

SCHOOL NUTRITION AND MEAL COST STUDY: VOLUME 3 –
SCHOOL MEAL COSTS AND REVENUES (SUMMARY)

Background

The United States Department of Agriculture (USDA), Food and Nutrition Service's (FNS) School Nutrition and Meal Cost Study (SNMCS) is the first nationally representative comprehensive assessment of the National School Lunch Program (NSLP) and School Breakfast Program (SBP) that simultaneously examines the cost of producing school meals and the nutritional quality of those meals. In light of the widespread changes that have occurred in the school meal programs in recent years, there is particular interest in (1) comparing NSLP and SBP meal costs with both revenues from paid meals and reimbursements for free meals, and (2) comparing overall school food authority (SFA) costs versus revenues, to examine how the updated nutrition standards for reimbursable meals and competitive foods, together with other changes, may have affected SFAs' finances.

The study addresses a broad array of research questions of interest to stakeholders at the national, State, and local levels. Study findings are presented in four report volumes plus a summary report that highlights key findings across the volumes. Report Volume 3 (this volume) provides a detailed examination of the cost of producing reimbursable meals and the revenues from school foodservice during school year (SY) 2014–2015. The study examined the costs charged to SFAs (referred to as "reported costs"), as well as those incurred by the school district in support of SFA operations but not charged to the SFA (referred to as "unreported costs"). Together, the reported costs plus unreported costs are the "full cost" of meal production. From the SFAs' perspective, reported costs are the costs of running the foodservice operation that they expect to be able to pay from the foodservice account.

Study Methods

In SY 2014–2015, SFA financial statements, meal production records, recipes, invoices, and other documents were collected from a nationally representative sample of 310 SFAs and 972 schools. Information obtained from interviews with SFA and school district officials were used to calculate unreported costs and allocate labor costs among SFA activities. Samples of meals selected by students were observed to obtain data on the distribution of menu items sold in reimbursable and nonreimbursable meals.

Study Findings

In SY 2014-2015, reported costs of producing a reimbursable lunch in most SFAs exceeded the Federal free lunch subsidy. For the average SFA, the mean reported cost to produce a reimbursable lunch was \$3.81, compared to the average Federal free lunch subsidy of \$3.32. When weighted by the total reimbursable lunches served by each SFA, the mean reported cost to produce a reimbursable lunch was \$3.66, reflecting lower per-meal costs in SFAs that produce more meals.

Full costs to produce reimbursable lunches exceeded the free lunch subsidy by an even greater margin. For the average SFA, the full cost to produce a reimbursable lunch was \$6.02. When results are weighted by the total reimbursable lunches served by each SFA, the mean full cost to produce a reimbursable lunch was \$5.55.

In most SFAs, average reported and full costs to produce reimbursable breakfasts in SY 2014-2015 also exceeded Federal subsidy levels. For the average SFA, the mean reported cost to produce a reimbursable breakfast was \$2.72, and the full cost was \$4.19 – both greater than the average Federal subsidy (\$1.88) for a free reimbursable breakfast. When results are weighted by the total breakfasts served by each SFA, the mean reported costs of producing a reimbursable breakfast was \$2.34, and the mean full costs was \$3.50, again reflecting lower per-meal costs in SFAs that produce more meals.

Food and labor accounted for 90 percent of the average SFA's reported costs. Food costs (including USDA Foods) and labor costs each accounted for 45 percent of reported costs. All other costs (supplies, contract services, capital expenditures, etc.) accounted for the remaining 10 percent.

USDA subsidies, including cash reimbursements and USDA Foods, represent a significantly larger share of SFA revenues (63 percent) in SY 2014-2015 than in SY 2005-2006 (51 percent). Student payments for reimbursable meals represented about 20 percent of total SFA revenues. The student payments combined with revenues related to the sale of reimbursable meals, Federal (USDA) subsidies, State and local subsidies, and other sources, accounted for an average of 89 percent of total SFA revenues, while a la carte and other nonreimbursable food sales accounted for 11 percent (Figure 1a and Figure 1b).

