

# Montana Child Care Cost Model

## Quick Start Guide

February 2023

### What is the Montana Child Care Cost Model?

Child care providers know all too well that the true cost of providing high-quality child care is above and beyond what most families can afford. Providers navigate a business model where the available revenues – either tuition or public subsidy – are not enough to cover the full costs of operating a program, including providing compensation at a level that allows them to recruit and retain teachers. Despite this reality, there is often a lack of understanding about the child care business model and why child care costs so much, but the workforce makes so little. **The Montana child care cost model helps answer this question!**

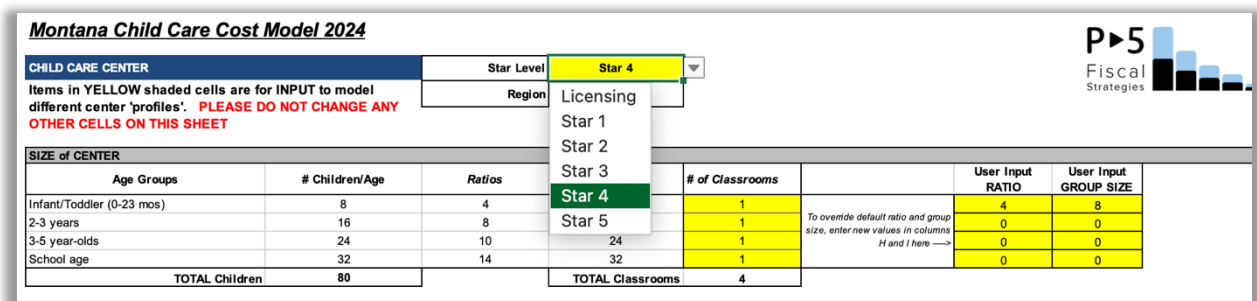
The Montana child care cost model is an excel-based tool that can help you understand the true cost of delivering early care and education and how that cost varies based on different program or child characteristics. This is a powerful tool with multiple uses:

- Policymakers and advocates can use the tool to better understand the cost of child care and the policy changes and investments required to support this essential industry.
- Child care providers can use the tool to better understand the financial implications of different program characteristics, such as ages of children served, size of program, and STARS to Quality level.

Are you wondering how opening a new classroom will impact your finances? Considering adding additional school age children to your FCC and want to know how it will impact your bottom line? Are you interested in offering your staff additional sick days, but you're not sure if you can cover the expenses? Use the Montana child care cost model to find out!

The cost model was developed by Prenatal to Five Fiscal Strategies ([P5FS](#)), working in partnership with Zero to Five Montana. The model builds on the Cost of Care Calculator previously developed by the Montana Department of Public Health and Human Services (DPHHS) to support programs in the STARS quality rating and improvement system.

**Montana Child Care Cost Model 2024**



The screenshot shows the 'CHILD CARE CENTER' section of the model. It includes a dropdown for 'Star Level' set to 'Star 4' and a 'Region' dropdown set to 'Licensing'. Below this is a table for 'SIZE of CENTER' with columns for 'Age Groups', '# Children/Age', and 'Ratios'. The table lists age groups: Infant/Toddler (0-23 mos), 2-3 years, 3-5 year-olds, and School age, with their respective counts and ratios. A 'TOTAL Children' row shows 80 children. To the right, there are columns for '# of Classrooms', 'User Input RATIO', and 'User Input GROUP SIZE'. The '# of Classrooms' column shows 4 classrooms. The 'User Input RATIO' and 'User Input GROUP SIZE' columns show 4 and 8 respectively. A note indicates that these values can be overridden by entering new values in the 'User Input' columns.

