



CPQ&R User Guide: Provider-Level Infrastructure and Costs

Personnel Costs
(B.2.d.1)

Non-Personnel Costs
(B.2.d.2)

Other Direct Costs
(B.2.d.3)

Indirect Costs
(B.2.d.4)

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. Private Center, Public School, 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 (including

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.

Table B.2.d: Provider-Level Direct & Indirect Services														
1. Personnel Costs														
	Number of Preschool Classrooms per Private Center Facility	TRUE	Fixed	2						Total	2 classrooms			
	Number of Total Classrooms (All Ages) per Private Center Facility	TRUE		4							4 classrooms			
	Number of Preschool Classrooms per Public School Facility	TRUE		5							5 classrooms			
Data: C.15	Number of Total Classrooms (All Ages) per Public School Facility	TRUE		19							19 classrooms			
	Number of Preschool Classrooms per Head Start Facility	TRUE		3							3 classrooms			
	Number of Total Classrooms (All Ages) per Head Start Facility	TRUE		4							4 classrooms			
Private Centers														
Data: C.26	Private Center Staffing Model: Preschool FTE and Salary Allocations per Site													
	Director (Education Administrators, Preschool and Private Center/Program, SOC 11-9031)	TRUE		100%	\$40,020	1	0.00	0	No	1	1.00	0.5	\$20,010	\$20,010 (0.5 FTEs)
	Assistant Director (Education Administrators, Preschool and CCC/Program, SOC 11-9031)	TRUE		80%	\$32,016	0.5	0.50	5	No	1	0.50	0.3	\$8,004	\$8,004 (0.25 FTEs)
	Administrative Assistant (Office Clerks, General, SOC 43-9061)	TRUE		90%	\$22,995	0.5	0.50	3	No		0.50	0.3	\$5,749	\$5,749 (0.25 FTEs)
	Other (Non-Teaching) Staff	TRUE			\$0	0	0.00	0	No		0.00	0.0	\$0	\$ (0 FTEs)
	SubTotal: Preschool FTE and Salary Allocations, Not Including Teaching Staff	TRUE										1.00	\$33,763	\$33,763 (1 FTEs)
	Floater-Assistants (Child Care Workers, SOC 39-9011)	TRUE		80%	\$15,520	0.5	0.50	3	Yes		0.50	0.5	\$7,760	\$7.46 per hour
	Lead Preschool Teachers (Preschool Teachers, Except Special Education, SOC 25-2011)	TRUE		100%	\$25,930									\$12.47 per hour
	Assistant Preschool Teachers (Child Care Workers, SOC 39-9011)	TRUE		100%	\$19,400									\$9.33 per hour
Data: C.28.a	Teacher Salaries Indexed by Level of Educational Attainment													
	Lead Preschool Teachers: Non-Degreed	TRUE		0.67	\$17,278	No	0.80							\$8.31 per hour
	Lead Preschool Teachers: AA Degrees	TRUE		0.88	\$22,736	No	0.90							\$10.93 per hour
	Lead Preschool Teachers: BA Degrees or Higher	TRUE		1.06	\$27,454	No	1.10							\$13.20 per hour
	Assistant Preschool Teachers: without CDA	TRUE		0.96	\$18,576	No	0.90							\$8.93 per hour
	Assistant Preschool Teachers: with CDA	TRUE		1.03	\$20,006	No	1.10							\$9.62 per hour
Public School														
Data: C.27	Public School Staffing Model: Preschool FTE and Salary Allocations per Site													
	Principal (Education Administrators, Elementary and Secondary School, SOC 11-9032)	TRUE		100%	\$81,500	1	0.00	0	No	1	1.00	0.3	\$21,190	\$21,190 (0.26 FTEs)
	Assistant Principal (Education Administrators, Elementary and Secondary School, SOC 11-9032)	TRUE		80%	\$65,200	1	0.00	0	No	1	1.00	0.3	\$16,952	\$16,952 (0.26 FTEs)
	Administrative Assistant (Office Clerks, General, SOC 43-9061)	TRUE		90%	\$22,995	1	0.50	6	No		1.50	0.4	\$8,968	\$8,968 (0.39 FTEs)
	Other (Non-Teaching) Staff	TRUE			\$0	0	0.00	0	No		0.00	0.0	\$0	\$ (0 FTEs)
	SubTotal: Preschool FTE and Salary Allocations, Not Including Teaching Staff	TRUE										0.91	\$47,110	\$47,110 (0.91 FTEs)
	Floater-Assistants (Child Care Workers, SOC 39-9011)	TRUE		80%	\$15,520	0.5	0.50	3	Yes		1.00	1.0	\$15,520	\$7.46 per hour
	Lead Preschool Teacher (Kindergarten Teachers, Except Special Education, SOC 25-2012)	TRUE		100%	\$41,800									\$20.10 per hour
	Assistant Preschool Teacher (Kindergarten Teachers, Except Special Education, SOC 25-2012)	TRUE		70%	\$29,260									\$14.07 per hour
Data: C.28.b	Teacher Salaries Indexed by Level of Educational Attainment													
	Lead Preschool Teachers: Non-Degreed	TRUE		0.67	\$27,852	No	0.80							\$13.39 per hour
	Lead Preschool Teachers: AA Degrees	TRUE		0.88	\$36,651	No	0.90							\$17.62 per hour
	Lead Preschool Teachers: BA Degrees or Higher	TRUE		1.06	\$44,256	No	1.10							\$21.28 per hour
	Assistant Preschool Teachers: without CDA	TRUE		0.96	\$28,017	No	0.90							\$13.47 per hour
	Assistant Preschool Teachers: with CDA	TRUE		1.03	\$30,174	No	1.10							\$14.51 per hour

