



Report to the Chairman, Committee on
Education and the Workforce, House of
Representatives

September 2015

SCHOOL NUTRITION

USDA Has Efforts Underway to Help Address Ongoing Challenges Implementing Changes in Nutrition Standards

Accessible Version

GAO Highlights

Highlights of [GAO-15-656](#), a report to the Chairman, Committee on Education and the Workforce, House of Representatives

Why GAO Did This Study

The Healthy, Hunger-Free Kids Act of 2010 required USDA to update nutrition standards for school lunches and breakfasts and add standards for other food sold in schools, known as competitive foods. In response, USDA set new nutrition requirements, including limits on calories, sodium, and fats. Previously, GAO reported on the implementation of changes to school lunches in school year 2012-2013. Since then, additional requirements for lunches have taken effect, as well as new requirements for breakfasts and competitive foods. GAO was asked to review implementation of the nutrition changes to school food.

GAO reviewed (1) recent trends in school meals participation, (2) challenges SFAs faced in implementing the new requirements for school meals, (3) challenges SFAs and districts faced in implementing new requirements for competitive foods, and (4) USDA assistance in implementing the changes.

GAO reviewed relevant federal laws, regulations, and guidance; analyzed federal school meals participation data from school years 2000-2001 through 2013-2014; reviewed implementation in the same eight school districts visited for the report on school year 2012-2013 lunch changes, selected to provide variation in geographic location and certain district and food service characteristics; and interviewed USDA and state officials, as well as food industry and stakeholder groups.

What GAO Recommends

GAO is not making any recommendations.

View [GAO-15-656](#). For more information, contact Kay E. Brown, (202) 512-7215, brownke@gao.gov

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What GAO Found

Nationwide, participation in the National School Lunch Program declined by 1.4 million children (or 4.5 percent) from school year 2010-2011 through school year 2013-2014, to 30.4 million children. The participation rate of enrolled students also declined, from 62 to 58 percent. Seven of eight states that GAO interviewed reported that challenges with student acceptance of changes made to comply with new federal nutrition requirements contributed to the decrease. Also, four of eight states noted that recent required increases in the price of lunch may have decreased participation among some students. At the same time, nationwide participation in the breakfast program continued its trend of steady increases, which can be explained, in part, by program expansion into more schools.

The U.S. Department of Agriculture (USDA), states, and the eight School Food Authorities (SFAs) GAO reviewed, which administer meal programs in school districts, reported some ongoing challenges with meal requirements; however some SFAs noted success in certain areas. For example, five of eight SFAs, described continuing challenges with plate waste, that is, students taking required foods and then not eating them. However, officials in the other three, as well as GAO's mealtime observations across the two school years, suggest that plate waste may be decreasing in some SFAs. Also, five of the SFAs reported difficulty serving certain required food items in ways that appeal to students, though others reported some success. Regarding sodium, SFA, state, and food company officials expressed concerns about meeting future targets, which USDA plans to phase in over the next 8 years. To address these concerns, USDA is gathering information from SFAs and the food industry on progress toward reducing sodium levels in school meals.

New requirements for competitive foods—foods sold to students in schools other than through the school meals programs—also challenged SFAs and schools during school year 2014-2015. Six of eight SFAs reported difficulty procuring items that met the new requirements, particularly at the beginning of the school year. Also, four SFAs and two school groups selling competitive foods in the eight districts GAO reviewed reported decreased revenues due to lower student demand for products that comply with the requirements. In addition, SFA and state officials reported issues with ensuring compliance and providing oversight of these sales. To identify and help address such issues, USDA recently required states to begin including competitive foods in their periodic reviews of SFAs.

Officials from five states and four SFAs reported that USDA's assistance in implementing these changes has been helpful or improving over time; however, some SFAs noted problems with the amount or clarity of the guidance. USDA has initiated efforts to assist SFAs, such as by conducting webinars on a variety of topics, including menu planning. At the same time, officials from three of eight SFAs said USDA guidance on the new requirements—comprising nearly 4,700 pages issued from January 2012 through April 2015—has been challenging to keep up with. However, according to USDA, the substantial changes to nutrition standards have already occurred, and therefore, the need for additional guidance should decrease in future years. Moreover, USDA has provided other types of assistance that help clarify the guidance, including initiatives that facilitate the sharing of best practices and provide peer mentoring.

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Abbreviations

CEP	Community Eligibility Provision
SFA	school food authority
SNA	School Nutrition Association
USDA	U.S. Department of Agriculture

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September 14, 2015

The Honorable John Kline
Chairman
Committee on Education and the Workforce
House of Representatives

Dear Mr. Chairman:

In fiscal year 2014, the National School Lunch Program and the School Breakfast Program, which are intended to promote the health and well-being of schoolchildren, provided school meals to an estimated 30.4 million and 13.6 million children, respectively, supported in part through federal subsidies and commodities totaling \$16.3 billion. The U.S. Department of Agriculture (USDA) administers the school meals programs at the federal level and, under agreements with state agencies, local school food authorities (SFA)—which are generally aligned with school districts—serve meals to children in schools. Federal standards for the content of school lunches and breakfasts have existed since the programs were created; however, the Healthy, Hunger-Free Kids Act of 2010, which most recently reauthorized school meal programs, required that these standards be updated. More specifically, the Act required USDA to update the standards for the content of school meals based on recommendations from the Institute of Medicine.¹ The Act also required USDA to establish nutrition standards for all other foods and beverages sold in schools, commonly known as competitive foods.² The changes to lunch, breakfast, and competitive foods were required in order to improve

¹ Pub. L. No. 111-296, § 201, 124 Stat. 3183, 3214. The Act required USDA to update the meal patterns and nutrition standards for the National School Lunch Program and School Breakfast Program based on recommendations issued by the Food and Nutrition Board, which is part of the National Academies' Institute of Medicine. Throughout this report, we refer to these as the Institute of Medicine's recommendations, on which USDA based the lunch and breakfast content and nutrition requirements.

² Pub. L. No. 111-296, § 208, 124 Stat. 3183, 3221. The Act required USDA to establish standards for competitive foods that are consistent with the most recent Dietary Guidelines for Americans, taking into consideration authoritative scientific recommendations for nutrition standards and other factors.

children's diets and help reduce childhood obesity. USDA has established these new requirements over the last few years.³

In the 2012-2013 school year, as many of the new nutrition standards for lunches were implemented, both USDA and the media reported that states, SFAs, school officials, parents, and students raised issues about the lunch changes. In June 2013 and January 2014, we reported to Congress on challenges SFAs encountered in implementing the lunch changes and recommended that USDA make modifications to some of the new lunch requirements and take steps to improve program oversight.⁴ Subsequently, additional nutrition requirements for lunches have taken effect, as well as new nutrition requirements for breakfasts and competitive foods. Accordingly, you asked us to review the current status of local implementation of the school meals and competitive food nutrition requirements.

This report assesses: (1) recent trends in school meals participation; (2) challenges that SFAs reported they continued to face in implementing the new requirements for school lunch and school breakfast; (3) challenges SFAs and schools reported they have faced during their first year implementing the new requirements for competitive foods; and (4) USDA's efforts to assist with implementation of the new requirements for school lunch, school breakfast, and competitive foods.

For this study, we gathered information through several methods. First, we reviewed relevant federal laws, regulations, and guidance; analyzed national school meals participation data from school years 2000-2001 through 2013-2014; and interviewed USDA officials. Second, we reviewed implementation in eight school districts across the country and talked with their state agency officials who have knowledge of the experiences of multiple school districts across their states. In addition, we

³ These requirements were phased-in, generally beginning in school year 2012-2013 for lunch, school year 2013-2014 for breakfast, and school year 2014-2015 for competitive foods.

⁴ In GAO, *School Lunch: Modifications Needed to Some of the New Nutrition Standards*, [GAO-13-708T](#) (Washington, D.C.: June 27, 2013) we made two recommendations on nutrition standards which are discussed later in this report. In GAO, *School Lunch: Implementing Nutrition Changes Was Challenging and Clarification of Oversight Requirements is Needed*, [GAO-14-104](#) (Washington, D.C.: January 28, 2014) we made two additional recommendations regarding program oversight. USDA generally agreed with both of these and has indicated they are taking steps to address them.

met with industry and stakeholder groups that vary in their perspectives on the nutrition standards and implementation of the changes. More specifically, to assess national school meals participation, we analyzed USDA's national data on meals served in the National School Lunch Program and the School Breakfast Program and reviewed the department's method for determining school meals participation from these data. To assess the reliability of the data, we interviewed USDA officials, reviewed related documentation, and compared the data we received from USDA with its published data. We determined that these data and the participation methodology are sufficiently reliable for the purposes of this report.⁵ To gather information on challenges directly from those affected by the changes to food in schools, we contacted the eight school districts in eight states across the country that we had visited as part of our prior study of implementation of the new school lunch requirements in school year 2012-2013. From December 2014 through March 2015, we visited seven of the districts and gathered information from the eighth district through phone interviews.⁶ The school districts selected for these visits provide variation across geographic location, district size, and certain characteristics of the student population and district food services. In each district we visited, we met with SFA staff at the district and school levels, school administrators, and students, and we also observed lunch and breakfast, as well as competitive food sales, in at least two schools of different grade levels, for a total of 14 schools. Contacting these districts and states a second time provides a short-term longitudinal perspective on challenges related to implementation of the phased-in changes. We cannot generalize our findings from the site visits beyond the school districts we visited or the findings from states beyond the eight states we interviewed. To understand the scale and scope of assistance USDA has provided, we interviewed USDA officials, reviewed relevant agency documents, talked with states and SFAs about their perspectives on the assistance provided, and analyzed guidance memos

⁵ We used the same approach to analyze school meals participation data as was used for our 2014 report. For more information on our analysis of participation data, see appendix I.

⁶ We conducted site visits to Carlisle Area School District (PA), Chicago Public Schools (IL), Coeur d'Alene School District (ID), Fairfax County Public Schools (VA), Irving Independent School District (TX), Mukwonago Area School District (WI), and Spokane Public Schools (WA). We were unable to visit Caddo Parish Public Schools (LA) because of weather-related school closings, but we gathered information from the district's SFA director and officials from two schools over the phone.

USDA issued on the nutrition changes from October 2013 through May 2015. We chose this time period in order to continue our previous analysis of this guidance, as in our prior report on the school lunch nutrition changes, we analyzed guidance issued from January 2011 through September 2013.

For additional information on the report's scope and methodology, see appendix I.

We conducted this work from November 2014 through August 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

The two largest federal school meals programs, the National School Lunch Program, established in 1946, and the School Breakfast Program, permanently established in 1975,⁷ aim to address problems of hunger, food insecurity, and poor nutrition by providing nutritious meals to children in schools. Although federal requirements for the content of school meals have existed since the programs began, as research has documented the increasing incidence of children who are overweight and obese in the United States, the federal government has taken steps to improve the nutritional content of meals. The Healthy, Hunger-Free Kids Act of 2010 required USDA to update federal requirements for school lunches, breakfasts, and to establish standards for competitive foods—foods sold to children in schools other than through the school meals programs. USDA issued final regulations that made changes to many of the meal content and nutrition requirements in January 2012, and many of the new lunch requirements were required to be implemented beginning in school year 2012-2013, with changes to breakfast generally beginning in school year 2013-2014.⁸ USDA issued interim final regulations that established

⁷ The School Breakfast Program began as a pilot project in 1966.

