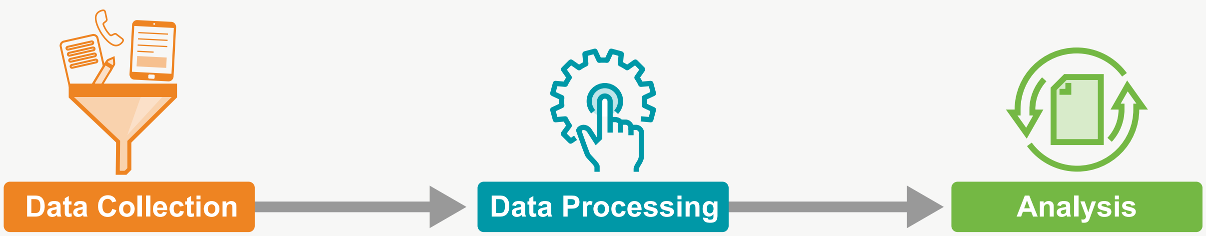
USDA United States Department of Agriculture

School Nutrition and Meal Cost Study

Methods Used to Estimate the Cost of Producing School Meals

This fact sheet summarizes the methods used in the School Nutrition and Meal Cost Study (SNMCS) to collect, process, and analyze data to estimate the cost of producing reimbursable school meals. The methods were based on approaches used in prior USDA studies.



Data Collection and Processing

To estimate the total cost of producing school meals, the study collected data on four key cost components:

Food Costs

Respondents: School nutrition managers and school food authority (SFA) directors

Data collected:

- Detailed data about the types and amounts of food used in reimbursable meals during one school week
- Documentation of the prices SFAs paid for these foods

Data processing:
Sum of (amounts of foods × unit prices) = food costs

Labor Costs

Respondents: SFA directors, district business managers, school nutrition managers, and principals

Data collected:

- For foodservice and non-foodservice staff who supported the meal programs:
  - Amount of time spent by type of activity (for example, purchasing food, producing meals, cleaning cafeterias)
  - Salary information

Data processing:
Staff labor hours × hourly salary = labor costs

Other Direct Costs and Indirect Costs

Respondents: SFA directors, district business managers, and State agencies

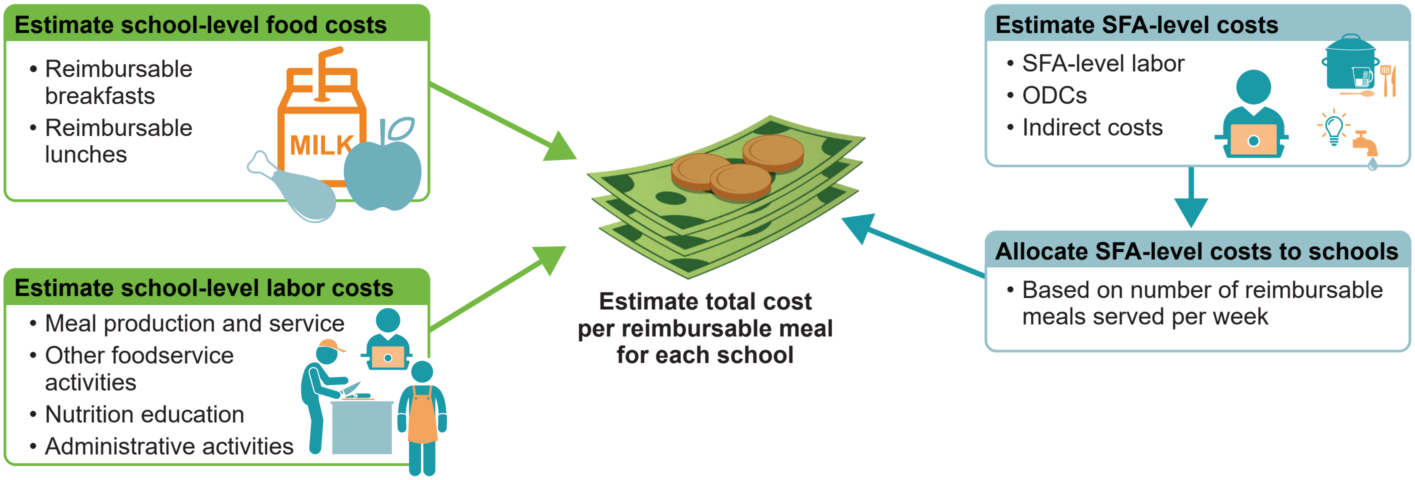
Data collected:

