teachers without a CDA will receive tuition support, and the length of time before they are expected earn their CDA and are eligible for a higher salary (if applicable). Partial year increments, such as 1.5 years, are allowed in the CPQ&R.

**State-Level CDA Program Tuition Support Provided per Assistant Teacher per Year ($):** The CDA tuition support cost per participating assistant teacher, expressed on a per-year basis.

**Annual State-Level Cost per Participating Assistant Teacher to Administate CDA Tuition Support ($):** Additional state-level costs not distributed to participating assistant teachers. Such costs should remind you of the need to consider resources for state oversight of a tuition support program. For example, your state may require proof of completing a class before issuing a tuition reimbursement to an assistant teacher, and may maintain records of this as part of a quality assurance program.
**Lead Teacher Specialized Training.** Early learning specialization is treated separately from a teacher degree because a lead teacher possessing specialized training in Early Childhood Education (ECE) or Child Development (CD) credential can possess an AA, BA, or other degree. The organization of this table is similar to organization of the preceding tables for Lead Teacher Degree and Assistant Teacher Degree, but it contains an additional assumption for a raise in lead teacher salary—regardless of degree level—associated with possessing an ECE/CD credential. The default for this raise in the CPQ&R is zero ($0), and any non-zero value will increase salaries shown in Table B.2.d.1 (Personnel Costs) by the specified amount.

**Table B.2.b: NIEER Preschool Quality Standards and Benchmarks**

<table>
<thead>
<tr>
<th>5. Lead Teacher Specialized Training (NIEER Benchmark: Specializing in Pre-K)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>By Delivery Model</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
<tr>
<td><strong>Child Care Centers</strong></td>
</tr>
<tr>
<td>TRUE</td>
</tr>
<tr>
<td>% of Lead Teachers in Year 0 with Specialized Training in ECE/CD (Head Start Data from Table C.6)</td>
</tr>
<tr>
<td>Subtotal: Number of Lead Teachers in Year 0 with Specialized Training in ECE/CD</td>
</tr>
<tr>
<td>% of Lead Teachers in Year 0 without Specialized Training in ECE/CD</td>
</tr>
<tr>
<td>Subtotal: Number of Lead Teachers in Year 0 Enrolling in a Specialized Training Program in Years 1+</td>
</tr>
</tbody>
</table>

**The Alterable Variables in the Lead Teacher Specialized Training Section**

- **% of Lead Teachers in Year 0 with Specialized Training in ECE/CD:** For lead teachers serving an existing preschool program, the percentage that currently possess specialized training. Head Start data by state is obtained from the Office of Head Start at the U.S. Department of Health and Human Services; default assumptions for Child Care Centers and Public Pre-K reflect national Head Start statistics and should be reviewed and edited by the user as needed.
% of Lead Teachers in Year 0 Enrolling in a Specialized Training Program in Years 1+: For lead teachers serving an existing preschool program and currently without specialized training in ECE/CD, the percentage that are expected to enroll in such training. Head Start data by state is obtained from the Office of Head Start at the U.S. Department of Health and Human Services; default assumptions for Child Care Centers and Public Pre-K reflect national Head Start statistics and should be reviewed and edited by the user as needed.

Entry Schedule for Lead Teachers in Year 0 Enrolling in Specialized Training: The percentage of lead teachers enrolling in a specialized training program expected to enroll in the first implementation year. For example, if all lead teachers without specialized training in ECE/CD in Year 0 enroll in Year 1, then you should input a value of 100%. However, if a large volume of lead teacher enrollment is expected and state budget constraints require enrollment be spread over the two years—with 50% of participating lead teachers enrolling in Year 1 and 50% in Year 2—then you should input a value of 50%. Similarly, a value of 33% would reflect three years to enroll all existing teachers, 25% would reflect four years, etc.

% of New Lead Teachers Hired in Years 1+ with Specialized Training in ECE/CD: The percentage of new lead teachers hired with specialized training in ECE/CD to replace existing teachers (churn) or to meet expansion plans. Default assumptions reflect national Head Start statistics for lead teacher degrees and should be reviewed and edited by the user as needed.

% of New Lead Teachers Hired in Years 1+ Enrolling in a Specialized Training Program: For new lead teachers hired without specialized training in ECE/CD to replace existing teachers (churn) or to meet expansion plans, the percentage that are expected to enroll in such training. Default assumptions reflect national Head Start statistics for lead teacher degrees and should be reviewed and edited by the user as needed.

Number of Years Required by Lead Teachers to Complete a Specialized Training Program in ECE/CD: The span of time for which participating teachers without specialized training will receive tuition support, and the length of time before they are expected to complete their specialized training and are eligible for a higher salary (if applicable). Partial year increments, such as 1.5 years, are allowed in the CPQ&R.

State-Level ECE Program Tuition Support Provided per Lead Teacher per Year ($): The specialized training tuition support cost per participating lead teacher, expressed on a per-year basis.

Provider-Level FTE Salary Increase for Lead Teachers with Specialized Training, including Taxes & Benefits ($): An annual salary increase in dollars ($) that is applied on top of any salary factors by degree level assumed in Table B.2.d.1 (Personnel Costs) to reflect higher compensation awarded to teachers possessing an ECE/CD credential. The default value for this salary increase in the CPQ&R is zero ($0).

Annual State-Level Cost per Participating Teacher to Administer Specialized Training Tuition Support ($): Additional state-level costs not distributed to participating lead teachers. Such costs should remind you of the need to consider resources for state oversight of a tuition support
program. For example, your state may require proof of completing a class before issuing a tuition reimbursement to a lead teacher, and may maintain records of this as part of a quality assurance program.

**Professional Learning and Support.** This table allows you to enter Professional Development (PD) assumptions for lead teachers and assistant teachers. The NIEER benchmark is 15 hours of general PD training for lead teachers and assistant teachers, individualized PD plans, and coaching.

Several of the NIEER Quality Standards Benchmarks include training and coaching support. The CPQ&R was designed to simplify the organization of these assumptions by consolidating them within the table for Professional Learning and Support. You will see separate entries for training and coaching assumptions for General PD (meeting the Professional Learning and Support benchmark), Early Learning and Development Standards (ELDS), Continuous Quality Improvement Systems (CQIS), and Curriculum. Although training and coaching assumptions for ELDS, CQIS, and Curriculum are entered by the user in this section, the resulting costs are separately attributed to each quality standard.