⁸ Nutrition Standards in the National School Lunch and School Breakfast Programs, 77 Fed. Reg. 4088 (Jan. 26, 2012) (codified at 7 C.F.R. pts. 210 and 220).

new nutrition standards for competitive foods in June 2013, and USDA required them to be implemented beginning in school year 2014-2015.⁹

For lunches, USDA regulations implementing the Healthy, Hunger-Free Kids Act of 2010 made changes to meal components and nutrition standards. Regarding meal components—fruits, vegetables, meats, grains, and milk—lunches must now include fat-free or low-fat milk and both fruit and vegetable choices.¹⁰ While students may be allowed to decline two of the five lunch components they are offered, they must select at least one half cup of fruits or vegetables as part of their meal in order for it to be reimbursable.¹¹ (See fig. 1.) For nutrition standards, the regulations include minimum and maximum calorie levels for lunches and require that lunches do not include trans fat and contain reduced amounts of sodium and saturated fat.

⁹ National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010, 78 Fed. Reg. 39,068 (June 28, 2013) (codified at 7 C.F.R. pts. 210 and 220).

¹⁰ For the fruit and vegetable meal components, total weekly juice offerings may not exceed one-half the total fruits and vegetables offered over the week. USDA regulations also specified additional requirements for maximum portions of meats and grains, however, USDA temporarily lifted these requirements for school years 2012-2013 and 2013-2014 and issued regulations in January 2014 that removed the requirement that SFAs comply with these maximums. See [GAO-14-104](#). We had previously recommended that the meat and grain maximum requirements be permanently removed, see [GAO-13-708T](#).

¹¹ The offer versus serve policy for lunch has been required for senior high schools and optional for all other schools since 1975. This policy provides an alternative to requiring students to be served all components.

Figure 1: Examples of Lunches Provided Pursuant to the New Content and Nutrition Requirements



Baked potato with toppings, salad with dressing, pretzel, cookie bar, juice, and milk.

Pizza, potato fries, and milk.

Chicken sandwich and a banana.

Chicken sandwich, garden salad, and milk.

Spaghetti and sauce, salad, garlic bread, strawberry fruit cup, and milk.

Source: GAO. | GAO-15-656

Note: These are examples of lunches selected by students from meal components offered. These lunches all include at least the required minimum of three meal components under the offer versus serve policy and some include four or five meal components.

USDA regulations also phased in some of the new lunch requirements. For example, in school year 2012-2013, USDA initially required that at least 50 percent of grain products offered in lunches had to be whole grain-rich—containing at least 50 percent whole grains—during the school week. In school year 2014-2015, the whole grain-rich requirement was increased to 100 percent of grain products, although SFAs may

request temporary exemptions from this requirement from their states.¹² USDA regulations also phase in requirements for sodium reductions in lunches. The Target 1 sodium limits became effective in school year 2014-2015, and future sodium reductions are set for school years 2017-2018 (Target 2) and 2022-2023 (Target 3). (See table 1.) However, USDA cannot implement these future reductions until the latest scientific research establishes that they are beneficial to children.¹³

Table 1: Sodium Targets for Lunch

Grade Group	Target 1: meet by July 1, 2014 (School Year 2014-2015) (mg)	Target 2: meet by July 1, 2017 (School Year 2017-2018) (mg)	Target 3: meet by July 1, 2022 (School Year 2022-2023) (mg)
K-5	<= 1,230	<= 935	<= 640
6-8	<= 1,360	<= 1,035	<= 710
9-12	<= 1,420	<= 1,080	<= 740

Source: USDA | GAO-15-656.

For breakfast, USDA’s regulations establish three meal components—fruit, grains, and milk—and require that breakfasts include whole grain-rich foods and only fat-free or low-fat milk. (See fig. 2.) Starting in school year 2014-2015, schools must offer one cup of fruit with each breakfast each day and may offer vegetables in place of fruit.¹⁴ If a school chooses to offer four or more food items, a child must take at least three, including at least one half cup of fruit or vegetable substitute, in order to have a

¹² In May 2014, in advance of school year 2014-2015, USDA acknowledged that some SFAs were struggling with whole grain-rich products, particularly pasta. USDA allowed states to approve temporary exemptions for school years 2014-2015 and 2015-2016 from the requirement for pasta upon request from SFAs who could demonstrate hardship in finding whole grain-rich pasta products that students found acceptable. Subsequently, in February 2015, as required by the Consolidated and Further Continuing Appropriations Act, 2015, Pub. L. No. 113-235, § 751, 128 Stat. 2130, 2171. USDA permitted states to approve temporary exemptions to SFAs from the requirement for any grain products for school years 2014-2015 and 2015-2016, upon request from SFAs that could demonstrate hardship.

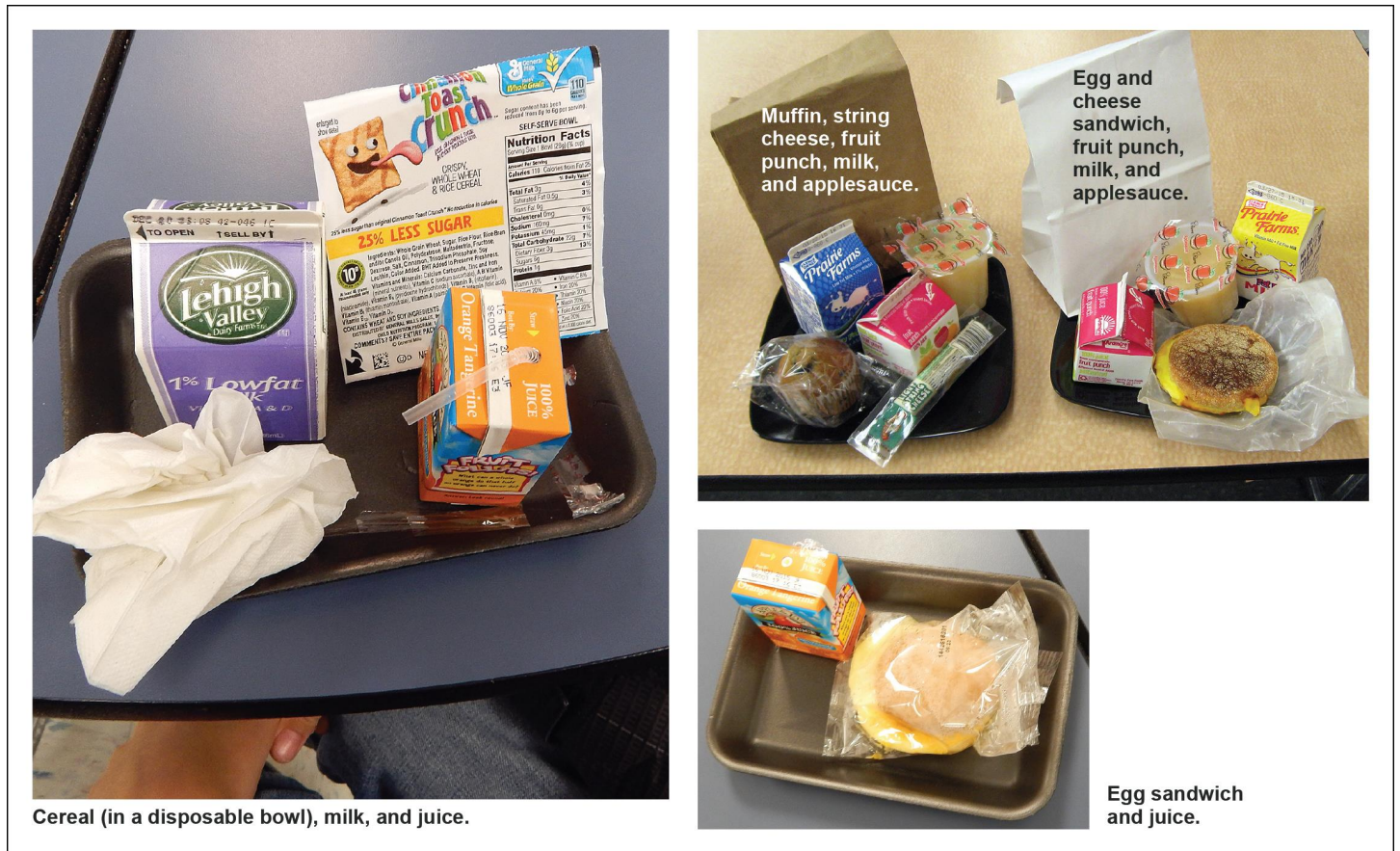
¹³ The Consolidated and Further Continuing Appropriations Act, 2015, Pub. L. No. 113-235, § 752, 128 Stat. 2130, 2171 provides that USDA cannot use its appropriations to implement requirements to reduce sodium below Target 1 until the latest scientific research establishes that the reduction is beneficial for children.

¹⁴ For breakfast, as well as for lunch, fruit juice may be offered as the fruit component. However, total weekly juice offerings may not exceed one-half the total fruits and vegetables offered over the week.

reimbursable meal.¹⁵ In addition, the new nutrition standards include minimum and maximum calorie levels for breakfasts and require that breakfasts include no trans fat and reduced amounts of sodium and saturated fat. Similar to lunch, the whole grain-rich requirement was phased in, with exemptions available, and the first sodium target was effective in school year 2014-2015, with further reductions in future years. (See table 2.)

¹⁵ The offer versus serve policy for breakfast has been optional for schools since 1985. To exercise the offer versus serve option at breakfast, an SFA must offer a minimum of four food items daily as part of the required components. This policy provides an alternative to students being served all components.

Figure 2: Examples of Breakfasts Provided Pursuant to New Content and Nutrition Requirements



Cereal (in a disposable bowl), milk, and juice.

Muffin, string cheese, fruit punch, milk, and applesauce.

Egg and cheese sandwich, fruit punch, milk, and applesauce.

Egg sandwich and juice.

Source: GAO. | GAO-15-656

Note: These are examples of breakfasts selected by students from food items offered. These breakfasts all include at least the required minimum of three food items under the offer versus serve policy, and some include more.

Table 2: Sodium Targets for Breakfast

Grade Group	Target 1: meet by July 1, 2014 (School Year 2014-2015) (mg)	Target 2: meet by July 1, 2017 (School Year 2017-2018) (mg)	Target 3: meet by July 1, 2022 (School Year 2022-2023) (mg)
K-5	<= 540	<= 485	<= 430
6-8	<= 600	<= 535	<= 470
9-12	<= 640	<= 570	<= 500

Source: USDA | GAO-15-656.