Figure 1a. Composition of School Food Authority Revenues, School Year 2005-2006

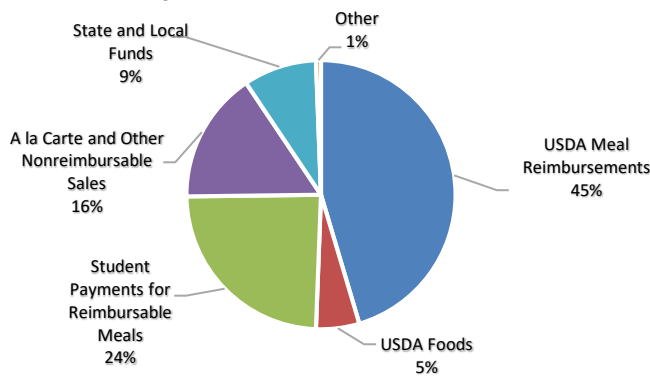
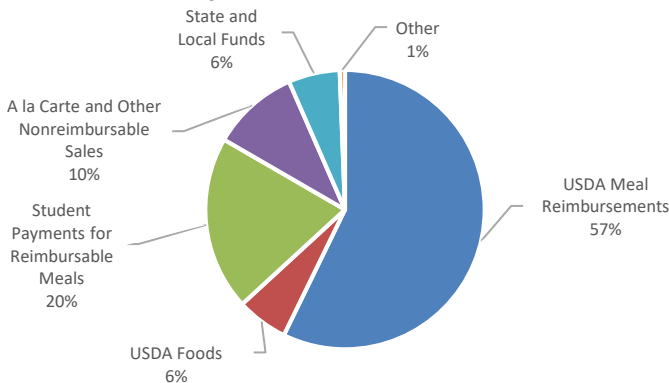
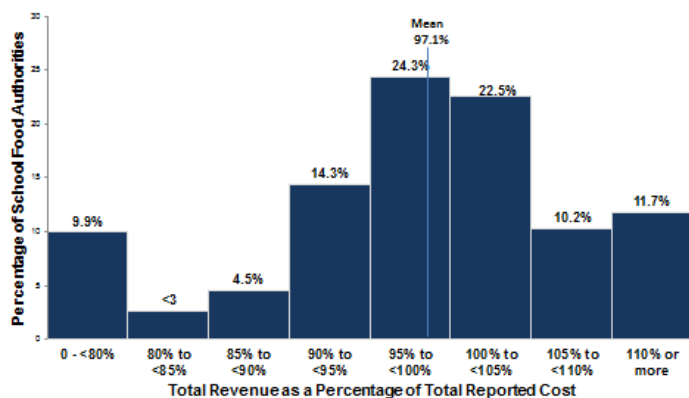


Figure 1b. Composition of School Food Authority Revenues, School Year 2014-2015



For the average SFA in SY 2014-2015, total revenues covered 97 percent of total reported costs, indicating that the average SFA operated at a small deficit. Smaller SFAs were more likely than large SFAs to operate at a deficit. About half of SFAs (47 percent) operated at a break-even point, defined as a total revenues/total cost ratio between 95 and 105 percent of total reported costs (Figure 2). This measure of the average SFA’s financial status did not change significantly over time.

Figure 2. Total Revenue as a Percentage of Total Reported Cost, School Year 2014-2015

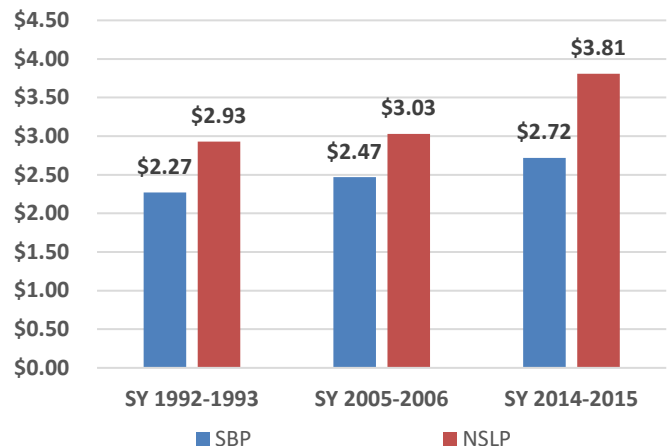


In SY 2014-2015, revenues generated from nonreimbursable food sales subsidized reimbursable meals. On average, across all SFAs, revenues from