**The Alterable Variables in the Professional Learning and Support Section**

**Annual PD Training Hours per Lead Teacher:** The number of hours required per year from lead teachers. Separate assumptions are allowed for General PD training (meeting the benchmark for Professional Learning and Support), and Early Learning and Development Standards (ELDS) training, Continuous Quality Improvement System (CQIS) training, and Curriculum training.

**Annual PD Training Hours per Assistant Teacher:** The number of hours required per year from assistant teachers.

**One-Time Training? (Enter "No" if the Standard is for a Recurring Annual Training Requirement):** A drop-down menu indicating whether the training requirement is expected to recur annually or is a one-time training event. The timing of the training is Year 1 for existing lead teachers and assistant teachers, and the year of hiring for new lead teachers and assistant teachers.

**Average Training Fees per Teaching Staff Member per Hour:** The hourly fee associated with each form of training, incurred at the provider level.
Are Substitutes Required for Teaching Staff to Attend Training?: A drop-down menu indicating whether training is in-service and substitute teachers are needed backfill the necessary hours. Substitute teacher costs are incurred at the provider level.
Other Costs per Participating Teacher for State-Level Monitoring & Oversight of Training Program: Other costs incurred at the state level, associated with administration and oversight of each form of training, expressed on a per-teacher basis.

Annual Provider-Level Cost per Teaching Staff Member for Individualized PD Plans: Any costs expected to be incurred by the provider in support of developing individualized PD plans, expressed on a per-teacher basis.

Other Costs per Teacher for State-Level Monitoring & Oversight of Individualized PD Plan Program: Any costs expected to be incurred at the state level and associated with administration and oversight of individualized PD plans, expressed on a per-teacher basis.

Number of Coaches in Year 0 (Total Count of Coaches in each Category): If a coaching program currently exists as part of an existing preschool program, then the number of coaches currently employed in each category of coaching.

Full-Time Equivalent (FTE) Allocation (Average % Allocation of Each Coach to the Coaching Category): The percent of time each coach is allocated to coaching. 100% reflects a single full-time equivalent, or FTE. A value of 50% means that each individual coach spends half of their available time coaching, and it would take twice as many individuals to meet a coaching load as a single FTE. You can use this allocation to model coaches delivering more than one category of coaching; for example, you could enter 50% in General PD coaching and CQIS coaching if a single coach is expected to split their time evenly between each category.

Caseload: Number of Classrooms per Coach (1 FTE): The number of classrooms that would be assigned to a coach who is 100% allocated to that category of coaching. The caseload assumption is combined with the assumption for FTE allocation by coaching category to establish the number of coaches required to satisfy the annual preschool slot plan.

Coaches Salary, Benefits, Travel, and Overhead/Indirect Charges (1 FTE): The total expense associated with each coach, which is then applied to the number of coaches to estimate a total coaching cost before state-level monitoring & oversight of the coaching program.

Churn: % of Existing Coaches Leaving the Workforce Each Year: The percentage of coaches leaving the workforce annually. New coaches hired to replace departing coaches or to meet an expansion plan must be trained, and all new coaches are subject to one-time training costs.

One-Time Training Cost per Coach (Coaches Training): A one-time training cost applied to existing coaches and new coaches at the time they are hired, to develop their skills in providing quality coaching to lead teachers and assistant teachers.

Entry Schedule for Training of Existing Coaches in Year 0: The percentage of existing coaches expected to receive specialized training in the first implementation year. For example, if all coaches existing in Year 0 are expected to receive training in Year 1, then you should input a value of 100%. However, if a large volume of coaches training is expected and state budget constraints require enrollment be spread over the two
years—with 50% of existing coaches receiving training on new standards in Year 1 and 50% in Year 2—then you should input a value of 50%. Similarly, a value of 33% would reflect three years to train all existing coaches, 25% would reflect four years, etc.

**Other Costs per Coach for State-Level Monitoring & Oversight of Coaching Program ($):** Any costs expected to be incurred at the state level and associated with administration and oversight of a coaching program, expressed on a per-coach basis. For example, if a coaching program is comprised of field workers (i.e., the coaches themselves) and state-level supervisors, then the supervisors could be included as part of other costs—unless they have already been accounted for as part of the overhead identified under Coaches Salary, Benefits, Travel, and Overhead/Indirect Charges.

**All Training for Professional Learning and Support: Participation Rate Among Lead Teachers (%):** Lead teacher participation rate in all categories of training for professional learning and support. For simplicity, the CPQ&R applies that same participation rate assumption for General PD, ELDS, CQIS, and Curriculum Training. The actual number of lead teachers participating in each category of training is shown under the relevant quality standard.

**Advanced Users:** you can easily modify the formulas to disaggregate the participation rate assumptions for lead teachers and assistant teachers in General PD, ELDS, CQIS, and Curriculum training, and allow each category to have its own unique participation rate assumption, by altering the contents of Table D.21 is Worksheet D: Annual Schedule Tables.

**All Training for Professional Learning and Support: Participation Rate Among Assistant Teachers (%):** Assistant teacher participation rate in all categories of training for professional learning and support. For simplicity, the CPQ&R applies that same participation rate for General PD, ELDS, CQIS, and Curriculum training. The actual number of assistant teachers participating in each category of training is shown under the relevant quality standard.

**Individualized PD Plans: Participation Rate Among Lead Teachers (%):** Lead teacher participation rate in developing individualized professional development plans.

**Individualized PD Plans: Participation Rate Among Assistant Teachers (%):** Assistant teacher participation rate in developing individualized professional development plans.

**All Coaching for Professional Learning and Support Participation Among Classrooms (%):** Classroom participation rate in all categories of coaching for professional learning and support. For simplicity, the CPQ&R applies that same participation rate assumption for General PD, ELDS, CQIS, and Curriculum coaching. The actual number of classrooms participating in each category of coaching is shown under the relevant quality standard.
**Advanced Users**: You can easily modify the formulas to disaggregate the participation rate assumptions for classrooms in General PD, ELDS, CQIS, and Curriculum coaching, and allow each category to have its own unique participation rate assumption, by altering the contents of Table D.23 is Worksheet D: Annual Schedule Tables.

**Other State-Level Implementation Supports for Professional Learning ($)**: If there are other costs derived by the state associated with providing supports for professional learning, then enter it here.