Age Groups	# Children/Age	Ratios	# of Classrooms	User Input RATIO	User Input GROUP SIZE
Infant/Toddler (0-23 mos)	8	4	1	4	8
2-3 years	16	8	1	0	0
3-5 year-olds	24	10	1	0	0
School age	32	14	1	0	0
<b>TOTAL Children</b>	<b>80</b>		<b>TOTAL Classrooms</b>	<b>4</b>	

## How do I use the cost model?

The cost model includes default data to ensure the costs of meeting health and safety requirements and Montana state licensing standards are captured. The model allows providers to estimate the cost of care under many different scenarios, with variations for:

- STARS to Quality level.
- Program size, ages of children served, maximum ratio and group size.
- Salaries and benefits.
- Program enhancements such as family engagement and transportation.
- Additional sanitation needs.
- Different revenue mixes across subsidy and private tuition.

When using the cost model, **you can only edit cells highlighted in yellow** (see examples below).

### Determining the true costs of staffing a quality child care program

The largest cost driver in a child care program is personnel. Personnel expenses are driven by both salaries and benefits and by the number of staff who support the program. Providers can capture variations in personnel expenses in the model in the following ways:

#### 1. Ratio and Group Size

In the center-based model, you can choose either the Montana licensing ratio and group size standards, or you can enter your own data. The cost model will automatically calculate the number of children in each age group and the total number of children in the program. For example, if you have two classrooms of 3-5 year-olds, and you enter a maximum group size of 24 for that age group, the cost model will populate 48 3-5 year-olds in your program. In the family child care model, you select the number of children at each age group, up to the maximum allowed under licensing regulations.

Montana Child Care Cost Model 2024							
CHILD CARE CENTER		Star Level	Star 4				
Items in YELLOW shaded cells are for INPUT to model different center 'profiles'. PLEASE DO NOT CHANGE ANY OTHER CELLS ON THIS SHEET		Region	Statewide				
SIZE OF CENTER							
Age Groups	# Children/Age	Ratios	Group size	# of Classrooms		User Input RATIO	GROUP SIZE
Infant/Toddler (0-23 mos)	8	4	8	1	To override default ratio and group size, enter new values in columns H and I here ----->	4	8
2-3 years	30	5	15	2		5	15
3-5 year-olds	48	8	24	2		8	24
School age	0	12	32	0		12	0
TOTAL Children		86		TOTAL Classrooms		5	

#### 2. Salaries

By default, the model includes three salary options. These represent current salaries (the [Bureau of Labor Statistics](#), or BLS, option), current salaries adjusted for a \$15 minimum wage floor (the BLS \$15 MW option), or high salaries based on the [MIT Living Wage Calculator](#). When a selection is made, the model will use a salary scale based on this source. Salary defaults are detailed in the pink box beginning in column K. You can also override these defaults and enter your own salaries by selecting 'User added' in the drop-down menu and entering data in the appropriate cells. In the family child care model, a salary is included for the provider/owner as well as any assistants or substitutes employed by the program.

ENROLLMENT	
Age Groups	# Children/Age
Infants	2
Two year olds	3
3-5 year olds	3
School Aged	2
<b>TOTAL Children</b>	<b>10</b> Group Home

To enter your own hourly wage, you must select "User added" from the drop-down menu

SALARIES			
Select salary level in D15	Salary level	User added	(enter hourly wage)
	BLS		Provider/Owner Assistant
	BLS, \$15 min wage adjusted		Hourly salary here \$ 45 \$ 15
	Living Wage		

BENEFITS		
Health Insurance	User added	Select amount per employee of discretionary benefits for provider/owner and any assistants

### 3. Benefits

You can select whether the program offers discretionary benefits to employees, and at different annual amounts per employee multiple, ranging from \$5,000-\$10,000. This could include an employer contribution to health insurance as well as other discretionary benefits such as reduced child care tuition or access to an employee assistance program (EAP). You can also include a contribution to a retirement account and a set number of paid sick and paid vacation days.