For competitive foods, USDA regulations establish nutrition standards for foods or beverages, other than school meals, sold to children in schools during the school day, by the SFA or school groups. Competitive food sales may take place at fundraisers on the school campus, as well as at specific venues in schools, such as vending machines, school stores, and a la carte lines in the cafeteria, through which the SFA sells individually priced food and beverage items.¹⁶ The new federal competitive food requirements include limits on calories, sugars, total and saturated fat, trans fat, and sodium, establish new standards for beverages, and add whole grain-rich requirements.¹⁷ Competitive foods sold in schools generally must meet these requirements during the school day, which the regulations define as beginning at midnight and ending 30 minutes after the end of the school day. However, USDA has provided flexibility to states to grant exemptions from the competitive food requirements for infrequent fundraisers held during the school day, allowing states to set the number of fundraisers schools can hold in which the food items being sold do not have to meet competitive food requirements.¹⁸ Outside of the school day, food sales also do not have to comply with the requirements. Before the Healthy, Hunger-Free Kids Act of 2010, competitive foods were largely unregulated at the federal level, with only minimal restrictions prohibiting the sale of certain competitive foods, known as foods of

¹⁶ Side items in meals, when sold a la carte, generally must meet all competitive food requirements in addition to those met as part of a school meal. For example, a vegetable salad with dressing served as part of a lunch, as well as a la carte, has to meet the requirements for the vegetable component of a lunch, be factored into the nutrition standards for the lunch as a whole, and meet the nutrition standards for competitive food items individually. However, entrée items that make up part of a school meal are exempted from competitive food requirements, and can be purchased a la carte on the day of or the day immediately following when the menu item is included as part of a breakfast or lunch.

¹⁷ Beverages can include water or carbonated water with no size limits, as well as varieties of milk and 100 percent fruit/vegetable juice (with or without carbonation) less than or equal to 8 fluid ounces at elementary schools and up to 12 fluid ounces at middle and high schools. In addition, for high schools, other flavored and/or carbonated beverages, with or without caffeine, are allowed for beverage sizes up to 12 fluid ounces or up to 20 fluid ounces depending on calorie limitations.

¹⁸ However, exempted fundraiser food and beverage items may not be sold in competition with school meals in the food serving area during the meal service.

minimal nutrition value, during meal periods in school cafeterias and other food service areas.¹⁹

National School Lunch Participation Continued to Decline in School Year 2013-2014, While Breakfast Participation Continued to Increase

School Lunch Participation Continued to Decline in School Year 2013-2014

Nationwide, participation in the National School Lunch Program has declined in recent years after having increased steadily for more than a decade. In our January 2014 report, we found that total student participation in the National School Lunch Program—the total number of students who ate school lunches—dropped by a cumulative 1.2 million students (or 3.7 percent) from school years 2010-2011 through 2012-2013, with most of the decrease occurring during school year 2012-2013.²⁰ According to our recent analysis of USDA data, school lunch participation continued to decline during school year 2013-2014, reaching a cumulative decline of 1.4 million students (or 4.5 percent) since school year 2010-2011.²¹ (See fig. 3.) The participation rate, which measures the

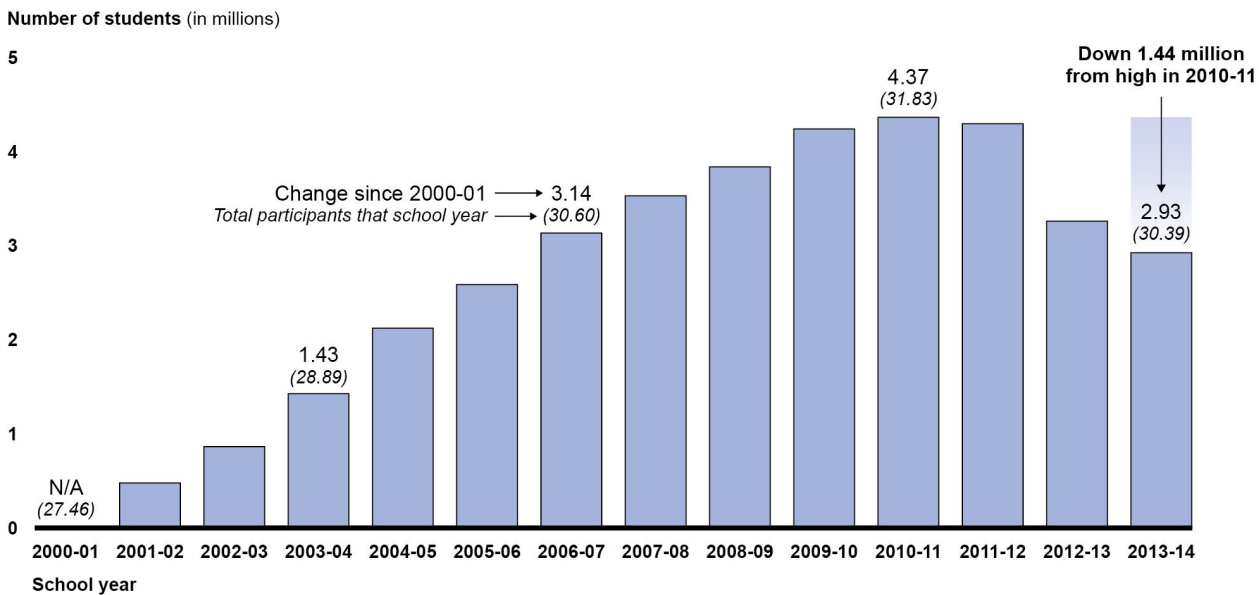
¹⁹ Foods of minimal nutrition value, as defined by USDA, included soda, chewing gum, and hard candy, for example. For more information, see GAO, *School Meal Programs: Competitive Foods Are Widely Available and Generate Substantial Revenues for Schools*, [GAO-05-563](#) (Washington, D.C.: August 8, 2005).

²⁰ See [GAO-14-104](#). Each month, states report to USDA the number of lunches served in the program and USDA adjusts the data to determine the number of students participating.

²¹ USDA also provided preliminary data for the first five months of school year 2014-2015. According to USDA officials, these data are subject to revision and should not be considered final. Although preliminary, these data suggest that participation in the National School Lunch Program did not continue to decline in the first five months of the school year as compared to the same five months in the prior school year.

proportion of all students in schools that take part in the National School Lunch Program who ate school lunches, also declined during this period, falling from 62 percent in school year 2010-2011 to 58 percent in school year 2013-2014.

Figure 3: Participation Changes Since School Year (SY) 2000-2001 in the National School Lunch Program for SY 2000-2001 through 2013-2014



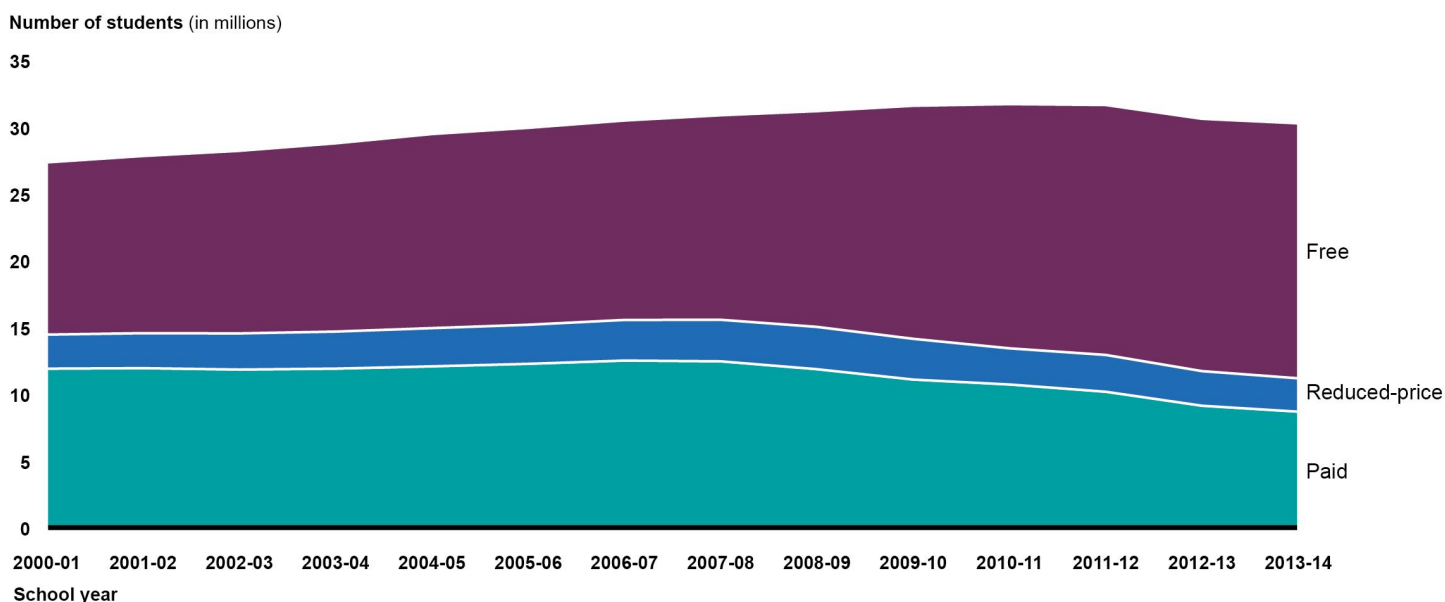
Source: GAO analysis of United States Department of Agriculture (USDA) data. | GAO-15-656

Note: Each month, states report to USDA the number of lunches served in the program and USDA adjusts the data to determine the number of students participating. Our analysis of school year data represents an average of 9 months—September through May—for each school year.

The decrease in the total number of students eating school lunches during the last three school years was driven primarily by a decrease in students paying full price for meals. Based on family income, children who participate in school meals programs either pay full price or qualify to

receive free or reduced-price meals.²² The number of students paying full price for meals declined by two million, a decrease that could be caused by students choosing to no longer purchase lunch at school or by students becoming eligible for free or reduced-price meals.²³ The decline in students paying full price for lunch exceeded the increase in the number of students eating free lunches during the same time period. (See fig. 4.)

Figure 4: Participation in the National School Lunch Program by Category of Student, School Years 2000-2001 through 2013-2014



Source: GAO analysis of United States Department of Agriculture (USDA) data. | GAO-15-656

²² SFAs generally determine the prices they charge for school meals, but children are eligible for free meals if their families have incomes at or below 130 percent of the federal poverty guidelines and reduced-price meals if their families have incomes between 130 and 185 percent of the federal poverty guidelines. SFAs may charge a maximum of \$0.40 for a reduced-price meal. SFAs receive federal reimbursements for all lunches served to eligible students that meet federal lunch component and nutrition requirements, regardless of whether children pay for the meals or receive them for free. The amount of federal reimbursement that SFAs receive for each meal served to a child is based on the eligibility category of the child and the proportion of the SFA's total lunches that are served to children eligible for free and reduced-price meals.

²³ Enrollment changes may also affect the number of students who can participate in school meal programs, however, enrollment increased over this period.

Note: Each month, states report to USDA the number of lunches served in the program by category of student and USDA adjusts the data to determine the number of students participating. Our analysis of school year data represents an average of 9 months—September through May—for each school year.

State and SFA officials told us that several factors likely influenced decreases in participation in the school lunch program, though the extent to which each factor affected participation is unclear. For example, officials from all the SFAs we interviewed during school year 2012-2013 reported that student acceptance of the lunch content changes was a challenge, which we heard again from officials we interviewed during school year 2014-2015. Further, officials from seven of the eight states we interviewed in school year 2014-2015 reported that the decreases in lunch participation were influenced by student acceptance of the changes made to comply with the new lunch content and nutrition standards. According to officials from four states, another factor that may have led to lower participation among students paying full price for lunch is the federally-required increase in the prices of paid lunches in certain districts—also known as paid lunch equity.²⁴ These federally-required price increases may have resulted in students who previously purchased school lunches deciding not to purchase lunch at the higher price.