**Advanced Users**: In the section of the table that includes Other State-Level Implementation Supports for Professional Learning, only the last row, “Subtotal: State-Level Implementation Supports for Professional Learning,” is used by other worksheets in the CPQ&R to perform calculations. Therefore, you can insert additional rows in this section of the table as you see fit, as long as the correct subtotal amount is still captured in the aforementioned subtotal row.

**Early Learning and Development Standards**. This table allows you to enter cost data related to the development of Early Learning and Development Standards (ELDS) and subsequent technical assistance. The NIEER benchmark calls for Early Learning and Development Standards that are developmentally appropriate and comprehensive, with state supports for implementation of curriculum aligned with K-3 standards through guidance, materials, professional development, and the use of formative assessment to inform teaching. The sum of initial development costs and technical assistance represents the implementation supports for an integrated ELDS.

In addition to development and technical assistance costs, this table presents the output from assumptions pertaining to training and coaching lead teachers and assistant teachers for ELDS entered under Professional Learning and Support.
## The Alterable Variables in the Early Learning and Development Standards Section

**Initial ELDS Development: Culturally Sensitive and Aligned with Child Assessments and I/T & K-3 Standards ($):** ELDS costs incurred by the state, entered by implementation year, associated with developing comprehensive standards that are aligned with state standards for infant/toddler, K-3, and/or college & career readiness, child assessments, and are culturally sensitive.

**Technical Assistance (TA) and Other Ongoing Implementation Supports for ELDS ($):** Technical assistance associated with the implementation of the ELDS, entered by implementation year, and any other implementation support costs incurred by the state.

### Advanced Users:

In the section of the table that includes Initial ELDS Development and Technical Assistance, only the last row, “Subtotal: Implementation Supports for Integrated ELDS,” is used by other worksheets in the CPQ&R to perform calculations. Therefore, you can insert additional rows in this section of the table as you see fit, as long as the correct subtotal amount is still captured in the aforementioned subtotal row.

### Continuous Quality Improvement System.

This table allows you to enter information on the frequency of classroom observations and the associated costs of a Continuous Quality Improvement System (CQIS). The NIEER benchmark is for teachers and administrators to regularly collect, report, and use data to make decisions at the classroom, local, and state levels. Also, a statewide program improvement plan is developed, reviewed, and revised on a scheduled basis.

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### Table B.2.b: NIEER Preschool Quality Standards and Benchmarks

#### 7. Early Learning & Development Standards (NIEER Benchmark: Aligned, Supported, Culturally Sensitive)

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<th>Year 4</th>
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<th>Year 7</th>
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<th>Year 9</th>
<th>Year 10</th>
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</thead>
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<td>Number of Assistant Teachers Participating in ELDS Training (See NIEER Standard #6 for Participation Rates)</td>
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<td>Number of Classrooms Participating in Coaching for ELDS (See NIEER Standard #6 for Participation Rates)</td>
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</tr>
<tr>
<td>Subtotal: Annual State-Level Coaching Cost for ELDS (See NIEER Standard #6 for Unit Costs)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Initial ELDS Development: Culturally Sensitive and Aligned with Child Assessments and I/T &amp; K-3 Standards ($)</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
</tr>
<tr>
<td>Technical Assistance (TA) and Other Ongoing Implementation Supports for ELDS ($)</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
</tr>
<tr>
<td>Subtotal: Implementation Supports for Integrated ELDS</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
</tr>
<tr>
<td>Subtotal: State-Level Cost for Integrated ELDS ($)</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
</tr>
<tr>
<td>Integrated ELDS as a % of Total State-Level Infrastructure &amp; Supports (%)</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
<td>TRUE</td>
</tr>
</tbody>
</table>
In addition to classroom observation and state planning costs, this table presents the output from assumptions pertaining to training and coaching lead teachers and assistant teachers for CQIS entered under Professional Learning and Support. The output includes provider-level and state-level costs.

**The Alterable Variables in the Continuous Quality Improvement System Standards Section**

**Frequency in Years Between Classroom Observations for CQIS:** the number of years between classroom observations for CQIS. For example, if observations occur twice per year, then you would enter a value of 0.5 years, and if observations are annual, then you would enter a value of one year (1.0). Values greater than one year are allowed within the CPQ&R: a value of 2.0 years means that 50% of participating classrooms are evaluated each year, with the remaining 50% evaluated the following year. The CPQ&R assumes an even distribution of observations over such multi-year periods.

**Cost per Classroom for Classroom Observation and Data Collection ($):** The cost to conduct observations and collect data. If these activities are completed by a member of the provider’s internal staff, then the cost could be much lower than if these activities were completed by an independent third party. Similarly, if the observations and data involve use of a rigorous program assessment tool (such as ERS/ECERS or CLASS),
then the cost will be higher than if a program assessment tool is not used. The default value for the cost per classroom in the CPQ&R reflects a situation wherein an independent third party observes the class and utilizes rigorous program assessment tools to issue a CQIS rating.

**Cost per Site for State-Level Administration of Classroom Observations for CQIS ($):** Any costs expected to be incurred at the state level and associated with administration and oversight of a program of classroom observations for CQIS, expressed on a per-site basis.

**Cumulative Percent of Sites Participating in Classroom Observations for CQIS (%):** The percentage of sites expected to participate in classroom observations for CQIS each year. This percentage is combined with the frequency of classroom observations to establish the number of observations expected annually under a preschool slot plan. For example, if 50% of classrooms are expected to participate in classroom observations and the frequency between observations is two years (2.0), then 25% of classrooms would be expected to complete classroom observations each year, with the remaining 25% completing observations the following year.

**Upfront Development Costs for the Continuous Quality Improvement System ($):** Initial costs incurred by the state, entered by implementation year, associated with developing a system using data to make decisions at the classroom, local, and state level.

**Cost for Assessment Tools, Assessor Training, and Ensuring CQIS Inter-Rating Reliability ($):** Initial and ongoing costs for the use of assessment tools, including the cost of the tools, training of assessors, and testing for reliably consistent assessments between assessors.

**Technical Assistance (TA) and Other Ongoing Implementation Supports for CQIS ($):** Ongoing cost, entered by implementation year, for technical assistance and other any other supports—excluding upfront development costs and the cost for assessment tools, assessor training, and ensuring inter-rating reliability—related to the implementation of a Continuous Quality Improvement System.

