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# **Critical Food Service Budget Metrics**

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# Your Presenters

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# Affiliations and Financial Disclosures

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Carolyn Thomas

Affiliations: Nothing to disclose

Mary Darnton

Affiliations: Nothing to disclose



# Financial Management of Child Nutrition Program

## Food Service Fund vs. General Fund

- Separate accounts
- Food Service is a non-profit entity/break even program
- Food Service shortfalls made up from General Fund

A quality program is financially sustainable and nutritionally sound



# Critical Food Service Budget Metrics

## Overview: Identify and define metrics

- Average Daily Participation (ADP)
- Food Cost – Usage and Raw Cost
- Meal Equivalents
- Labor Productivity: Meals Per Labor Hour (MPLH)
- Break Even Analysis



# Building Blocks: Average Daily Participation (ADP)

## Importance and Usage of ADP Data

- Prevent over and under production of food
- Refine scheduling
- Track trends
- Identify areas for growth
- Measure growth over time
- Gauge customer satisfaction
- Evaluate new items



# Building Blocks: Average Daily Participation (ADP)

$$\text{ADP} = \frac{\text{\# of Meals served}}{\text{\# of Operating Days}}$$

$$\text{ADP Rate} = \frac{\text{Lunch (or Breakfast) ADP}}{\text{Average Daily Attendance}}$$



# Building Blocks: Average Daily Participation (ADP)

## Factors Affecting ADP

- Student age/grade level
- Percent Paid, Free, and Reduced-Price meals
- Location/Campus
- Outside competition
- Type of production (onsite vs. satellite)
- Price





# Building Blocks: Average Daily Participation (ADP)

## Example: ADP and ADP Rate Calculation

Building Name	Enrollment	ADA 93.80%	# of Bfast Meals Served	# of Lunch Meals Served	# of Operating Days	Bfast ADP	ADP Rate BFAST	Lunch ADP	ADP Rate LUNCH
Apple Elementary	534	501	1956	5638	18	109	21.7%	313	62.5%
Oak Middle School	1256	1178	3776	7405	18	210	17.8%	411	34.9%
Hightown High	2356	2210	4123	11332	18	229	10.4%	630	28.5%



# Building Blocks: Food Cost

## Why calculate the cost of food?

- To determine if costs are within budget guidelines
- To ascertain if there are sufficient funds to pay expenditures
- To establish the cost for each meal equivalent served
- To prevent waste and food theft through monitoring food usage

Raw Food Cost: the actual cost of each menu item or combination of items

Food Cost Percentage: Cost of Food Used or Purchased as a percentage of revenue



# Building Blocks: Food Cost

- Vitally important to determine what your Raw Food Cost is, by costing out each individual menu item; this is ongoing
- For budgeting, calculating total cost of food as a Percentage will allow for changing participation levels
- USDA's 2019 School Nutrition and Meal Cost Study revealed a national average food cost of 44.7%
- The average raw food costs in Michigan are up 35-40% (23-24)
- Industry Standard: 42-46% Food Cost



# Building Blocks: Food Cost Usage

	Beginning Food Inventory		\$10,000
+	Total Food Purchases	+	\$20,000
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=	Total Food Available	=	\$30,000
-	Ending Food Inventory	-	\$7,000
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=	Cost of Food Used	=	\$23,000



# Building Blocks: Meal Equivalents (MEQ's)

## Meal Equivalents

- Statistical tool to standardize unique mix of services into one unit
- Standard unit can be used to determine meal costs, labor ratios, and revenue
- Evaluate productivity and efficiency of program
- Help establish performance benchmarks
- Current MEF: 2023-24: \$4.6250



# Building Blocks: Meal Equivalents (MEQ's)

By converting food sales to meal equivalents, the school nutrition director can determine

- Meal Cost
- Labor Productivity Ratios (MPLH)
- Average revenue earned per meal/meal equivalent



# Building Blocks: Meal Equivalents (MEQ's)

Institute for Child Nutrition Meal Equivalent Ratios:

- **One** school lunch and/or supper equals **one** meal equivalent (1:1)
- **Three** school breakfasts count as **two** meal equivalents (3:2)
- **Three** snacks equal **one** meal equivalent (3:1)
- Non-program food sale revenue (a la carte, catering, vending, adult meals) is divided by the Meal Equivalency Factor (MEF).
- The MEF is established by MDE annually & is based on the current federal reimbursement rate plus USDA Foods value per meal.
- Current MEF: 2023-24: \$4.6250

*Note: Meal equivalent ratios may vary from state to state, Michigan uses 2:1 for Breakfast*