The increase in lunch participation by students who qualify for free lunches may be influenced by several factors. USDA has reported that the introduction of the Community Eligibility Provision, which allows qualifying, high-poverty schools to provide free meals to all students, is intended to remove the stigma of receiving free meals and reduce administrative barriers to student participation.²⁵ Other factors that may have influenced the increase in participation by students who receive free

²⁴The Healthy, Hunger-Free Kids Act of 2010 contained a new revenue requirement, known as paid lunch equity, related to the prices SFAs set for paid lunches. It was developed, in part, because of a USDA study that found the average prices charged for paid lunches by some SFAs were less than the cost of producing those meals. In 2014, we reported that the paid lunch equity requirement caused many SFAs to raise the price of their paid lunches beginning in school year 2011-2012. See [GAO-14-104](#).

²⁵ The Community Eligibility Provision (CEP), authorized as a part of the Healthy, Hunger-Free Kids Act of 2010, was phased in for an increasing number of states over a period of three years, beginning in school year 2011-2012. The program became available nationwide in school year 2014-2015. According to USDA, meal counts and participation statistics in CEP schools reflect the proportion of a school's students that are considered eligible for free school meals as well as the proportion that would be required to pay for their meals in the absence of CEP.

school lunch include the economic downturn that began in 2007²⁶ and adjustments made to how student eligibility for free and reduced-price meals is determined.²⁷

As we previously found in our January 2014 report, the impact of other factors at the local level on lunch participation may vary.²⁸ Specifically, changes to district and school policies that affect school lunch may increase or decrease lunch participation. For example, in 2014, officials in three of the eight districts we visited noted that the time allotted for lunch periods may affect participation. In addition, USDA officials told us that school closures, mergers, moves, consolidation due to economic conditions, and issues with food service management companies may affect school lunch participation.

School Breakfast Participation Continued to Increase in School Year 2013-2014

Participation in the School Breakfast Program continued its upward trend during school year 2013-2014, continuing more than a decade of steady increases. According to our analysis of USDA data, participation in the School Breakfast Program grew by 1.4 million students (or 12 percent) from school year 2010-2011 through school year 2013-2014, to a total of

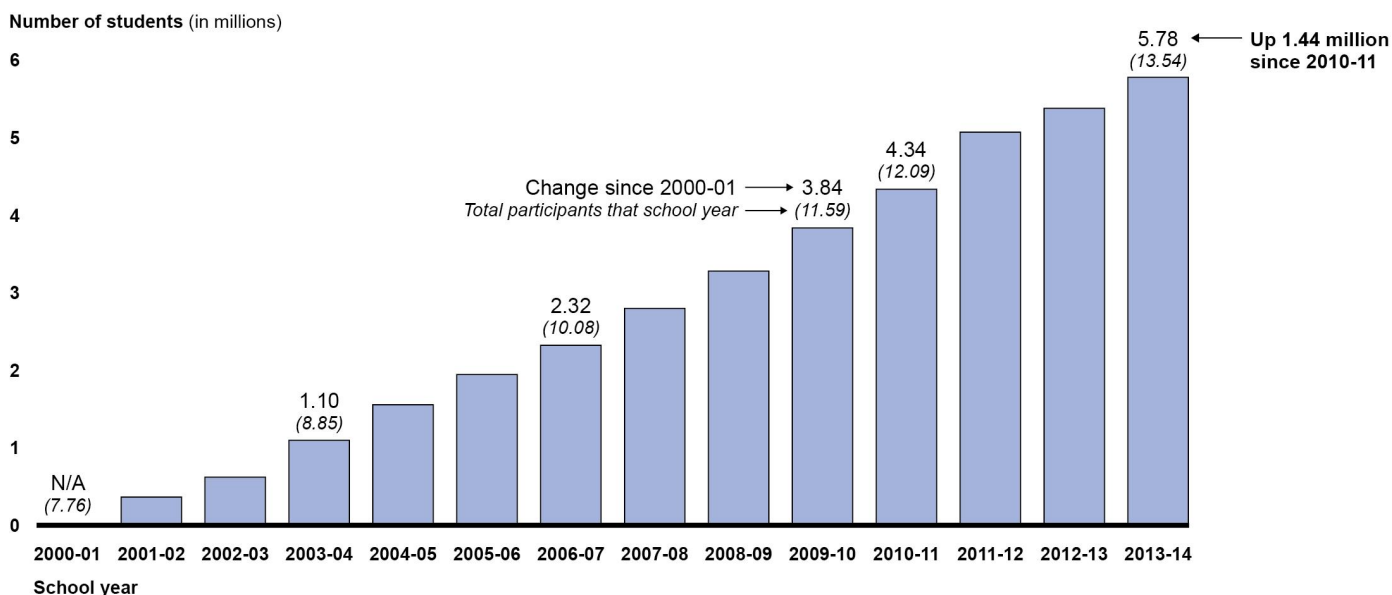
²⁶ The recession that began in 2007 ended in 2009. However, according to Census data, while the number of children under 18 living in poverty decreased each year since 2011, the number of children in poverty remains above pre-recession levels. Additionally, participation in programs aimed to reduce food insecurity may lag relative to economic recovery. For example, past research into why Supplemental Nutrition Assistance Program participation may continue to increase when employment starts to increase during the early stages of economic recovery suggests that real wages and job opportunities for less-skilled workers did not improve enough to raise people out of poverty and the need for food assistance remained high.

²⁷ As we previously reported, there have been various efforts designed to ease the administrative burden when certifying children for multiple assistance programs with similar eligibility criteria. For example, since school year 2008-2009, all school districts have been required to certify as eligible for free meals students in households that receive benefits through the Supplemental Nutrition Assistance Program (SNAP), previously known as the Food Stamp Program. 42 U.S.C. § 1758(b)(4). Additionally, we previously noted that changes to state policies that broaden eligibility criteria for SNAP may have resulted in an increase in students eligible for free school meals. For more information, see GAO, *Supplemental Nutrition Assistance Program: Improved Oversight of State Eligibility Expansions Needed*, [GAO-12-670](#) (Washington, D.C.: July 26, 2012).

²⁸ See [GAO-14-104](#).

13.5 million students.²⁹ (See fig. 5.) The participation rate also increased during this period, growing from 26 percent in school year 2010-2011 to 28 percent in school year 2013-2014. In comparison with school lunch, the number of students participating in school breakfast was less than half of the number participating in school lunch in school year 2013-2014.

Figure 5: Participation Changes Since School Year (SY) 2000-2001 in the School Breakfast Program for SY 2000-2001 through 2013-2014



Source: GAO analysis of United States Department of Agriculture (USDA) data. | GAO-15-656

Note: Each month, states report to USDA the number of breakfasts served in the program and USDA adjusts the data to determine the number of students participating. Our analysis of school year data represents an average of 9 months—September through May—for each school year.

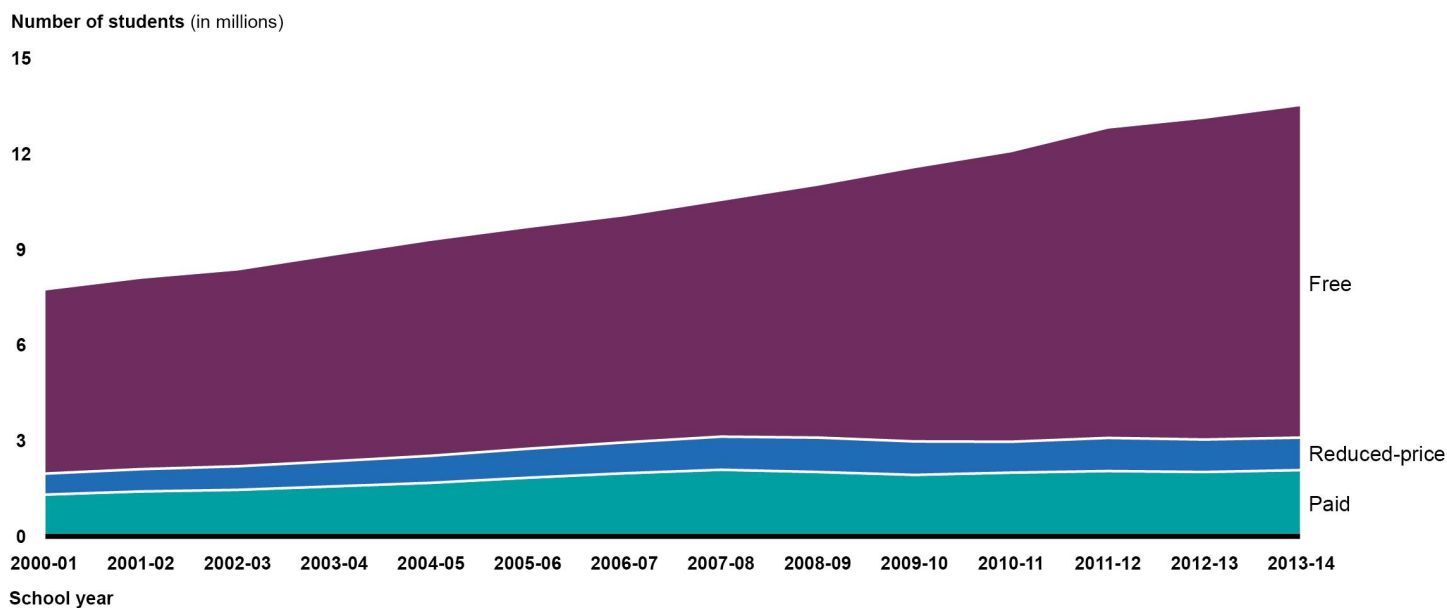
According to USDA data, the increases in School Breakfast Program participation can be explained, in part, by program expansion.³⁰

²⁹ USDA also provided preliminary data for the first five months of school year 2014-2015. According to USDA officials, these data are subject to revision and should not be considered final. While the data are not final, they suggest that School Breakfast Program participation continued to increase in the five first months of the 2014-2015 school year as compared to the same months in the prior year.

³⁰ State officials also told us that breakfast participation was likely affected by some of the same factors as the school lunch program, including meal pattern changes, economic trends, and the introduction of the Community Eligibility Provision.

Specifically, since school year 2010-2011, the program has expanded to more than 1,500 additional schools, while also increasing the proportion of enrolled students eating breakfast. That growth has been driven largely by increases in the number of students eating breakfasts that receive free meals, which have accounted for 1.3 million of the 1.4 million additional average daily breakfasts served from school years 2010-2011 through 2013-2014.³¹ (See fig. 6.) Breakfast has also benefitted from efforts intended to increase participation using alternative formats, such as providing students with breakfast in the classroom and breakfast after the school day has started. USDA found in 2009 that the probability of student participation in school breakfast increases when breakfast is served in the classroom rather than in the cafeteria, and that the more time students have to eat breakfast, the more student participation increases.³²

Figure 6: Participation in the School Breakfast Program by Category of Student, School Years 2000-2001 through 2013-2014



Source: GAO analysis of United States Department of Agriculture (USDA) data. | GAO-15-656

³¹ In comparison with school lunch, a greater proportion of free breakfasts were served (77 percent) than free lunches (63 percent) in school year 2013-2014.