Next, you can review and revise the various staffing assumptions for each of the three delivery models. Personnel Costs draw annual salary information by state from Worksheet C (State Data and Research); 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-

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: Private Centers, Public School, and Head Start. Lead Teacher and Assistant Teacher staffing levels are established as part of the NIEER Quality Standards Benchmarks. For other 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. A hyperlink to Data Table C.28.a is provided. Data for Private Centers and Public School 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 Private Centers and Public School, 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. A hyperlink to Data Table C.28.b, which includes supporting calculations by state, is provided. As a default, the CPQ&R uses indices based on Head Start PIR 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.

Substitute Teacher Wages per Hour: The hourly wage paid to substitutes, based on state minimum wage laws. A hyperlink to Data Table C.29 is provided.

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. A hyperlink to Data Table C.30 is provided.

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. A hyperlink to Research Note C.31 is provided.

You can use the **Lump Sum** feature when you want occupancy and/or site-level costs to vary by **Delivery Model** within a single scenario. In such situations, you may find the detailed line items useful for generating estimates for your lump sums (i.e., use that section of the CPQ&R as a “mini-calculator”).

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 School site. In contrast, Private 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 Private Center is 11.1% of salaries, then the additional benefits rate assumed for Private Centers would be that much higher than for Public School.

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.

