

Break Even Analysis

A break-even calculator is an excellent tool to use when deciding if a new program is sustainable. For those of you familiar with your revenue projection, fixed costs, and variable costs, use this calculator to do a quick calculation to determine if your program will break even or to identify areas where you may need to make adjustments to start a financially solvent program. For those of you who need help thinking through your daily revenue and fixed and variable costs, fill out Section 6 of the Operational Plan Workbook and then populate this table.

Item	Daily Revenue	Daily Fixed Costs	Daily Variable Costs
Projected Daily Revenue	\$646		
Food Costs			\$226
Transportation		\$0	
Supplies		\$130	
Core Labor Costs		\$200	
Administrative Labor/Overhead Costs		\$20	
Benefits		\$58	
TOTALS		\$408	\$226

Break Even Formula

Break Even Point = Fixed Costs

$$1 - (\text{Variable Cost} \div \text{Revenue})$$

$$\text{BE} = \$408$$

$$1 - (\$226 \div \$646)$$

$$\text{BE} = \$408$$

$$1 - (.35)$$

$$\text{BE} = \$408$$

$$.65$$

$$\text{BE} = \$627$$

$$\$646 > \$627$$

This example was a calculation done by a new director looking to pilot the afterschool meal program in one of her schools. After speaking with the principal and the afterschool program director, she anticipated the program would serve 200 additional meals and the total fixed costs would be \$408. You will note that the program was in the same school as where the preparation took place so there is no charge for transportation. Additionally, the School Nutrition Director felt that the current staff could produce the additional meals and that she would not need any additional labor hours. However, for her calculation, she still included the core labor hours for the number of meals that the staff would produce by using her average Meals Per Labor Hour in the pilot school. The total variable costs were \$226, which was the average daily cost of her proposed 3-week cycle menu that included

similar food to her lunch program. In the end, this director projected to make \$18 a day on the program in the pilot school. However, she is likely to make even more than \$18 a day if her staff makes the additional 200 meals without any additional labor hours.

Important Terms for Break Even Analysis¹

Fixed Costs: These costs remain the same over time and do not change with sales volume or number of customers served. The most common fixed costs are central office costs, manager's salary, basic telephone charges, core staff, and trash removal

Variable Costs: These costs change with sales volume or number of customers served. The most common variable costs are food, supplies, paper goods, and some labor (temporary and part-time).

Contribution Margin: The percent of revenue that can be used to cover fixed costs. For example, if the contribution margin is 46%, then 46 cents of every dollar in revenue goes to pay the fixed costs.

¹ Rushing, K. (2017). *Essential KPIs for School Nutrition Success*. Hattiesburg, MS: Institute of Child Nutrition, Applied Research Division.