- Other direct costs (ODCs): Total annual costs for items other than food and labor (for example, equipment, non-food supplies, and purchased services)
- Indirect costs: District-level costs for utilities, space, and support services (if the SFA is charged for them)

The final analysis sample included 284 SFAs and 844 schools in those SFAs—an average of three schools per SFA.

Analysis

The analysis followed a multi-step process to (1) estimate school-level food costs, (2) estimate school-level labor costs, (3) estimate SFA-level costs for labor, ODCs, and indirect costs, and (4) combine school- and SFA-level costs to estimate the total cost per reimbursable meal for each school. Additional details about how each of these steps were implemented are available in a corresponding webinar and study report (see link at the bottom of the page).



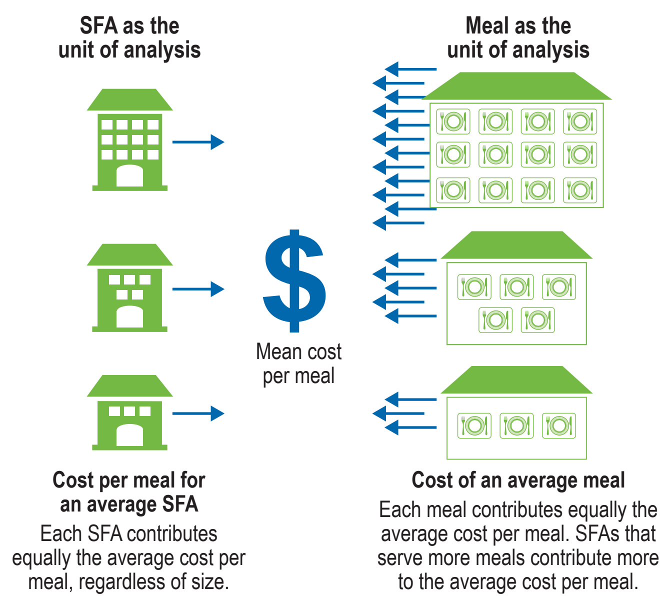
Meal costs were estimated in three different ways, to reflect:

1. Reported costs only (costs charged to the school foodservice account, such as food costs and labor costs for foodservice staff)—this is the metric that is used by most SFAs.
2. Unreported costs only (costs not charged to the school foodservice account, such as facilities costs paid by the district).
3. Full costs (including both reported and unreported costs).

Two different units of analysis were used to examine the national average cost per meal:

- **Using the SFA as the unit of analysis.** In this approach, each SFA contributes equally to computing the national average cost per meal.
- **Using the meal as the unit of analysis.** In this approach, SFAs that serve more meals are given more weight in determining the national average cost per meal. This results in a lower estimated average cost per meal because per-meal costs are lower in SFAs that produce more meals.

Most findings presented in the study's final report used the SFA as the unit of analysis. This metric is most relevant to understanding the cost of producing meals in the average SFA.



For more information

More information on the methods used to estimate the cost of producing school meals is available in the SNMCS methods report as well as Volume 3 of the SNMCS final report. To access reports, instruments, and webinars, visit www.fns.usda.gov/school-nutrition-and-meal-cost-study. To request access to public-use datasets, email: OPSDataRequest@usda.gov.