**Advanced Users:** In the section of the table that includes Upfront Development Costs and Technical Assistance, only the last row, “Subtotal: Implementation Supports for CQIS,” is used by other worksheets in the CPQ&R to perform calculations. Therefore, you can insert additional rows in this section of the table as you see fit, as long as the correct subtotal amount is still captured in the aforementioned subtotal row.

**Curriculum.** This table allows you to enter unit information related to curriculum development and support. The NIEER benchmark calls for support to be in place for curriculum selection and implementation. States are not required to use specific curriculum models but rather must provide guidance for, or have a process for, approving the use of curricula as well as provide support for implementation.
In addition to curriculum selection and implementation costs, this table presents the output from assumptions pertaining to training and coaching lead teachers and assistant teachers for Curriculum entered under Professional Learning and Support. The output includes provider-level and state-level costs.

### The Alterable Variables for the Curriculum Standards Section

**One-Time Cost per Participating Site for Curriculum Selection Supports**: A state level cost incurred as the result of a site participating in support for curriculum selection. The CPQ&R assumes this is a one-time cost for existing and new sites participating in such support.

**Cumulative Percent of Sites Participating in Curriculum Selection Supports (%)**: The percentage of sites, by implementation year, that have utilized curriculum selection support in the current year and in all past years. If all sites are expected to receive such support in the first implementation year, then you would enter a value of 100% in Year 1 and in all subsequent years of your annual slot plan. You can also model a...
program for curriculum selection supports that is growing over time, perhaps because caseload restrictions prevent state-level staff from administering the intended support to 100% of sites in one calendar year.

**One-Time Cost per Participating Classroom for Curriculum Materials**: A state level cost incurred as the result of a site receiving curriculum materials. The CPQ&R assumes this is a one-time cost for existing and new sites participating in such support.

**Cumulative Percent of Classrooms Participating in Curriculum Materials Support (%)**: The percentage of sites, by implementation year, that have received curriculum materials in the current year and in all past years. If all sites are expected to receive the materials in the first implementation year, then you would enter a value of 100% in Year 1 and in all subsequent years of your annual slot plan. You can also model a program for curriculum materials that is growing over time.

**Upfront Development Costs to Align Curriculum with other State Standards ($)**: Initial costs incurred by the state, entered by implementation year, associated with aligning selected curricula with other state standards.

**Technical Assistance (TA) and Other Ongoing Implementation Supports for Curriculum ($)**: Ongoing cost, entered by implementation year, for technical assistance and other supports related to implementation of a statewide curriculum program.

**Advanced Users**: In the section of the table including Upfront Development Costs and Technical Assistance, only the last row, “Subtotal: Implementation Supports for Curriculum,” is used by other worksheets in the CPQ&R to perform calculations. Therefore, you can insert additional rows in this section of the table as you see fit, as long as the correct subtotal amounts is still captured in the aforementioned subtotal row.

**Screening/Referral and Support Services.** This table allows you to specify the cost to the provider for offering screening and referral services per participating child, and the percentage of children expected to participate in these services. The NIEER benchmark is to offer vision, hearing, and health screening. Varying assumptions by delivery model allows the CPQ&R to accommodate situations wherein one delivery model provides more screening/referral and support services than another. For example, Head Start might offer more comprehensive screening and support services than Child Care Centers.
### The Alterable Variables in the Screening/Referral and Support Services Section

**Vision, Hearing, Health, and Other Support Service(s) Cost/Participating Child ($)**: The NIEER Benchmark is vision, hearing, health, and at least one support service. The cost per participating child for these services should not include any related staffing costs addressed in the provider-level staffing models. Furthermore, participation rates are addressed separately; the cost per participating child should reflect the incremental cost for a single child to receive these services (per year).

**% of Slots Participating**: The proportion of children served by the preschool slot plan, by delivery model, who will receive each of the screening/referral and support services.

**Advanced Users**: This table is formatted to also allow you to add to the number of services. Only the last row, “Subtotal: Weighted Avg Cost per Slot, Based on Participation Rates by Service,” is used by other worksheets in the CPQ&R to perform calculations. You can insert additional rows as you see fit, as long as the correct subtotal amount is still captured in the aforementioned subtotal row.
State-Level Infrastructure and Costs

There are six buttons in the State-Level Infrastructure and Costs category. Pressing any one of these buttons on the HOME Page takes the user to the appropriate sub-table under Table B.2.c: State-Level Infrastructure & Supports. In some cases, the assumptions driving state-level costs have already been addressed within one of the NIEER Preschool Quality Standards Benchmarks (Tables B.2.b.1-10). Subtotals for the resulting state-level costs are presented under the relevant section in each table.

**Annual Inflation Factor on Unit Costs.** This table allows you to establish whether future costs are projected with or without the effects of inflation. If no inflation is assumed, then unit costs do not change over time. If inflation is assumed, then it applies to unit costs beginning in Year 1 and is compounded annually.

<table>
<thead>
<tr>
<th>Table B.2.c: State-Level Infrastructure &amp; Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Annual Inflation Factor on Unit Costs</td>
</tr>
<tr>
<td>Fixed Total</td>
</tr>
<tr>
<td>Inflation Factor (Applies to Year 0 Unit Cost Assumptions—Use 0% to Ignore Inflation Considerations)</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>1.6%</td>
</tr>
<tr>
<td>1.6%</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>1.6%</td>
</tr>
</tbody>
</table>
The Alterable Variables in the Annual Inflation Factor on Unit Costs Section

Annual Inflation (Applies to Year 0 Unit Cost Assumptions): The annual increase in the price of unit costs (the rate of price inflation) in the preschool slot plan projections. The effects of inflation can become significant over large timespans. If you do not want to assume an inflation rate and instead want to report all future costs in terms of today’s dollars, then enter a value of 0%.

Advanced Users: You can independently set inflation for funding assumptions in Table B.2.a.2: Funding Streams. For example, this can allow you to measure the size of a funding gap arising when prices are expected to rise over time and anticipated funding is not corrected for inflation.

Baseline Administrative Cost. States will incur costs to sustain an existing early learning program at its current quality levels, or in the case of a new program, to provide a basic minimum level of administrative support and oversight. The CPQ&R is designed to “layer” additional state-level administrative costs associated with introducing new quality standards on top of this baseline level. This allows you to specify the baseline in one of two ways: you can assume a fixed cost per slot over all implementation years, or vary the cost per slot by implementation year.