³² Bartfeld, Judi. "School Breakfast Program: Participation and Impacts" (2009).

Notes: Participation is expressed in average daily breakfasts served, adjusted for attendance using USDA's adjustment factor. Each month, states report to USDA the number of breakfasts served in the program by category of student and USDA adjusts the data to determine the number of students participating. Our analysis of school year data represents an average of 9 months—September through May—for each school year.

SFAs Continue to Report Challenges with New School Meals Requirements and Expressed Concern about Future Sodium Restrictions

Some Challenges We Reported on Previously Have Persisted

SFAs and states reported that some of the challenges they have experienced meeting the new school meals requirements have persisted since school year 2012-2013, such as increased plate waste. Plate waste occurs when students take food required for a school meal, but then choose not to eat it. In our January 2014 report, 48 states reported that plate waste—particularly for fruits and vegetables—was a challenge for their SFAs in school year 2012-2013.³³ Further, in 7 of the 17 schools we visited in school year 2012-2013, we saw many students throw away some or all of their fruits and vegetables at lunch. During school year 2014-2015, directors and staff from five of the eight SFAs we reviewed indicated that this issue has persisted as a challenge, though staff from three SFAs reported that plate waste was not a problem at their schools. Our lunch observations suggest that plate waste may be beginning to decrease as students adjust to school meals that meet the new requirements. Specifically, the plate waste we observed when visiting schools in school year 2014-2015 was generally limited to a small number of students throwing away some of their fruits and vegetables in 7 of the 14 schools.³⁴ SFA food preparation changes and student acceptance of

³³ See [GAO-14-104](#).

³⁴ We also observed small numbers of students throwing away other types of foods, such as students in three schools throwing away some or all of their milk.

fruits and vegetables may be helping to reduce fruit and vegetable waste in some districts. For example, officials from three SFAs noted that it is sometimes difficult for students to eat whole fruit during a meal, and one SFA has responded by giving pre-cut, rather than whole, fruit to elementary and middle school students. In addition, when we asked students what they like about school lunch, students we spoke with in 13 of the 14 schools generally reported liking fruit and vegetable options, and those at 5 schools highlighted fruits or vegetables as their favorite breakfast or lunch items.

Although there has been some progress, poor student acceptance of certain foods is another longstanding challenge that SFAs continued to report. For example, in our prior work, we found that SFAs were challenged by student acceptance of some whole grain-rich products in school year 2012-2013.³⁵ With the requirement increasing from half of grains served in meals having to meet the whole grain-rich definition beginning in school year 2012-2013, to all grains in school year 2014-2015, we found that these acceptance challenges have continued for most SFAs we reviewed. Specifically, directors and staff from seven of eight SFAs told us that students do not like certain whole grain-rich foods, so getting them to take and eat them continues to be a challenge.³⁶ Representatives from five of these SFAs highlighted whole grain pasta as being particularly challenging to serve, with one noting, for example, that whole grain-rich pasta loses structural integrity soon after being served, becoming unappealing to students. While none of the SFAs we visited had applied for the temporary pasta exemption or grain product exemption made available by USDA,³⁷ we found that two had nevertheless been serving pasta that was not in compliance with the

³⁵ See [GAO-13-708T](#) and [GAO-14-104](#).

³⁶ The eighth SFA director indicated that the SFA has not experienced recent challenges with student acceptance of whole grain-rich foods.

³⁷ SFA directors provided a range of explanations for this, including not wanting to change the menu again when the temporary exemptions expire in the future and not being aware of the option to apply for the exemptions. Three of the eight SFA directors indicated their interest in pursuing a temporary exemption in the future. According to the state officials we spoke with, the number of SFAs that requested pasta exemptions and the number of SFAs approved for exemptions ranged across the eight states from 0 to more than 200. Also, according to USDA, all eight states in our review have notified USDA of their intent to offer the broader exemption from the whole grain requirement to the SFAs in their states.

whole grain-rich requirement. For example, one SFA director told us that she was not serving compliant lasagna noodles because she was unable to find whole grain-rich noodles that would work well in the SFA's recipe.³⁸ In addition, SFA directors and staff mentioned whole grain-rich bread and crackers as examples of other items that have been challenging to get some students to accept. In our June 2013 testimony, we also found poor student acceptance of vegetables in the beans and peas (legumes) and red/orange vegetable subgroups,³⁹ and we found during our recent SFA visits that this challenge has persisted for five of the eight SFAs. For example, two SFA directors reported that they have tried to replace regular potatoes with sweet potatoes in fries or tater tots, but students have not embraced the change. Also, one SFA director noted that even when staff prepare a small amount of legumes, they end up throwing some of it away because children do not take it.

Despite their persistence, the challenges around student acceptance that we previously reported may be improving over time as students adjust to the lunch changes and SFAs find more acceptable products and recipes. Specifically, directors and staff from four SFAs we visited reported some success in addressing challenges in obtaining student acceptance of whole grains, including three that used white whole wheat flour and one that mixed whole grains—such as rice—in with other foods rather than serving them on their own. Another SFA director indicated that the SFA's early adoption of whole grain-enriched foods helped ease the transition to meeting the federal standards, and student acceptance has improved over time. The opportunities for SFAs to receive temporary exemptions from whole grain requirements—both specifically for pasta and generally for any grain product—were designed to help ease these challenges in some SFAs across the country. Further, food industry representatives we spoke with reported that they are taking steps to help schools improve preparation of these products, which may also help improve student acceptance. For example, representatives of three companies, including one that produces pasta, said that they are currently focused on educating SFAs and schools on preparation techniques that maximize palatability of whole grain-rich products. In addition, directors from two SFAs noted that they have found ways to incorporate legumes and

³⁸ The SFA director indicated that the SFA would likely continue to use noncompliant lasagna noodles until the SFA was scheduled for its next compliance review by the state.

³⁹ See [GAO-13-708T](#).

red/orange vegetables into dishes that students will eat. For example, one said the SFA was able to incorporate red/orange vegetables into popular harvest cake, pumpkin bars, and a sweet potato and apple side dish on the elementary school menus in the fall, and another successfully included black and refried beans in tacos.⁴⁰

In our prior work, we also found that managing food costs was a significant challenge in school year 2012-2013.⁴¹ During our current review, we found that managing food costs has persisted as a challenge for several of the SFAs we visited. Specifically, 47 states reported that food costs were a challenge for their SFAs in school year 2012-2013, and all eight directors of SFAs we visited reported that fruit and vegetable expenditures increased substantially from school year 2011-2012 to school year 2012-2013. During our recent visits to SFAs, we found that four of the eight SFA directors continue to report increased food costs due to the new requirements for school meals, which three attributed, in part, to increased costs for fruits and vegetables.⁴² In addition, two SFAs reported a net financial loss from school years 2012-2013 to 2013-2014—a trend they expected to continue for school year 2014-2015—which they said reduced their SFAs' fund balances.⁴³ In addition to increasing food costs, several SFA and state officials highlighted increasing employee wages and benefits as another major driver of SFAs' increasing costs.

⁴⁰ According to USDA officials, a lack of culinary training may contribute to poor student acceptance of school meals. The agency issued professional standards requirements in July 2015, which officials said they expect to improve the ability and skills of personnel responsible for menu planning.

⁴¹ See [GAO-13-708T](#) and [GAO-14-104](#).

⁴² Two SFA directors did not respond to our request for information about factors affecting SFA finances. The other two SFA directors did not report that their food costs had increased. In addition, according to officials from two states, food that meets the whole grain-rich requirement is also more costly than grains that do not meet the whole grain-rich definition.

⁴³ These two SFAs were among six that had previously reported a net financial loss from school year 2011-2012 to school year 2012-2013. In contrast, officials we spoke with from one state said that a greater number of the SFAs in their state are operating at a financial surplus exceeding the limit allowed in federal regulations, as compared to past years. Federal regulations generally limit SFA net cash resources—the cash SFAs carry in their accounts—to 3 months of average operating expenditures. Officials in that state indicated that required increases in paid lunch prices may have led to these SFAs' surpluses.

SFAs and States Are Concerned about Meeting Future Sodium Targets Without Industry Help

The 2014-2015 school year marked the first school year for which SFAs were required to comply with sodium reductions as part of a planned phase-in for new sodium limits for breakfast and lunch, and while the eight SFAs we reviewed reported meeting the first sodium targets, officials reported difficulties in doing so. For example, to meet the first sodium target, three SFAs altered popular items to comply with the requirements, and three SFAs removed popular items altogether—including certain cereals, biscuits and gravy, and chili. Staff from another SFA said they had replaced all added salt with pepper, which resulted in a strong pepper flavor for many foods, and other SFA staff reported switching to low-sodium gravy and removing pickles from the condiment station. Some students we spoke with in 6 of 14 schools made comments about the lack of flavor in school meals that suggested they noticed the changes SFAs made to meet the first targets. Further, we found that students in two of the SFAs had attempted ways to add sodium to their school meals, including bringing salt and pepper shakers to lunch in the cafeteria (see fig. 7) and asking school faculty and administrators to obtain additional condiment packets for them from the cafeteria. The dietitian in the latter SFA noted that under the current sodium restrictions, the SFA no longer allows students to take unlimited quantities of condiments.

Figure 7: Salt and Pepper Shakers Brought to Lunch by a High School Student



Source: GAO. | GAO-15-656

SFA directors, state officials, and industry representatives we interviewed expressed concerns about the future sodium targets for school meals. Directors and staff from three SFAs indicated that they made changes to food that are within their control in order to meet the first sodium requirements, and those from two noted that they are doubtful it will be feasible to meet the future targets without changes made by the food industry. Similarly, officials from three of eight states noted that SFAs' success with meeting future sodium targets depends on industry's ability to manufacture compliant foods that students will eat. Representatives from four of the eight food companies we interviewed said they anticipated problems with developing foods that would meet future targets. Three of the representatives noted that sodium is a necessary component of certain products, including breads, meat, and cheese, so reducing sodium content further in those products will be difficult. For example, one company representative said that reduced sodium could shorten products' shelf lives. Representatives from two of the companies that are already reformulating their food products to meet the future

targets said they have encountered challenges with respect to palatability when testing these reformulated foods.

In addition, we found that uncertainty about when and if future targets will be implemented may be delaying some industry progress toward developing compliant products. For example, a representative from one company said that the company is waiting to see if USDA will maintain the first target as the ultimate sodium limit, in part because changing formulations is expensive and time-intensive.⁴⁴ Consistent with this, officials from two states said they believe some food manufacturers may be taking a wait-and-see approach to the sodium targets due to uncertainty about the implementation of future targets,⁴⁵ which could impact the availability of low-sodium food products in the future. In April 2015, USDA officials told us that, consistent with the statutory requirements, they have been examining the science around the health effects of sodium, and they do not expect to make any policy decisions on future sodium targets until the Dietary Guidelines for Americans recommendations are released later this year.