# Building Blocks: Meal Equivalents (MEQ's)

Meal Categories	Total Meal Units or Sales	Conversion Factor	Total Meal Equivalents	# of Serving Days
Student Lunch	1,000	1	1,000	5
Adult Lunch	100	1	100	5
Student Breakfast	3,500	0.67	2,333	5
Snacks	500	0.33	165	5
Supper	500	1	500	5
Non-Program Food Sales	\$1,000.00	\$4.625	216	5
<b>Totals</b>			<b>4,315</b>	





# Building Blocks: Meals Per Labor Hour (MPLH)

The importance of knowing MPLH standards

- Meal Equivalent calculation needed to determine MPLH
- Together they give an understanding of labor and food cost
- Monitor efficiency
- Manage staffing by reducing or increasing work hours
- Manage menu to control labor
- Creates incentive to increase participation



# Building Blocks: Meals Per Labor Hour (MPLH)

How to Calculate MPLH:

MPLH = Total meal equivalents ÷ Total number of labor hours

Factors Affecting Meals Per Labor Hour

- Number of serving lines/cashiers
- Service times and duration
- Employee skill/tenure
- Menu complexity
- Production and preparation time
- Equipment
- Kitchen layout



# Building Blocks: Meals Per Labor Hour (MPLH)

Calculating MPLH: Calculate current total hours of labor paid daily by building

Name of Building:	Number of Staff	Daily Hours	Total Number of Labor Hours	Total Average Daily Meal	Meals Per Labor Hour (by building)
Apple Elementary School	1	5	5		
	2	3.5	7		
Labor Hours from other buildings	1	2.5	2.5		
<b>Totals</b>			<b>14.5</b>	<b>331</b>	<b>22.8</b>
Oak Middle School	2	8	16		
	4	5	20		
	3	3.5	10.5		
<b>Totals</b>			<b>46.5</b>	<b>877</b>	<b>18.9</b>



## Staffing Guidelines for On-Site Production

Number of Meal Equivalents	Meals Per Labor Hour for Low and High Productivity			
	Conventional System		Convenience System	
	MPLH		MPLH	
	Low	High	Low	High
Up to 100	8	10	10	12
101 – 150	9	11	11	13
151 – 200	10-11	12	12	14
201 – 250	12	14	14	15
251 – 300	13	15	15	16
301 – 400	14	16	16	18
401 – 500	14	17	18	19
501 – 600	15	17	18	19
601 – 700	16	18	19	20
701 – 800	17	19	20	22
801 and up	18	29	21	23

Source: Pannell-Martin, D. & Boettger, J. (2014). *School food & nutrition service management for the 21st century*

(6th ed.). Aiken, South Carolina: Author.

- A conventional system is the preparation of some foods from raw ingredients on premises (e.g., using some baked goods, prepared pizza, and washing the dishes).
- A convenience system is using maximum amount of processed foods (e.g., using all baked goods, precooked chicken, ready-to-serve raw fruits and vegetables, portion-packed condiments, and washing only trays and using disposable dinnerware)



# Building Blocks: Break-Even Analysis

## What?

*Break-Even Analysis is the amount of sales needed to cover both fixed and variable costs/expenses.*

## Why?

*Use Break-Even Analysis for decision making and/or program expansion*

## When?

*Anytime – but particularly heading into Budget Season*

## How?



# Building Blocks: Break-Even Analysis

## Break-Even Analysis

*Break-Even Point (BEP) is the amount of sales needed to cover Fixed & Variable costs.*

*The BEP is the point where total Revenues & Total expenses are equal.*

### Fixed Cost Analysis:

Driver (\$20.5 x .5 hrs) Transportation of Food	\$10.25
On-Site Staff Hours (\$16.57/hr wage x 6.5 labor hours)	\$107.70
Subtotal	\$117.95
33% Fringe on Driver & Prep worker hours	\$41.28
<b>Total Fixed Costs</b>	<b>\$159.23</b>

Fixed Costs (Labor & Fringe) \$159.23

Variable Costs (Food, Disposables, Other) 48%

Fixed Costs ÷ Variable Costs = Break Even Point **\$331.73** **Break Even Point**  
 (\$159.23 ÷ 48% = \$331.73)

Reimbursement Rate \$4.33

\$331.73 (BEP) / \$4.33 (Reimb. Rate) = 77 meals per day  
 77 meals per day x \$4.33 = \$333.41 **77** **Required Avg Daily Participation**  
**\$333.41** **Required Avg Daily Revenue**



# Impact of Healthy School Meals for All on Budget Process

Free Meals changed everything!

How does this impact your budget?

**Metrics** will help create different scenarios

- Establish metrics based on actual performance from 2023-24
- Use closest relatable budget year for comparison or budgeting



# Using Data to Drive Decisions

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**So what now??**

Using them already? Great! Refine, Drill Down

Not using them? Start now!

We are here to help!





# We Remember...

20% of what we hear.

30% of what we see.

50% of what we see and hear.

70% of what we see, hear, and say.

90% of what we see, hear, say, and do.



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# **Thank You!**

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