<table>
<thead>
<tr>
<th>Table B.2.c: State-Level Infrastructure &amp; Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Baseline Administrative Cost (Before Investments in Quality Standards Above)</strong></td>
</tr>
<tr>
<td>TRUE</td>
</tr>
<tr>
<td>Baseline Administrative Cost per Slot (Year 0)</td>
</tr>
<tr>
<td>$250 per slot</td>
</tr>
<tr>
<td>TRUE</td>
</tr>
<tr>
<td>Annual Baseline Administrative Cost per Slot (IF not Fixed based on Year 0, above)</td>
</tr>
<tr>
<td>Base Administrative Cost per Slot: State-Level Monitoring &amp; Oversight (Including Inflation)</td>
</tr>
<tr>
<td>Subtotal: Baseline Administrative Cost ($)</td>
</tr>
<tr>
<td>Subtotal: Cumulative Preschool Slots</td>
</tr>
<tr>
<td>By Implementation Year</td>
</tr>
<tr>
<td>Year 0</td>
</tr>
<tr>
<td>$0</td>
</tr>
<tr>
<td>Total: $250 per slot</td>
</tr>
</tbody>
</table>

The Alterable Variables in the Baseline Administrative Cost Section

Baseline Administrative Cost per Slot (Year 0): The minimum cost to administer a new early learning program, or the cost to administrate an existing early learning program at its current quality standards (i.e., in Year 0), before the cost to implement and support additional quality standards. The cost of additional quality standards in Years 1+ are added to the baseline administrative cost per slot. This cost is applied unless the user selects “Yes” from the drop-down menu for the assumption stating, “Enter Separate Baseline Administrative Cost per Slot Assumptions by Year Instead?”

You should take care to ensure that no double-counting occurs between the costs included in the Baseline Administrative Cost per Slot and the additional state-level cost assumptions made elsewhere in the CPQ&R.
**Annual Baseline Administrative Cost per Slot (IF not Fixed based on Year 0, above):** The minimum cost to administer an early learning program, before the cost of implementing and support additional quality standards, entered by implementation year. This cost is applied unless the user selects “No” from the drop-down menu for the assumption stating, “Enter Separate Baseline Administrative Cost per Slot Assumptions by Year Instead?” For example, you may prefer to enter a cost per slot by implementation year because your administrative costs have a fixed and variable component (i.e., they are not 100% variable), resulting in a higher average cost per slot for small programs that would decrease as the programs expand to reach more children.

**Capacity Building.** The CPQ&R treats capacity building as funds awarded by the state to providers to build their local site capacity and add or improve space to accommodate additional children. This table allows you to enter a one-time award of funds to each new site required to meet the annual slot plan. Awards can be set by delivery model, and you can also assume less than 100% of eligible new sites receive awards. The number of new sites is a function of the number of new classrooms required to meet the annual preschool slot plan, and the average number of classrooms per facility.

<table>
<thead>
<tr>
<th>Table B.2.c: State-Level Infrastructure &amp; Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3. Capacity Building (Funds for New Facility Expansion)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>By Delivery Model</th>
<th>Child Care Centers</th>
<th>Public PreK</th>
<th>Head Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUE</td>
<td>$15,000</td>
<td>$12,000</td>
<td>$0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual Percent of New Sites Awarded Funds for Startup Costs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUE</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subtotal: Number of New Sites Awarded Startup Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUE</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subtotal: Capacity Building Funds ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUE</td>
</tr>
<tr>
<td>$0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capacity Building Funds as a % of Total State-Level Infrastructure and Supports Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUE</td>
</tr>
</tbody>
</table>

**The Alterable Variables in the Capacity Building Section**

**Startup Costs per New Site (Weighted Average of One-Time Funds Awarded for New Facilities):** The cost funded by the state for new facilities entering the preschool slot plan, for building improvements and other investments that build their capacity to meet the new quality standards and/or enroll additional students. Startup costs can also help to subsidize the cost for new facilities created (newly built or remodeled) to meet the preschool slot plan.

**Annual Percent of New Sites Awarded Funds for Startup Costs (%):** In cases where providers must apply for capacity building and awards are not guaranteed, users can specify the percentage of new facilities that receive Startup funds. The same percentage is applied to all delivery models equally.
**Advanced Users:** You can modify the CPQ&R so that all sites are eligible for participating in capacity building funds, by editing the formula for the row, “Subtotal: Capacity Building Costs” in Worksheet E: State Level Infrastructure & Support.

**Additional System Supports.** This table allows you to enter information for large, one-time investments or costs that are not directly proportional to early learning volumes and that you have not already entered under the NIEER quality standards benchmarks. For example, the purchase and installation of a new enterprise-wide Information Technology (IT) platform can be a large capital investment occurring over a fixed number of years.

The top of this table shows the results from other implementation supports specified by the user under Professional Learning, Early Learning and Development Standards (ELDS), Continuous Quality Improvement Systems (CQIS), and Curriculum. The CPQ&R suggests five additional categories of system supports that you may consider: Licensing and/or Accreditation System Supports, Information Technology (hardware), Data Systems (software), Marketing and Communications, and Other.

### Table B.2.c: State-Level Infrastructure & Supports

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensing and/or Accreditation System Supports ($)</td>
<td>TRUE</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Information Technology System Supports ($)</td>
<td>TRUE</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Data System Supports ($)</td>
<td>TRUE</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Marketing and Communications System Supports ($)</td>
<td>TRUE</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Other System Support Costs ($)</td>
<td>TRUE</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Subtotal: Additional System Support Costs ($)</strong></td>
<td>TRUE</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

**The Alterable Variables in the Additional System Supports Section**

**Licensing and/or Accreditation System Supports ($):** Large, fixed, and/or non-recurring provider licensing and/or accreditation investments. This can include costs for site visits related to licensing but not related to classroom observations under a Continuous Quality Improvement System.

**Information Technology System Supports ($):** Large, fixed, and/or non-recurring Information Technology (IT) investments or improvements, typically in hardware or in enterprise applications.
**Data System Supports ($):** Large, fixed, and/or non-recurring Data System investments or improvements. Such costs may include data systems for mapping and analytics, and if not already accounted for under the implementation supports under the quality standards, for systems such as registries for professional development and a CQIS portal for maintaining and disseminating provider quality ratings.