reimbursable lunches fell short of the cost of producing them, covering only an average of 93 percent of reported costs. The gap between revenues and costs was even larger for SBP breakfasts—revenues from SBP breakfasts covered an average of 82 percent of reported costs. Net revenues from nonreimbursable food sales (a la carte, adult meals, and other nonreimbursable meals) supported school foodservice operations by partially offsetting the gap between costs and revenues for reimbursable meals.

The mean reported cost of producing reimbursable lunches and breakfasts, when adjusted for inflation, increased significantly since the last meal cost study conducted in SY 2005-2006. For the average SFA, the mean reported cost to produce a reimbursable lunch was \$3.81 in SY 2014-2015 – significantly higher than the average inflation-adjusted cost of an NSLP lunch in SY 2005-2006 (\$3.03). Similarly, the cost of the average SBP breakfast in SY 2014-2015 (\$2.72) was significantly higher than the average inflation-adjusted cost of an SBP breakfast in SY 2005-2006 (\$2.47) (Figure 3).

Figure 3. Mean Reported Cost per SBP Breakfast and NSLP Lunch, SY 1992-1993, SY 2005-2006, and SY 2014-2015 (2015 Dollars)



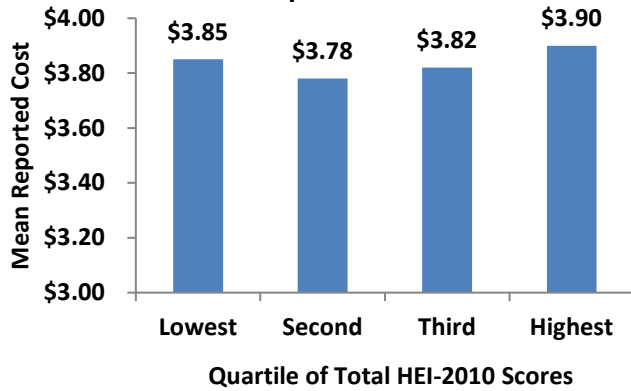
SBP - School Breakfast Program NSLP - National School Lunch Program
SY - School Year

Although the reported costs of NSLP lunches and SBP breakfasts have increased significantly, SFA revenues have increased to partially offset the rise in reported costs. The Paid Lunch Equity (PLE) provision and nonprogram food revenue requirement have contributed to increased revenue for the food service account.

The overall nutritional quality of NSLP lunches is not associated with the reported cost to produce these meals. NSLP lunches of higher nutritional quality, as measured by the Healthy Eating Index (HEI)-2010, did not cost significantly more to produce than those of lowest nutritional quality. The average reported cost for schools with lunches in the highest quartile of the HEI-2010 (scores between 85.2 and 97.9 out of a possible 100) was \$3.90 and was not statistically different than the reported cost of \$3.85

for schools with lunches in the lowest quartile of the HEI-2010 distribution (scores between 60.5 and 78.9) (Figure 4).

Figure 4. Regression-Adjusted Mean Reported Cost per NSLP Lunch by Quartile of Total Healthy Eating Index (HEI)-2010 Scores for NSLP Lunches Prepared



NSLP - National School Lunch Program

Note: Confidence intervals for these estimates are ± 25 -35 cents.

For More Information

U.S. Department of Agriculture, Food and Nutrition Service, School Nutrition and Meal Cost Study Final Report Volume 3: School Meal Costs and Revenues by Vinh Tran et.al. Project Officer, John Endahl, Alexandria, VA: April 2019. Available online at: www.fns.usda.gov/research-and-analysis.