Table B.2.d: Provider-Level Direct & Indirect Services			
2. Non-Personnel Costs			
Operations: Annual Per Child Costs			
Data: C.32	Child Meals: Cost for Meals per Participating Child per Day	TRUE	\$3.61
	Class Days (from Table B.2.a.1, Above)		150
	Percent of Children Participating in Child Meals (%)	TRUE	100%
	Subtotal: Effective Annual Meals Cost per Child		\$542
Data: C.33	Average Annual Transportation Cost per Participating Child (Vehicle, Maintenance, Insurance, Driver, etc.)	TRUE	\$1,109
Data: C.33	Percent of Children Participating in Transportation (%)	TRUE	0.5%
	Subtotal: Effective Annual Transportation Cost per Child	TRUE	\$5
	Education Supplies	TRUE	\$25
	Education Equipment (including Computers/Tablets, etc.)	TRUE	\$50
	Office Supplies	TRUE	\$20
	Office Equipment	TRUE	\$13
	Insurance (Liability, Accident, etc.)	TRUE	\$38
	Postage	TRUE	\$12
	Advertising	TRUE	\$13
	Miscellaneous/Other	TRUE	\$8
	Subtotal: Office Supplies, Equipment, and Miscellaneous	TRUE	\$102
Occupancy: Annual per Classroom Costs			
	Square Feet per Classroom (Including Allocation for Shared Space)	TRUE	1,100
	Effective Square-Feet per Child (based on Expected Class Size)		
	Cost per Square Foot		
Data: C.34	Mortgage/Lease (including Real Estate Taxes)	TRUE	\$13.00
	Utilities (electricity, heat/cool, water/sewer)	TRUE	\$2.00
	Building Insurance	TRUE	\$1.00
	Maintenance/Repair/Cleaning/Yardwork	TRUE	\$2.00
	Other Occupancy Costs	TRUE	\$0.00
	Subtotal: Annual Per Classroom Occupancy Costs	TRUE	\$19,800
Annual Costs Using Other Bases, i.e., Per Site Costs (Inclusive of All Classrooms per Facility)			
	Annual Cost for Telephone & Internet	TRUE	\$2,400
	Annual Audit, Accounting and Legal Costs	TRUE	\$3,000
	Annual Cost for Fees/Permits	TRUE	\$135
	Other Annual Per Site Costs	TRUE	\$0
	Subtotal: Annual Per Site Costs (Using Other Bases)	TRUE	\$5,535

	By Dosage			Total
	Part Day (3hr)	Full Day (6hr)	Extended Day (10hr)	
Override Meals Cost?	No	\$0.00	\$0.00	\$0.00
Override Transportation Cost?	No	\$250	\$250	\$250
Override Participation Rate?	No	100%	100%	100%
Assume Lump Sum Instead?	No	\$100	\$200	\$300
				1,100 sf
				\$13.00/sf
				\$2.00/sf
				\$1.00/sf
				\$2.00/sf
				\$0.00/sf
Assume Lump Sum Instead?	No	\$24,000	\$5,500	\$24,000
				\$19,800/classroom
				\$2,400 per site
				\$3,000 per site
				\$135 per site
				\$0 per site
Assume Lump Sum Instead?	No	\$5,000	\$5,000	\$5,000
				\$5,535/site

The Alterable Variables in the Non-Personnel Costs Section

Operations: Annual Per Child Costs (\$): Provider costs that are modeled to increase proportional 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 Cost** and the **Percent of Children Participating in Child Transportation**, **Education Supplies**, **Education Equipment**, and other office-related and/or miscellaneous per-child costs not addressed elsewhere in the CPQ&R (beginning with Office Supplies and ending with Miscellaneous/Other). These other costs will apply individually 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.

A hyperlink to Data Table C.32 is provided for Child Meals costs by state, which are based on data from the Federal Register. Data for Child Transportation, provided in Data Table C.33, is from School Transportation News Magazine. These costs and participation rates will apply unless you enter “Yes” in the override drop-down menu to the right and enter a revised amount.

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. For Mortgage/Lease costs per square foot, a hyperlink is provided to Data Tables C.34.a and C.34.b, which show median real estate rents by state and in fifty metropolitan markets in the U.S.

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 amount 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 may find that public schools are not subject to the same mortgage or lease costs as sites occupied by Private 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 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.

stating, "Assume Lump Sum Instead?", in which case the lump sum amount by delivery model is used by the CPQ&R. A hyperlink to Research Note C.35 is provided.

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.

4. Indirect Costs						
		By Delivery Model				
		Private Centers	Public School	Head Start	Total	
Data: C-36	Indirect Rate Charge (% of Total Provider-Level Expenses I, II, and III, Above)	TRUE	0%	0%	0%	
	Contribution to Operating Reserve (% of Total Provider-Level Expenses I, II, and III, Above)	TRUE	0%	0%	0%	

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%). A hyperlink to Research Note C.36 is provided.

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.