In 2010, the National Academies' Institute of Medicine reported that several broad barriers precluded rapid and large reductions in the sodium content of school meals, noting that most schoolchildren prefer salty food, and that this preference should be expected to persist as long as children are exposed to salty foods at home or elsewhere.⁴⁶ Pointing to studies showing that acceptance of diets with lower sodium content is more successful if carried out gradually, the Institute of Medicine recommended that USDA gradually phase in the sodium reductions in school meals over 10 years.⁴⁷ However, the Institute of Medicine said that following a

⁴⁴ Industry representatives discussing product reformulations said that their companies need a minimum of one year's lead time before these products might be ready for the market, and another noted that reformulating products to meet future sodium targets requires more time for small companies than for larger ones.

⁴⁵ As discussed earlier in this report, the Consolidated and Further Continuing Appropriations Act of 2015 prohibits USDA from implementing future sodium reductions until the latest scientific research establishes that they are beneficial to children.

⁴⁶ Institute of Medicine, *School Meals: Building Blocks for Healthy Children* (Washington, D.C.: The National Academies Press, 2010).

⁴⁷ The Institute of Medicine report stated that it would be reasonable for USDA to determine subsequent sodium targets after the department assesses progress made following the implementation of each sodium reduction and the effect of the change on student participation rates, food cost, safety, and food service operation.

phased-in approach may not remove all related challenges to student acceptance, and SFAs will not be able to accomplish these reductions on their own. The report noted that the food industry's partnership is essential because the current sodium content of many commercially prepared foods available for school meals is moderately high or high, and the food industry is responsible for the diversity and quality of these foods. It also acknowledged the correlation between palatable foods at school and school meals participation and concluded that it is unlikely that children will be easily motivated to continue to eat foods they find unappealing. Further, the report also noted that any loss of revenue based on decreased participation presents a threat to the financial stability of SFAs' programs.

Recognizing the challenges related to implementation of the sodium targets, USDA officials told us they have taken steps intended to assist SFAs as they modify foods in preparation for the future targets. For example, officials told us they began planning an initiative in the summer of 2014 called "What's Shaking? Creative Ways to Boost Flavor with Less Sodium" with the goal of developing and sharing strategies for reducing sodium levels in school meals. Officials reported that they have 36 partners in this initiative, including organizations focused on improving public health and other federal agencies such as the Department of Health and Human Services' Centers for Disease Control and Prevention, who began meeting in April 2015. USDA officials reported that they have also held roundtable discussions and are planning future listening sessions among districts to discuss and receive feedback on specific challenges SFAs are encountering as they try to plan menus with reduced sodium. An additional effort that may assist SFAs struggling with the sodium reductions in the future is USDA's training and peer-to-peer mentoring program called "Team Up For School Nutrition Success," which aims to leverage successes from some SFAs by sharing best practices with others that are struggling with specific aspects of implementing the new nutrition requirements.⁴⁸ The department has also made a number of resources on reducing sodium in school meals available for SFAs on the department's website, including recipes, fact sheets, presentations, and webinars.

⁴⁸ Officials told us that while this initiative provides training and technical support on such topics as menu planning and meal presentation, sodium has not yet been a specific topic for discussion. However, the initiative offered a June 2015 webinar entitled, "Making Sense of the Science of Sodium."

USDA is also beginning to gather information from food producers about their progress toward developing school meals that meet the future sodium targets. In June 2015, the department requested proposals for a study examining the market availability of foods that meet both the current and future targets, as well as successes and challenges experienced by the food industry and SFAs as they take steps to reduce sodium in school meals.⁴⁹ Among other things, the study aims to identify barriers the food industry faces and expects to face in the future in providing schools with lower sodium foods, as well as gauge progress made toward future sodium targets. In addition, officials reported that they have conducted some outreach to food industry representatives on the future sodium targets, for example, by visiting a spice manufacturing company to discuss alternative food preparation techniques that require little or no added salt. USDA officials also said that they are gathering feedback on trends related to new technologies and tactics industry is employing to lower sodium levels in food. In July 2015, USDA officials noted that food industry representatives they have talked to have committed to working toward the future targets, but have also emphasized that research and development efforts take time, and they do not want to compromise quality or taste in producing compliant foods. USDA officials noted that while they believe the sodium reductions in school meals can be achieved, doing so will take time and energy and will require both industry innovation and cooperation among SFAs, the food industry, USDA, and other partners that promote good child nutrition.

⁴⁹ The request for proposals indicates that the contract for this study will be awarded during fiscal year 2015, and the study will be completed within 36 months.

SFAs and Schools Made Changes to Comply with the New Federal Competitive Food Standards and Faced Challenges with Procurement, Revenue, and Oversight

SFAs and School Groups Had to Make Product Changes and Had Procurement Challenges

While many states and school districts had pre-existing policies on nutrition standards for competitive food sales when the new federal requirements were established, SFAs and school groups in seven of the eight districts we reviewed reported that they had to make changes to the competitive foods they offered for sale in school year 2014-2015 to comply. USDA reported that, by 2012, at least half of states had competitive food standards for foods sold in schools through a la carte sales in the cafeteria, vending machines, school stores, and snack bars, and almost half had nutrition standards for foods sold through bake sales. Six of the eight school districts we reviewed were in states that had pre-existing competitive food policies.⁵⁰ However, pre-existing policies did not eliminate the need for most SFAs to make changes to comply in school year 2014-2015, as officials from seven of the eight SFAs we reviewed said that they discontinued some products and added other products to comply with the new federal standards.⁵¹ For example, some products, such as candy, were discontinued entirely. Further, two of eight SFA

⁵⁰ According to state officials in six of the eight states that had SFAs we reviewed, their states had policies for competitive foods prior to the new federal competitive food requirements. In three states, these policies were voluntary, and in the other three states, they were mandatory. In addition, officials in three of the SFAs we reviewed in these states told us their school districts had previously adopted requirements more restrictive than their state policies for competitive foods.

⁵¹ Officials from seven of eight SFAs said they had made changes to comply with the new federal standards, while one SFA director told us that they had made changes in prior years to meet their local policy and therefore were already in compliance with the new federal standards.

directors said that they stopped selling some items a la carte that were served as part of the school lunch, such as a side salad with dressing, peach cobbler, and fried potatoes, because the individual items did not meet the competitive food requirements.⁵² At one school, because some meal components met the competitive food requirements and others did not, the SFA discontinued all meal component a la carte sales to avoid confusing students. SFA directors, athletic directors, and a school store manager said that non-SFA groups also had to change the products they sold, for example, discontinuing sales of candy, donuts, chicken sandwiches from a restaurant, and full calorie soda.

SFAs and school groups also added various compliant food products to their competitive food sales. For example, some added products that had been reformulated to comply with the new requirements, such as flavored chips, puffed grain snacks, ice cream, and marshmallow cereal treats.⁵³ Sports drinks continued to be offered at some schools, but in their lower calorie or no calorie versions and in small size bottles. Carbonated drinks, which were generally previously prohibited by federal regulations from being sold in school food service areas at mealtimes, were also added in their low-calorie and no calorie forms to competitive food sales in high school cafeterias at three of the eight SFAs we contacted.⁵⁴

Six of eight SFAs told us they had difficulty, particularly during the beginning of school year 2014-2015, finding compliant competitive food products and obtaining sufficient quantities of the products to meet student demand. For example, two SFAs said they had a difficult time obtaining products like compliant chips and marshmallow cereal treats.

⁵² When side dishes from school meals are also sold individually, they are required to meet the competitive food standards.

⁵³ One SFA director said that she was concerned about providing reformulated products as healthy snacks, even if they met the federal competitive food requirements. She said that she didn't want to confuse children with popular snack brands and packaging, when they couldn't get the reformulated version of the product at local stores. She said that this is not the way to teach children to eat healthfully. A representative from a national association told us that she had been contacted by some parents who were confused and concerned about the continued availability of such snacks in schools, now in reformulated forms.

⁵⁴ The federal interim final competitive food regulations allow a variety of carbonated drinks to be sold in the school food service area and elsewhere, without meal time restrictions. Previously, carbonated beverages could not be sold in food service areas during meal times, unless exempted.

Food industry representatives we spoke with reported that these shortages were the result of initial difficulty estimating demand for the new reformulated products. However, SFAs reported that these supply challenges diminished as the year progressed.

Some SFAs and Schools Reported Reduced Revenues from Competitive Food Sales

SFAs reported concerns about revenue losses from switching to sales of competitive foods that comply with the new federal nutrition requirements. Of the five SFAs that provided us with information on their competitive food sales from the beginning of school year 2014-2015 up to the time of our visits, four told us that their competitive food sales had decreased in comparison to the previous school year, while one SFA reported increased competitive food sales. Specifically, reasons the SFAs gave for reduced revenues included lost sales from some of the popular, discontinued foods, and students not buying as much of the new foods offered for sale. SFAs also reported that the cost of compliant items was greater than the cost of noncompliant items sold previously, but they did not feel that they could increase prices to the same degree, which resulted in lower profits. The SFA director that reported increased sales said that her a la carte sales were slightly higher part way through the 2014-2015 school year, possibly because she had not raised prices and that she offered a wide variety of snacks and beverages.

We also heard of mixed effects on school group fundraising revenues. For example an athletic director in one district we reviewed and a school store manager in another said that they had experienced reduced revenues from fundraising, which resulted in less money to subsidize athletic facilities, equipment, uniforms, field trips, and travel for competition at regional and national events.⁵⁵ However, some groups also mentioned that changing from food to non-food sales can sometimes increase fundraiser revenues. For example, an athletic director in another district and a representative of a national association said that other types of fundraising, such as craft fairs or sales of cards that provide discounts at local restaurants and other businesses, have raised more money than candy sales in some districts.

⁵⁵ While we spoke with school officials in all eight districts we reviewed regarding competitive food sales in their schools, we did not speak with individual school groups in every district regarding competitive food sales, and therefore did not obtain revenue information in every district. In 2005, we reported that competitive food revenues were often used for these purposes and others. See [GAO-05-563](#).

The concerns we heard about competitive food revenues are generally consistent with those raised by school districts in the past and discussed by USDA in its interim final regulations. For example, school districts we visited in 2005 that had taken steps to substitute healthy competitive foods for less nutritious items expressed strong concerns about potential revenue losses. However, at that time, the limited data available on competitive foods revenue from the schools and districts we visited suggested that districts experienced mixed revenue effects from changes made to competitive food sales.⁵⁶ In USDA's interim final regulations, the department acknowledged that there was considerable variation among schools in the share of their revenue from competitive foods, and some schools might see substantial reductions in competitive food revenues after implementation of the federal requirements, at least in the short term.

At the same time, revenue effects and other challenges related to implementing the new federal competitive food standards have likely been mitigated for school groups that received exemptions from the new requirements for certain fundraisers. School groups are subject to the same federal competitive food requirements as SFAs, unless exempted; USDA permits states to determine the allowed frequency of fundraising exemptions without federal review as long as those sales do not take place in the food service area during meal times. The eight states we reviewed varied in the number of fundraising exemptions allowed in school year 2014-2015, with no fundraiser exemptions allowed in four states and varied policies on the number exempted and their duration in the remaining four. For example, during school year 2014-2015, one state allowed 10 exempted fundraisers per year, per school with each lasting no longer than 4 consecutive days, while another state allowed unlimited fundraisers on 36 designated days during the school year. (See table 3.) Fundraiser exemptions remove challenges some school groups may face complying with the federal requirements, but they potentially raise other challenges as well. For example, in 2013 we found that some SFAs were concerned that these exemptions put the SFA at a competitive disadvantage relative to other food sales within the school.⁵⁷ Further, some commenters on the interim final regulation raised concerns that

⁵⁶ See [GAO-05-563](#).