SALARIES			
Select salary level to use in model	Salary level	Living Wage	(enter hourly wage)
			Lead Teacher Assistant Teacher Floater
			\$32.23 \$ 24.80 \$ 24.80

BENEFITS		
Discretionary (health, etc)	Yes, \$7,500	Select amount per employee of discretionary benefits
Retirement %	3%	enter percentage of salary paid in benefits
Sick Days	10	enter annual number of days per staff member
Paid Leave	10	enter annual number of days per staff member, not including holidays where program is closed

Customize your benefits here

As shown in the examples above, when using the cost model, you can modify the cells that are highlighted in yellow. To make a modification, either select an option from the drop-down menu or enter your own data.

### Accounting for nonpersonnel expenses

In addition to personnel expenses, the model captures all mandatory employer taxes, and the nonpersonnel expenses necessary to operate a child care program, such as the cost of supplies, equipment, consumables, food, rent/lease/mortgage, and utilities, among others. You can choose to use either the default values in the model or override them with your own data. Default values are aligned with the values in the federal [Provider Cost of Quality Calculator](#). When using the default value, the cost model automatically adjusts each expense category, such as occupancy (rent/lease, utilities, building insurance, maintenance/repair/cleaning), based on the number of classrooms and total number of children captured in the first section.

### How much revenue is necessary to cover expenses?

In addition to estimating the cost of care, the model also integrates a revenue analysis to better understand the sufficiency of current revenues. You can enter the number of children served by child care subsidy, and the cost model calculates the balance being funded through private tuition. You can select if the program receives the high-growth county subsidy differential, if the program participates in the Child and Adult Care Food Program, or CACFP, and whether the program receives additional income from sources such as fundraising or grants. The model uses subsidy rate data as of March 1, 2024. You must enter tuition data manually.

## How do I see the results of my scenario?

Once you have made your selections, the model will calculate the results for that specific scenario. These results represent the ongoing operational cost of care. The program level results provide details on expenses and income by category and show the program's total annual revenue less expenses as both a dollar amount and a percentage of expense. For example, you can review the cost model results and discover how much income you make from tuition versus subsidy, or the

percentage of your budget you allocate toward administrative costs (internet, office supplies, insurance) compared to transportation costs.

RESULTS		
<b>Results - Program Level</b>		
Total Staff		13.7
Total Teaching Staff		10.7
<b>EXPENSES</b>		
		<i>Percent of expense</i>
Wages	\$ 424,495	48%
Benefits	\$ 145,467	17%
<b>Total Personnel</b>	<b>\$ 569,961</b>	<b>65%</b>
Education Program for Children and Staff	\$ 158,874	18%
Occupancy	\$ 66,978	8%
Program Management & Administration	\$ 29,112	3%
Conferences	\$ 2,037	0%
Transportation	\$ 2,000	0%
Additional Cleaning	\$ 6,960	1%
<b>Total Nonpersonnel</b>	<b>\$ 265,960</b>	<b>30%</b>
Contribution to operating reserve	\$ 41,796	5%
<b>TOTAL EXPENSE</b>	<b>\$ 877,718</b>	
<b>INCOME</b>		
CACFP	\$ 8,247	
Tuition	\$ 915,600	
Subsidy	\$ 66,079	
STARS incentives	\$ -	
Other income	\$ 10,000	
<b>TOTAL INCOME</b>	<b>\$ 999,926</b>	
Adjustment for bad debt and enrollment efficiency	\$ 179,987	
<b>ADJUSTED INCOME</b>	<b>\$ 819,939</b>	
Annual Revenue less Expenses	\$ (57,778)	
profit/(loss)		
Percent of expenses		-7%

Results are also displayed at a cost per child level as annual, monthly, and weekly values. A comparison is also provided to the current child care subsidy rates. In this way, the results help illustrate any gaps between cost and subsidy rates, for each age group served.