**Marketing and Communications System Supports ($):** Large, fixed, and/or non-recurring marketing and communication system investments. Such costs may be associated with provider recruitment, and family recruitment and enrollment.

**Other System Support Costs ($):** Account for large, fixed, and/or non-recurring investments, other than specified above.

**Advanced Users:** The bottom section of the table is formatted to allow for additional rows to be inserted. Only the row, “Subtotal: Additional System Support Costs,” is used by other worksheets in the CPQ&R to perform calculations; therefore, you can insert additional rows within this section of the table as you see fit, as long as the correct subtotal amount is still captured in the aforementioned subtotal row.

**External Technical Assistance.** In this table you can enter information on costs from outside consulting and other forms of third party support associated with the implementation of your preschool slot plan. The CPQ&R allows users to assume external Technical Assistance (TA) costs as a percentage of state-level costs or as a fixed amount entered by implementation year.

**The Alterable Variables in the Technical Assistance Section**

**External Technical Assistance Cost as a % of Total State-Level Costs, Excluding Program Evaluation:** A fixed percentage of state-level costs allocated to External Technical Assistance (TA) in each implementation year. Program evaluation is excluded from this calculation because it employs a similar method for deriving state-level cost allocations. This cost is applied if the user selects “No” from the drop-down menu for the assumption stating, “Enter Separate Technical Assistance Cost Assumptions by Year Instead?”
External TA Costs by Implementation Year (IF not Fixed, above): State-level costs for TA, entered manually by implementation year. This cost is applied if the user selects “Yes” from the drop-down menu for the assumption stating, “Enter Separate Technical Assistance Cost Assumptions by Year Instead?” You may prefer to enter costs using this method if you do not expect External TA costs to scale directly with the size of your preschool program or if such costs are intermittent.

Advanced Users: This table is formatted to allow for additional rows to be inserted, which is applicable if you choose to enter External TA Costs by Implementation Year. Only the row, “Subtotal: Cost of External Technical Assistance,” is used by other worksheets in the CPQ&R to perform calculations; therefore, you can insert additional rows within this table as you see fit, as long as the correct subtotal amount is still captured in the aforementioned subtotal row. Inserting rows is not applicable if you choose to enter External TA Costs as a % of Total State-Level Costs.

Program Evaluation. Program Evaluation (PE) refers to the external evaluation of the overall effectiveness and efficiency of a state early learning program conducted by an independent (third party) evaluator. This is distinct from site visits to monitor provider quality. The CPQ&R considers PE activities as separate from TA activities in part because states typically require the former, whereas state early learning agencies have the discretion to hire or not hire outside consultants and other forms of third party support.

<table>
<thead>
<tr>
<th>Year 0</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

The Alterable Variables in the Program Evaluation Section

Program Evaluation Cost as a % of Total State Costs, Excluding Technical Assistance: A fixed percentage of state-level costs allocated to program evaluation. Technical assistance is excluded from this calculation because it employs a similar method for deriving state-level cost allocations. This cost is applied if the user selects “No” from the drop-down menu for the assumption stating, “Enter Separate Program Evaluation Cost Assumptions by Year Instead?”

Program Evaluation Costs by Implementation Year (IF not Fixed, above): If not a fixed % of state-level costs, program evaluation expenditure by year can be entered here. This cost is applied if the user selects “Yes” from the drop-down menu for the assumption stating, “Enter Separate Program Evaluation Cost Assumptions by Year Instead?” You may prefer to enter costs using this method if you do not expect PE costs to scale directly with the size of your preschool program or if such costs do occur in every implementation year.
There are 4 buttons in the Provider-Level Infrastructure and Costs category. Pressing any one of these buttons on the HOME Page takes the user to the appropriate sub-table under Table B.2.d.1-4: Provider-Level Direct & Indirect Services. This is the final cost data category of the CPQ&R, and focuses on costs at the provider level. As with state-level costs, some of the assumptions driving provider-level costs are addressed in previous tables. In such cases, the relevant tables are referenced.

**Personnel Costs.** Site level staffing and salary models are included in this first table of provider-level cost assumptions. Child Care Center, Public Pre-K, and Head Start models are each preloaded with a unique list of staff and salary information. For non-teaching staff, the CPQ&R uses the ratio of early learning classrooms to total classrooms to establish the correct proportion of site-level staffing costs to allocate to the early learning program. At the top of the table for Personnel Costs, you are asked to identify the total number of classrooms per facility, which can also include infant/toddler classrooms and school-age classrooms. These assumptions combine with your previous assumptions for the number of preschool classrooms per facility in Table B.2.b.2 (Staff-Child Ratio) to establish the aforementioned ratios.
Next, you can review and revise the various staffing assumptions for each of the three delivery models. This table draws annual salary information by state from Worksheet C (Demographic Tables); you can then adjust these salaries upward or downward, as well as establish salary factors for teaching staff by degree level. The staffing model is organized so that you can establish unique staffing levels for each non-teaching position (teaching staff counts per facility are established in the quality standards tables). You can set minimum and maximum staffing levels, and indicate the amount by which staffing would increase based on the number of classrooms (preschool only or in total) per facility.
The bottom of this table is devoted to paid leave and other employment benefits. Paid leave for teaching staff contributes to the cost for substitute teachers. Mandatory benefits include FICA (Federal Insurance Contributions Act for Social Security and Medicare), Unemployment Tax (FUTA), and Workers Compensation Insurance. Additional benefits include health care, other insurance plans, and retirement and savings plans. The CPQ&R gives the user the option to assume additional benefits as a flat dollar amount per FTE or as a percentage of annual salary.
The Alterable Variables in the Personnel Costs Section

Number of Total Classrooms (All Ages) per [Type of] Facility: The number of classrooms including preschool, infant/toddler, kindergarten, and grade school classrooms. Specifying the number of classrooms across all ages served, by delivery model, allows the CPQ&R to allocate a portion of a typical facility’s shared personnel (and site level) costs to its preschool program. The ratio of preschool classrooms to total classrooms establishes the allocation; the smaller the ratio the smaller the allocation of shared resources to the early learning program.