⁵⁷ [GAO-13-708T](#).

exempt fundraisers threaten the rule’s public health goals and student participation in the meals programs.

Table 3: State Fundraiser Exemptions

State	Exemptions
Idaho	10 exempted fundraisers per year, per school. Each fundraiser can be no longer than 4 consecutive days. Additional exemptions may be requested.
Illinois	Year 1: Middle school and high school, 36 exemption days; elementary 9 exemption days. Number of groups that can fundraise on those days is not limited. Year 2 and beyond: Middle school and high school, 9 exemption days; elementary 0 exemption days.
Louisiana	No exemptions allowed.
Pennsylvania	10 exempt fundraisers for high school; 5 exempt fundraisers per elementary school and middle school, per school, per year. Each fundraiser can last up to a week.
Texas	No exemptions allowed during school year 2014-2015. Beginning in school year 2015-2016, each school is allowed up to 6 exempt fundraiser days per school year.
Virginia	No exemptions allowed for school year 2014-2015. For school year 2015-2016, 30 exempt fundraisers are allowed per school, per school year. Duration of the fundraisers is not addressed.
Washington	No exemptions allowed.
Wisconsin	2 exempt fundraisers per student group, per year, each lasting up to 2 weeks.

Source: State officials | GAO-15-656.

Without a fundraiser exemption, school groups may also sell other food products that do not comply with the competitive food requirements, on the school campus 30 minutes after school or in other non-school locations. In three of eight districts we reviewed, some vending machines were not turned on until after school. At two schools, we observed sales of food and beverage products 30 minutes after the end of the school day, when additional products were sold that did not meet the competitive food requirements, such as candy, large muffins, pizza, and full-calorie carbonated drinks. We were told that school groups also continued to have concession stands at after school sporting and other school events that sold products that were not subject to the competitive food requirements. Groups also continued to sell items like candy bars as fundraisers, providing boxes of candy bars to students that were to be sold to family, neighbors, and friends outside of school.

Oversight of Competitive Food Sales has Been Challenging

According to states and SFAs, the involvement of a variety of groups in competitive food sales at schools has made oversight of competitive food sales challenging. According to USDA, SFAs are responsible for the compliance of the sales they operate, and school districts are responsible for the compliance of foods sold in areas that are outside the control of the SFA. However, while principals at all of the schools we contacted were aware of competitive food sales at their schools, our conversations with them suggested that their involvement with oversight of these sales varied. For example, 6 of 16 principals said that they or the school administration must approve fundraisers. Further, 4 school principals told us that they rely on the SFA director for information about the competitive food requirements. This is consistent with our conversations with SFA directors, as five of the eight SFA directors said that they provided information and assistance regarding the new competitive food requirements to school administration or school groups and helped determine product compliance. In one school district, competitive foods had to be approved by the SFA's dietitian, and in two other school districts, the SFA director provided an approved-list of items that could be sold.⁵⁸ However, at the same time, three of eight SFAs expressed concerns that not all school groups were in compliance with the new requirements and the consequences for noncompliance were unclear. For example, one SFA director said that when she observed noncompliant snacks being sold at schools, she reported it to the principal and superintendent, but that typically did not result in the noncompliant sales being shut down permanently. Beginning in school year 2014-2015, USDA requires that periodic state reviews of schools identify the entities responsible for selling food and beverages and ensure that such food meets the competitive food requirements, which should help address such situations.

During our visits to schools and discussions with SFAs and students, we found that schools in six of the eight SFAs we reviewed had some competitive foods for sale during the school day that were not compliant with the new federal requirements. In some cases, particular items were out of compliance, such as a sports drink sold a la carte by a SFA that exceeded the size and calorie requirements, trail mix sold at a school store that exceeded the calorie and fat requirements, and pizza slices

⁵⁸ At another school, the SFA director consulted with a fundraising group to help them find foods that would meet the requirements for their weekly fundraisers; however, the teacher sponsor told her that the group was going to operate as an exempt fundraiser instead.

sold by a school store during lunch that we were told did not meet whole grain-rich requirements.⁵⁹ In other cases, we observed a bake sale in a school cafeteria during the lunch period, and students told us about another bake sale held by a teacher in a classroom during the school day and sales of candy in the library during the school day.⁶⁰

All states we contacted indicated there were challenges in local level oversight of competitive foods. Officials from three of eight states said that there is a lack of clarity at the local level about who is responsible for compliance. Officials from two states said that neither the SFAs nor school administrators want to be the “food police,” responsible for overseeing compliance at the local level. Although officials from three states said that ultimately the superintendent is responsible for the compliance of school groups’ competitive food sales, not all districts have yet to work out how this operates at the local level or defined the role of the SFA director and others. In its interim final regulations, USDA foresaw issues with ensuring compliance at the local level and said it envisioned that a school district designee, such as a local school wellness coordinator, may need to take the lead in this area.⁶¹ USDA also suggested that sorting through who is responsible for monitoring competitive foods would initially require planning and cooperation, but if all parties (i.e., school wellness coordinator, SFA, and school groups) worked together, such as to share information on allowable foods, the department believed that implementation in future years would be greatly streamlined.

The expansion of state oversight responsibility to include reviews of competitive foods could help ensure compliance with the nutrition standards, though some states reported that initial oversight of this area has been challenging. Specifically, beginning in school year 2014-2015, states are now responsible for overseeing local compliance with both

⁵⁹ We reported these instances of non-compliance to USDA.

⁶⁰ While we did not further investigate these fundraising activities, we did report them to USDA. States are responsible for assessing such sales through periodic reviews of schools, beginning in school year 2014-2015.

⁶¹ In our 2005 report on competitive foods, we concluded that the lack of a single person responsible for the presence and sale of competitive foods in schools complicates efforts to ensure that new policies will be implemented as intended and maintained over time. See [GAO-05-563](#).

federal school meals and competitive food requirements, including providing technical assistance and developing corrective action plans for SFAs and schools when noncompliance is found.⁶² However, officials from two of eight states told us that their initial oversight of this area suggests that all school districts do not take competitive food compliance seriously, and some try to find ways around the requirements.⁶³ An official from another state said that there is sometimes resistance to modifying these sales from principals, especially when competitive food sales may be the only source of discretionary money for school activities and equipment. Officials from three of eight states also expressed concerns that they currently do not have enforcement tools for competitive food sales, and officials in one state said that they have heard from SFA directors who do not think that school groups will take compliance with the requirements seriously unless there are financial consequences.⁶⁴

USDA officials also said that they will be reviewing all aspects of the first year's implementation of the competitive food requirements and will consider any necessary changes before finalizing the competitive food regulations. When issues of competitive foods noncompliance arise during state oversight reviews, USDA has said that it sees technical assistance and training as the first step to address them. However, the competitive foods interim final regulations also indicate that USDA will issue a proposed rule to address a number of integrity issues related to administration of the school meal programs and competitive foods, which

⁶² States are required to conduct administrative reviews of SFAs' school lunch and breakfast programs to assess compliance with program requirements at least once during each three-year review cycle, provided that each SFA is reviewed at least once every four years. In September 2014, USDA added a new section to its Administrative Review Manual for states to assess compliance with competitive food requirements. USDA recently issued proposed rules that would add competitive foods and other areas to the required scope of the administrative review. Administrative Review in the School Nutrition Programs, 80 Fed. Reg. 26,846 (proposed May 11, 2015).

⁶³ Officials from one state told us that they were aware of fundraising groups at some schools that tried to find ways to get around complying with the requirements and tried to hide their activity during state reviews.

⁶⁴ However, officials from another state said when they previously had a penalty for violations of state competitive food requirements, it was ineffective because the value of the penalty was far outweighed by the proceeds of the fundraisers.

will provide states options for imposing fines against any school or SFA failing to comply with program regulations.⁶⁵

USDA's Assistance Has Included a Substantial Amount of Guidance and Other Efforts

Officials from several states and SFAs that we interviewed during school year 2014-2015 indicated that USDA's assistance on the new school meals and competitive food requirements was helpful or has recently improved; at the same time, some found the amount of USDA guidance to be overwhelming. As part of our January 2014 report, we found that all states found USDA's guidance and training to be useful as the new school lunch requirements were implemented during school year 2012-2013.⁶⁶ As implementation of the school meals and competitive food changes continued during school years 2013-2014 and 2014-2015, officials from five states and two SFAs who we interviewed in school year 2014-2015 similarly noted that USDA assistance has been helpful. For example, officials from one state noted that frequent webinars, covering such topics as menu planning using USDA foods, have been useful. In addition, two SFAs reported that USDA guidance on the changes has improved over time; however, a state official also told us that USDA has issued too much guidance, and it has overwhelmed SFAs. Officials from three SFAs we spoke with also told us that the amount of guidance they have received from USDA has been challenging, especially given the complex nature of the guidance, and one SFA official noted there is not enough time to read all of the guidance. This difficulty keeping up with the extensive amount of USDA guidance is consistent with what some states and SFAs reported to us during school year 2012-2013. In our 2014 report, we found that, in the first 33 months after the Healthy, Hunger-Free Kids Act of 2010 was enacted (from January 2011 through September 2013), USDA issued about 90 memos to provide guidance to states and SFAs on the new requirements for the content of school lunches and paid lunch equity.⁶⁷ In the 19 months since then (from October 2013 through April 2015), we found that USDA issued 51

⁶⁵ USDA officials told us in July 2015 that the proposed rule was under development, but they could not provide us with a timeframe for when it will be issued.

⁶⁶ [GAO-14-104](#).

⁶⁷ We reported that 85 percent of the memos—including those covering policy and providing technical assistance—addressed the new requirements for lunch content and nutrition standards, as well as related issues such as food procurement and state review of SFA compliance with the lunch requirements. The other 15 percent addressed paid lunch equity requirements. See [GAO-14-104](#).

additional memos related to these changes. In total, USDA has issued nearly 4,700 pages of guidance on the lunch, breakfast, and competitive food requirements since the final rule on changes to the lunch and breakfast content and nutrition standards was issued in January 2012.⁶⁸

With the bulk of the changes to school meals and competitive foods nutrition standards already required to be implemented, the need for USDA to issue additional guidance on these changes should diminish in future years, according to officials. In our 2014 report, we found that several SFAs reported challenges with the high volume of USDA guidance that was issued at the same time that they were implementing significant changes to the lunch program. Similarly, during the 2013-2014 and 2014-2015 school years, SFAs were implementing substantial program changes—related to breakfast, competitive foods, and whole grains and sodium for lunch—concurrently with USDA's issuance of guidance on those topics. Since the only future planned changes are additional sodium reductions for school meals and minor changes to competitive foods, it is likely the amount of USDA guidance will decrease.