Results - Cost per Child (CPC)			
	Annual	Monthly	Weekly
Infant/Toddler (0-23 mos)	\$19,034	\$1,586	\$366
2-3 years	\$13,299	\$1,108	\$256
3-5 year-olds	\$11,828	\$986	\$227
School age	\$7,149	\$596	\$137
<b>Subsidy rates, per child</b>			
	Annual	Monthly	Weekly
Infant/Toddler (0-23 mos)	\$15,080	\$1,257	\$290
2-3 years	\$15,080	\$1,257	\$290
3-5 year-olds	\$14,300	\$1,192	\$275
School age	\$8,580	\$715	\$165
<b>Gap - subsidy/true cost, per child</b>			
	Annual	Monthly	Weekly
Infant/Toddler (0-23 mos)	(\$3,954)	(\$330)	(\$76)
2-3 years	\$1,781	\$148	\$34
3-5 year-olds	\$2,472	\$206	\$48
School age	\$1,431	\$119	\$28

You can run multiple scenarios in the model and compare the results to understand the financial impact of different program characteristics or selections. For example, in one scenario, you may want to determine how much it would cost to offer three family conferences per year, instead of one, and 10 sick days per year instead of eight. After inputting the changes, you will see the difference in total expense, in cost per child in each age group, and you will also see how much additional revenue is needed beyond the current subsidy rate to cover the costs (found in the Gap – subsidy/true cost, per child table). It is recommended that you save a copy of the model with your default data, and then add an additional worksheet in Excel to track your results from different scenarios to more easily compare across scenarios.

## What scenarios can I explore when using this model?

The model can be used to answer several commonly asked questions, including:

- **How does the size of the program impact the cost?**
  - In the Center-based scenarios, you can change the number of classrooms in the program, and then compare results with a large, small, or medium size program.
  - In the FCC-based scenarios, the number of children can also be modified, within licensing regulations. The model can show the true cost per child if a program chooses to serve less than licensed capacity.

- **How does the cost of care vary by age of child, or based on whether a program serves different ages of children?**
  - Modifying the types of classrooms included in the model can demonstrate the impact on the cost of care when a program serves infants, toddlers, and preschool age children, when a program only serves infants and toddlers, or begins enrolling school-aged children.
  
- **What is the financial impact of smaller group sizes?**
  - Modifying the ratio and group size inputs in the model can demonstrate how the cost of care is impacted when programs operate with smaller ratios or group sizes than required by licensing, either due to space constraints or voluntarily so as to provide more individualized care and instruction. Simply change the ratio or group size and view the results at the bottom of the cost model.
  
- **How do higher salaries and inclusion of benefits impact the cost of care?**
  - With personnel expenses accounting for around 70% of the total expenses in a child care program, the salary and benefits chosen in the model have a significant impact on the cost of care. Changing the Salary selection in the model or entering your own salary options in the User selected area, can demonstrate the impact on the cost of care with different salary levels.
  - Similarly, the model can demonstrate the impact when the program covers the cost of health insurance and offers paid time off to staff and how much additional revenue is needed in order to cover these additional costs.
  
- **How does enrollment efficiency and bad debt impact financial stability?**
  - No program is 100% full 100% of the time, but programs can implement policies that promote close to full enrollment and maximize collection of expected revenues. By changing the enrollment efficiency and bad debt percentages the model can demonstrate the impact on program net revenue when enrollment is less than staffed capacity or when the program fails to collect family fees or expected public subsidies. Take a look at your enrollment records. Over the course of a year, are you typically 75% full? Are you curious about how much revenue you would receive if you were closer to 90% full? Use the cost model to see the difference.
  
- **How does the financial health of the program vary based on the number of subsidy children served?**
  - The number of tuition-paying children and children who are eligible for child care subsidy can be modified in the model to demonstrate the impact of different mixes of income.
  - When private pay tuition rates are higher than child care subsidy rates, programs often have to find a balance in how many subsidy-eligible children they can serve while still covering their costs. The model can help providers determine a sustainable mix of private pay families and subsidy-eligible children.

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*For more details on the methodology driving the Montana cost model, please review the technical manual and full user guide.*