Staffing Model: Preschool FTE and Salary Allocations per Site: A separate staffing model is provided for each delivery model: Child Care Centers, Public Pre-K, and Head Start. Lead teacher and assistant teacher staffing levels are established as part of the NIEER Quality Standards Benchmarks. For other staff positions, the staffing model table allows you to establish site-level Full-Time Equivalent (FTE) counts allocated to early learning. You can specify Minimum Site Staffing (FTEs) that are independent of the number of total classrooms, and Maximum Site Staffing (FTEs) which cannot be exceeded regardless of the number of classrooms. In addition, you can enter a Staffing Threshold (Classrooms) that dictates the number of classrooms required to trigger an increase in staffing, and a Staffing Increment (FTE) that is applied each time a multiple of the staffing threshold is met. Finally, you can specify whether the staffing threshold applies to Preschool Classrooms Only, or to the total classrooms in a facility. If you select “Yes” in the drop-down menu under Preschool Classrooms Only, then 100% of the staffing cost for that position will be applied to the preschool program.

The preschool salary allocation in the staffing model is based on the preschool FTE allocation with the annual salary per FTE. The staffing model provides salary data for each of the positions identified in the default model. Data for Child Care Centers and Public Pre-K is from the Bureau of Labor Statistics (BLS); data for Head Start is from the U.S. Department of Health & Human Services’ Office of Head Start. The specific data reference for each position is listed next to the position name. You can adjust these salaries up or down using the % of BLS Salary Statistic for Child Care Centers and Public PreK, and the % of PIR Salary Statistic for Head Start.

Advanced Users: The staffing model table is formatted to allow users to easily insert rows for additional non-teaching staff positions, without having to modify any of the other CPQ&R worksheets. You can add rows above “Other (Non-Teaching) Staff,” so long as the row, “Subtotal: Preschool FTE and Salary Allocations, Not Including Teaching Staff,” correctly captures the intended FTE counts and salary allocations. This design consideration allows the CPQ&R to easily accommodate the disparate staffing models that may be encountered across various state settings.

Teacher Salaries Indexed by Level of Educational Attainment: In addition to establishing a state average salary for teachers and assistant teachers (by applying a % to the state average from BLS or Head Start PIR data), users may take the further step of indexing this salary by degree level. As a default, the CPQ&R uses indices based on Head Start salary data by degree level in your state (or if unavailable the national average Head Start ratios). You can elect to override these indices, by entering “Yes” under Override Salary Factor, and enter your own assumption for
salary factors by degree level under **New Salary Factor**. If you choose to override the salary factor, then you will see the adjusted annual salary reported to the right of your new factor (replacing the previously reported adjusted annual salary reported to the left).

**Days of Paid Leave (Vacation/Sick Days) for Teaching Staff (Not Including Holidays):** The number of days for which substitute teachers will be required, using an assumption of 8-hour workdays. Alternatively, you can assume substitute teacher costs as a percentage of total teaching salaries, by entering “Yes” under the drop-down menu for the assumption, “Assume Substitute Costs as a % of Total Teaching Salaries Instead?”, and entering an assumed percentage rate.

**Mandatory Benefits (FICA, Unemployment, Workers Comp/Industrial Insurance):** Benefits that employers are legally required to provide to their employees. Mandatory benefits listed include FICA (Federal Insurance Contributions Act for Social Security and Medicare), Unemployment Tax (FUTA), and Workers Compensation Insurance.

**Additional Benefit Contributions per Preschool Staff FTE:** Benefits offered to employees that are not legally required. Examples of additional benefits listed include insurance plans and retirement and savings plans. You can enter the cost of additional benefits as a fixed dollar value per FTE; alternatively, you can assume the cost as a percentage of annually salary by entering “Yes” under the drop-down menu for the assumption, “Assume Additional Benefits as a % of Annual Salary Instead?” and entering an assumed percentage rate.

**Advanced Users:** For structural reasons, the cost of additional benefits may vary by delivery model. For example, in a state with a publicly funded pension program, public school employees may not have a need for a separate retirement and savings plan, and the cost of their pension plan may not fall upon the individual or the Public Pre-K site. In contrast, Child Care Centers may need to establish separate retirement plans for their staff to make contributions (with employer matching). In this example, if the cost of a retirement and savings plan for a Child Care Center is 11.1% of salaries, then the additional benefits rate assumed for Child Care Centers would be much higher than for Public Pre-K.

**Non-Personnel Costs.** The second table of provider-level cost assumptions addresses per-child operating costs, per-classroom early learning occupancy costs, and site-level operating costs. Occupancy costs are driven by the assumed square footage assumed per early learning classroom (and including an allocation for shared space). Site-level costs are allocated based on the proportion of early learning classrooms to total classrooms. You have the option to assume lump sum amounts instead of breaking out cost assumptions by line item, which is useful in
cases where you lack more detailed cost information. For per-child costs, the lump sum feature applies by dosage; for occupancy and site-level costs, the lump sum feature can be varied by delivery model within a single scenario.

The Alterable Variables in the Non-Personnel Costs Section

**Operations: Annual Per Child Costs ($)**
Provider costs that are modeled to increase proportionally to the number of children rather than the number of classrooms or sites. With the exception of Child Meals, you enter these costs for Full Day care and the CPQ&R will adjust them up or down by for Part Day and Extended Day care. Transportation costs per child are not adjusted up or down based on a dosage because they are entered as a cost per participating child. Per child costs include **Child Meals Cost** and the **Percent of Children Participating in Child Meals, Child Transportation, Education Supplies, Education Equipment**, and other office-related and/or miscellaneous per-child costs not addressed elsewhere in the CPQ&R. These costs by line item apply unless you enter “Yes” under the assumption stating, “Assume Lump Sum Instead?”, in which case the lump sum amount is used by the CPQ&R.
**Advanced Users:** The CPQ&R assumes 50% of certain costs per child in Full Day care to generate estimates for Part Day care, and similarly, assumes 150% of Full Day care costs for Extended Day. You can change these ratios by adjusting the formulas under Part Day and Extended Day care in this table, without having to make changes to other worksheets in the CPQ&R.

**Occupancy: Annual per Classroom Costs:** Provider costs that are modeled to increase proportionally to the number of early learning classrooms. State preschool standards often require a minimum square footage per child; this square footage multiplied by the maximum class size (quality standard) can provide you with the **Square Feet per Classroom** (including shared space). The square footage is by the cost per square foot for **Mortgage/Lease, Utilities, Building Insurance, Maintenance,** and **Other Occupancy Costs.** These costs by line item apply to all delivery models unless you enter “Yes” under the assumption stating, “Assume Lump Sum Instead?”, in which case the lump sum amount you enter by delivery model is used by the CPQ&R.

