

SECTION: 6 COSTS ASSOCIATED WITH NATIONAL IMPLEMENTATION

There are two sources of cost associated with national implementation of the measures tested in the SMPT. Increased participation in the school meals programs will result in increased Federal outlays to reimburse school districts for the additional meals. A second source of increased cost will result from the additional expenses associated with improved packaging and distribution practices. In this chapter, we estimate the additional costs of each.

6.1 Federal Outlays Associated with National Implementation

As indicated in Section 4, it is estimated that participation in school meals would increase by about 430,000 if these measures are implemented nationally. To estimate the incremental Federal costs associated with the reimbursement for the resulting meals, a number of assumption are required, including:

- The assignment of increased participation by lunch and breakfast
- The assignment of increased participation by free, reduced-price, and full-price meals
- The average number of serving days per school year

For the division by lunch and breakfast, we assume that 90 percent of the increased participation occurs at lunch and only 10 percent at breakfast. Unpublished ADP numbers collected as part of the SMPT and made available by Roper ASW indicate that this is an appropriate relationship. Given that changes in the menu are thought to be more influential in determining lunch than breakfast participation, this split makes sense. The attraction of flavored milks that are more frequently consumed with lunch than with breakfast would also suggest that a large share of the increased participation occurred at lunch.

In assigning meals to free, reduced, and full price, we have used the shares reported by FNS for SY 2001, distinguishing between breakfast and lunch. Thus, the meals are assigned as follows:

	<u>Free</u>	<u>Reduced-price</u>	<u>Full-price</u>
Breakfast	74.5%	8.6%	16.9%
Lunch	46.9%	9.5%	43.6%

It is further assumed that both breakfast and lunch are served 180 days each school year.

Using these assumptions and the per meal reimbursement rates effective for SY 2001/02 (including an entitlement of 15.5 cents/lunch for donated commodities) it is estimated that Federal outlays would have been about \$103.9 million higher due to the increased participation resulting from the SMPT measures (Table 9).

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Table 9: Estimated Additional Federal Outlays Resulting from Increased Participation in the NSLP and SBP

Meal type	Additional lunches		Additional breakfasts	
	Meals (million)	Outlays (million \$)	Meals (million)	Outlays (million \$)
Free	32.7	68.3	5.8	6.6
Reduced-price	6.6	11.2	0.7	0.6
Full-price	<u>30.4</u>	<u>6.1</u>	<u>1.3</u>	<u>0.3</u>
Total	69.7	85.6	7.8	7.5

Total additional outlays:

Lunch reimbursement	\$85.6m
Breakfast reimbursement	7.5
Donated commodities	<u>10.8</u>
	\$103.9 m

6.2 Costs for Improved Packaging and Distribution Practices

Offering students a more appealing product has its costs. Compared to the paper cartons that have been used for many years, the plastic containers used in the pilot have higher material, labeling, and processing costs.

On the basis of interviews conducted with milk processors participating in the pilot, researchers from Beverage Marketing Corporation concluded that the new products cost an additional 5.4¢ to 7.4¢ per container to process and package, compared to the traditional product. The container accounted for about one-third of the incremental cost with the remainder due to labeling, additional labor requirements, and slower line speeds.

Recognizing that some of the incremental costs experienced during the pilot were due to start-up and that efficiencies could be realized through further modifications in the materials and techniques being used, processors were asked to estimate the potential cost-savings that would result from these changes. In combination, it was estimated that processors could reduce the incremental cost by 50 percent or more. With these efficiencies in place, BMC estimated that the new products would add 2.2¢ to 4.2¢ to the cost of production.

To estimate the national impact of this cost increment, it is necessary to estimate the number of units of fluid milk that would be sold through the school meals program

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following adoption of the new merchandising measures. Using the estimates derived in Chapter 3, we convert the estimated national sales (3,661 million pounds) to 8-ounce serving units (7,322 million units). Applying minimum and maximum estimates of incremental cost yields a range in added processor costs of \$161.1 million to \$307.5 million.

Equipment installed in the test schools also contributed importantly to the outcome and would be a required investment for national implementation. This included expenditures for coolers, display cases, and vending machines. In total, 120 pieces of equipment were installed in 97 schools at a cost of \$408,950. With their smaller enrollments, elementary schools required fewer pieces and less expensive equipment, on average. Elementary schools averaged 1.8 pieces of equipment per school at an average cost of \$1,385 per piece. For secondary schools, the comparable requirements were 2.9 pieces at an average cost of \$1,728 per piece.

Applying these averages to the total number of public schools participating in the National School Lunch Program in School Year 1999/2000 yields the following estimate:

elementary	–	50,140 schools	X	1.8 pieces	X	\$1,385	=	\$125.0m
secondary	–	27,104 schools	X	2.9 pieces	X	\$1,728	=	\$135.8m
other ¹	–	5,954 schools	X	1.8 pieces	X	\$1,385	=	<u>\$14.8m</u>
								\$275.6m

Assuming an average useful life of 7 years and a straight-line depreciation of the expenditure, the estimated annual cost of the required equipment is approximately \$39.4mil.

¹ “Other” schools have grade configurations that do not conform to the definition of either “elementary” or “secondary,” e.g. schools with K-12. Since their average enrollment is only about two-thirds the average enrollment of elementary schools, we have assumed equipment requirements similar to those of elementary schools