**Annual Costs Using Other Bases, i.e., Per Site Costs ($):** Provider costs that do not fit under a per child or per classroom classification and are best expressed on a site-wide basis. You should enter the total site-level cost for each line item, not just the amounted allocated to early learning, and the CPQ&R will allocate the correct portion of this total based on the ratio of early learning classrooms to total classrooms (for each delivery model). These unit costs apply to all delivery models unless you enter “Yes” under the assumption stating, “Assume Lump Sum Instead?”, in which case the lump sum amount you enter by delivery model is used by the CPQ&R.

You can obtain information on average **Lease** rates per square foot from your current preschool providers, or by contacting a commercial real estate company contact in your state. You may find that public schools are not subject to the same mortgage or lease costs as sites occupied by Child Care Center or Head Start providers, if those facilities are publicly financed construction projects, in which case you may want to use the **Lump Sum** feature for occupancy costs.
**Advanced Users:** This table is formatted to allow for additional rows to be inserted at several places. Rows can be inserted immediately above the subtotal row for “Child Meals,” between the rows the “Education Supplies” and “Education Equipment,” immediately above the subtotal row for “Office Supplies, Equipment, and Miscellaneous,” immediately above the subtotal row for “Annual Per Classroom Occupancy Costs,” or immediately above the subtotal row for “Annual Per Site Costs (Using other Bases).” In each case, if you follow these instructions correctly and check to ensure that each subtotal row is correctly capturing these additional rows, then no other changes are required to the CPQ&R.

**Other Direct Costs.** Other provider-level direct costs include the costs for screening/referral and support services entered under the NIEER Quality Standards Benchmarks, annual child assessment costs, and the annualized cost for classroom materials and furnishings that typically last for greater than one year. The top of this table is devoted to screening/referral and support services, the assumptions for which are entered under the NIEER Preschool Quality Standards Benchmarks. The Cost per item shown in this section of the table represents a weighted average cost based on the cost per participating child and the percentage of children in a classroom who are expected to participate; that weighted average is then multiplied by the expected class size to give a total cost per classroom.

The next section of this table is preloaded with a list of classroom items related to the Environment Rating Scale (ERS); in some cases, the number of items required is based on the expected class size, and in other cases you can input the desired number of items. The cost for these items is then allocated over an assumed useful life. The CPQ&R default assumption is five years, (i.e., the purchase price is spread evenly over five years). You instead choose to enter an annual lump sum amount by delivery model, if you lack more detailed cost information specific to your program or if you want to vary the cost of ERS-related items by delivery model within a single scenario.

**Advanced Users:** You can overwrite the formula references (white-shaded cells) for the number of items for child assessments, chairs, and dramatic play materials in this table, if you choose, without compromising other areas of the CPQ&R. You should not do so for the number of items for screening/referral and support services without risking an error in the CPQ&R calculations, unless you also check to ensuring your changes are consistent with your assumptions in the table devoted to that quality standard under NIEER Preschool Quality Standards Benchmarks.
The Alterable Variables in the Other Direct Costs Section

Child Assessment Costs (per Child): The cost to administer individual assessments of child development and learning, as well as to determine program quality.

Purchase of ERS-Related Items (Per Classroom): Classroom Items pertaining to equipment, furnishings, and materials that typically last for more than one year, but which must eventually be replaced. The CPQ&R is populated with a list of typical items related to the Environment Rating Scale (ERS) assessment for early childhood program quality (http://ers.fpg.unc.edu/), Space and Furnishings (Indoor) sub-scale. The purchase of these items is then amortized over the period of the useful life to arrive at an estimate for an effective annual cost. These costs by line item apply unless you enter “Yes” under "Assume Lump Sum Instead?"

You can use the Lump Sum feature when you want the cost of ERS-related items to vary by Delivery Model within a single scenario. In such situations, you may find the detailed line items useful for generating estimate for your lump sums (i.e., use that section of the CPQ&R as a “mini-calculator”).
the assumption stating, “Assume Lump Sum Instead?”, in which case the lump sum amount by delivery model is used by the CPQ&R.

**Useful Life (in Years Between Replacement):** The number of years between replacement of durable items, used in deriving an effective annual cost under straight-line depreciation of the asset over its useful life.

**Advanced Users:** This table is formatted to allow for additional rows to be inserted within the list of ERS related items. As long as the row, “Subtotal: Initial Purchase Cost of ERS-Related Items (Per Classroom),” references these additional rows, no other CPQ&R worksheets will require modification.

**Indirect Costs.** The final table of provider-level cost assumptions allows you to include two additional types of provider contributions not covered elsewhere in the CPQ&R. In most cases these costs can be assumed as zero (0%), but a state may specifically authorize an “up to” budget allocation to providers in these categories.

**Table B.2.d: Provider-Level Direct & Indirect Services**

<table>
<thead>
<tr>
<th></th>
<th>Child Care Centers</th>
<th>Public PreK</th>
<th>Head Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect Rate Charge</td>
<td>TRUE</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Contribution to Operating Reserve</td>
<td>TRUE</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The Alterable Variables in the Indirect Costs Section**

**Indirect Rate Charge:** In cases where a state allows providers to submit an Indirect Rate Charges as part of their budgets, the applicable cost expressed as a percentage of all other provider-level expenses. This table allows you to include such charges rather than explicitly model the underlying, indirect costs. Indirect rate charges can cover the cost of labor and overhead that is not addressed directly in the staffing models in Table B.2.d.1 (Personnel Costs). If you consider the other tables of provider-level costs to be comprehensive of all reimbursable expenses, then you can assume an Indirect Rate Charge of zero (0%).

**Contribution to Operating Reserve:** In cases where a state allows additional reimbursement to providers to build an operating reserve, the applicable contribution expressed as a percentage of all other provider-level expenses. Operating reserve funds may be drawn upon by the provider when expenses exceed available funding or tuition, i.e., contingencies that would require a net positive working capital.
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:

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 on the Demographic Tables in Worksheet C.

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 boxes shown above certain columns or to the left of certain rows on a worksheet. Upon clicking this box, the symbol will change to 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.