Some state and SFA officials we spoke with also found USDA's assistance in response to questions about school meals and competitive food requirements was not always timely or clear. While several state officials we spoke with said they appreciated USDA's assistance or had good working relationships with USDA regional offices, officials from five of the eight states we spoke with were frustrated by USDA's response times. Specifically, officials from two of those states said that USDA sometimes did not respond to questions for more than a month. Officials from two states also expressed frustration with the timing of USDA's release of guidance surrounding state compliance reviews, as changes were made after the review cycle began. An official from one of the two states told us that as a result of the timing, the state was not able to effectively redesign its electronic records system after it had already been finalized. In addition, officials from two states and four SFAs also told us that some of USDA's guidance was unclear or inconsistent. For example,

⁶⁸ In our 2014 report, we found that from January 2012 through the end of school year 2012-2013, USDA issued 1,800 pages of guidance addressing lunch content and nutrition standards, state review of SFA compliance with those standards, and related areas, such as food procurement. We calculated our new total by adding to this previous total all pages from guidance documents issued on these topics from July 2013 through April 2015.

one SFA official said that guidance on whether certain a la carte items meet the competitive foods requirements was difficult to interpret.⁶⁹ Two SFA officials also said that the guidance issued on juice—including how much can be offered and how frequently it can be offered—has been confusing.⁷⁰ In addition, a state official described frustration with the multiple modifications of USDA’s guidance surrounding smoothies, which substantially changed how smoothie components were to be credited toward the meal pattern.⁷¹ However, not all SFAs we spoke with highlighted such challenges related to USDA guidance. For example, one SFA director noted that while one part of the competitive foods guidance was unclear, the competitive foods requirements are new, and she expected that USDA would provide clarity. She added that she thought USDA provided sufficient communications on the new requirements.

In recognition of the challenges SFAs have faced while implementing the new requirements, USDA has provided other types of assistance intended to help clarify the regulations and guidance. For example, USDA partnered with the Institute of Child Nutrition to create the “Team Up For School Nutrition Success” training and mentoring program, which is designed for SFAs to share best practices. Also under this program, experienced SFAs provide targeted technical assistance to those struggling with certain aspects of implementation to clear up lingering confusion. In addition, the initiative offers monthly webinars for states and SFAs on a wide variety of topics—including menu planning and sodium, which are also made available online for later viewing.

Although USDA has taken some steps toward addressing three of the four recommendations included in our report and testimony on the school

⁶⁹ USDA guidance on competitive foods also includes when entree items must meet the nutritional requirements for competitive foods, as well as circumstances when these items are exempt from these standards.

⁷⁰ In an updated questions and answers memo of August 4, 2014, USDA addresses seven questions regarding juice requirements on such issues as whether the limits on juice apply on a daily or weekly basis, how the requirements differ among grade groups, how frozen juice fluid volume is determined, and how combination vegetable and fruit juice blends count against the juice limits.

⁷¹ USDA issued multiple guidance documents on smoothies, which differentiated between food and beverage smoothies and between snack and entrée smoothies. USDA also changed its guidance to allow schools to credit yogurt in smoothies as a meat/meat alternative for lunch beginning January 14, 2015, to be consistent with previous guidance which allowed schools to credit yogurt as a meat/meat alternative in breakfast smoothies.

lunch nutrition changes,⁷² the department has not yet acted to address an issue we reported in our 2013 testimony that would help SFAs meet the school lunch calorie requirements. Specifically, we found that the gap in the calorie ranges for the 6-8 and 9-12 grade groups—600-700 and 750-850, respectively—was problematic for districts we visited that included schools with students in both groups. In guidance, USDA acknowledged that the lack of overlap in the calorie ranges for the two grade groups can be challenging and suggested that districts serve a menu appropriate for the lower grade level and add a few additional foods for students in the upper grade level. However, as part of that report we also found that this may not be a feasible solution for some schools because, for example, students in different grade ranges may use the same serving lines during a shared lunch period. In such schools, cashiers at the point-of-sale may not know each student's grade level and therefore may not be able to accurately identify whether lunches comply with requirements. Thus, in that report we recommended that USDA provide flexibility to help SFAs with schools that serve students in both grade groups comply with the defined calorie ranges. While USDA generally agreed with the recommendation, indicating that it recognizes the need to address the challenges posed by the lack of overlap in the calorie ranges, the department has not yet taken action to address the issue.

In the absence of additional USDA assistance in this area, state and SFA officials we spoke with in school year 2014-2015 described varied approaches they have taken to address this issue, all of which are inconsistent with USDA regulations and guidance. For example, one state official told us that for schools serving meals to students in both grade ranges, the state recommended serving meals that met the calorie range associated with the predominant grade group served at each lunch period.⁷³ An SFA from another state took a different approach, planning its menus for these schools to offer lunches with maximum calorie counts midway between the middle school maximum and the high school minimum. Officials from another state said that while USDA requirements do not provide flexibility in this area, and schools with both 6-8 and 9-12 grade groups are supposed to be considered out of compliance if they are not meeting both calorie ranges, the state has instead chosen to use

⁷² See [GAO-13-708T](#) and [GAO-14-104](#).

⁷³ This approach is consistent with the previous school lunch requirements.

common sense when reviewing the menus in such schools.⁷⁴ As the absence of USDA guidance is leading to states making varied decisions about menu compliance in these schools, we continue to believe that our June 2013 recommendation to USDA (to provide some flexibility to SFAs with such schools) continues to have merit and should be fully implemented.⁷⁵

Agency Comments

We provided a draft of this report to the U.S. Department of Agriculture for review and comment. On September 1, 2015, the FNS Director for Program Monitoring and Operational Support Division, Child Nutrition Programs, and other FNS officials provided us with their oral comments. The officials stated that they generally agreed with the report findings. However, we discussed our previous recommendation that USDA provide school districts with flexibility to help them comply with the lack of overlap in the calorie ranges for lunches served to students in grades 6-8 and 9-12 in schools with both grade groups. As stated in this report, we again found that some SFAs and states with schools that include students from both grade groups were taking varied approaches to address the lack of overlap in the calorie ranges for school lunch, which were inconsistent with USDA requirements. Officials noted that USDA believes it is important to maintain the scientifically-based, age-appropriate calorie ranges and is unlikely to change the calorie requirements. However, they

⁷⁴ This approach is generally consistent with the Institute of Medicine's recommendations in its report on which the federal requirements are based. The report's authors suggested that, for schools serving students from multiple grade groups on the same serving line, the SFA should work with the state agency to find a solution that ensures the basic elements of the standards for menu planning will be maintained, including moderate calorie values.

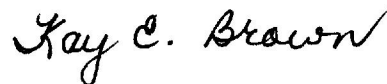
⁷⁵ In 2014, we reported that national data, as well as our conversations with states and visits to schools, suggested that some instances of SFA noncompliance may not have been fully documented while the new lunch requirements were being implemented in school year 2012-2013. Further, we expressed concern that USDA's guidance to states on assessing SFA compliance with the new requirements moving forward may continue to inadvertently lead to states not consistently documenting noncompliance. We noted that without such documentation, USDA has limited information on the extent to which SFAs are facing similar difficulties complying with the new requirements, which could be the focus of future federal technical assistance efforts. See [GAO-14-104](#).

noted that our findings show an inconsistency in state oversight of districts with such schools and indicate a continued need for clarification. The officials said that they intend to continue providing menu planning guidance and technical assistance to states and districts to help them comply with these requirements. We continue to believe that additional flexibility from USDA would assist school district efforts to comply and is consistent with the Institute of Medicine's suggestions that USDA and states should work together to find a solution in these schools, though we appreciate that additional technical assistance from USDA may also help achieve this goal. FNS also provided technical comments on the draft report, which we have incorporated as appropriate.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from the report date. At that time, we will send copies of this report to the appropriate congressional committees, the Secretary of Agriculture, and other interested parties. In addition, this report will be available at no charge on GAO's website at <http://www.gao.gov>.

If you or your staff have any questions concerning this report, please contact me at (202) 512-7215 or brownke@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix II.

Sincerely yours,



Kay E. Brown
Director, Education, Workforce, and Income Security Issues

Appendix I: Scope and Methodology

U.S. Department of Agriculture (USDA)

Participation Data

To assess trends in school lunch and breakfast participation, we analyzed USDA's national data on meals served in the National School Lunch and School Breakfast Programs from school year 2000-2001 through school year 2013-2014.¹ We used the same methodology to assess trends in participation as we had in our prior report on the initial implementation of school lunch changes.² Each month, states report to USDA on the FNS-10 form the number of lunches and breakfasts served by category of student—free, reduced-price, and paid—as well as average daily lunches and breakfasts served to all students. These data are used to determine federal reimbursement payments to states. Additionally, in October of each school year, states report to USDA the total number of students enrolled in schools with the National School Lunch and School Breakfast Programs.

Although USDA does not collect additional data on the number of students participating in the programs each month, the department uses the lunch and breakfast data it collects to determine the number of students participating in the programs. Specifically, USDA adjusts the data on average daily lunches and breakfasts served each month upward to help account for students who participated in the programs for a number of days less than all days in the month. To make this adjustment,

¹ These data include meals served in public and private schools and residential child care institutions in the 50 states, the District of Columbia, Guam, Puerto Rico, the U.S. Virgin Islands, and the U.S. Department of Defense's military bases. USDA also provided preliminary data for the first five months of the 2014-2015 school year, which we used to describe general trends in school meals participation over the first five months of the 2014-2015 school year. According to USDA officials, these data are subject to revision and should not be considered final.

² See GAO, *School Lunch: Implementing Nutrition Changes Was Challenging and Clarification of Oversight Requirements is Needed*, [GAO-14-104](#) (Washington, D.C.: January 28, 2014).

USDA uses an estimate of the proportion of students that attend schools daily nationwide.³

To analyze participation in the National School Lunch and School Breakfast Programs, we reviewed USDA's data on meals served and students enrolled, as well as the department's methodology for determining student participation, and determined these data and the method to be sufficiently reliable for the purposes of this report. Specifically, we interviewed USDA officials to gather information on the processes they use to ensure the completeness and accuracy of the school lunch and breakfast data, reviewed related documentation, and compared the data we received from the department to its published data. To determine school year participation from these data, both overall and by free, reduced-price, and paid categories, we relied on 9 months of data—September through May—for each year.⁴

Guidance Documents

To understand the scale and scope of assistance USDA has provided to states and SFAs, we analyzed guidance memos USDA issued from October 2013 through May 2015. This period allows for a seamless continuation of the analysis we conducted for the previous study on implementation of the new nutrition requirements for school lunch, which reviewed guidance issued from January 2011 through September 2013.⁵ Our intent was to continue our longitudinal review of USDA-issued guidance addressing implementation of the updated nutrition requirements, as well as paid lunch equity, and we used the same methodology that we used for the prior study. Specifically, we reviewed all guidance memos issued to states during this time period and further analyzed those that provided guidance addressing the new requirements for the content of school meals and competitive foods, including related issues such as food procurement and state review of SFA compliance

³ USDA divides the data reported for average daily lunches and breakfasts by an attendance factor of 0.927 to estimate monthly meal participation. USDA officials said this methodology has been in place for many years and the attendance factor was historically derived. We determined that this attendance factor is similar to average daily attendance data published annually by the U.S. Department of Education.

⁴ On its public website, USDA reports annual school lunch participation based on fiscal year rather than school year.

⁵ [GAO-14-104](#).

with the requirements, as well as those addressing the paid lunch equity requirements. These memos included the department's policy and technical assistance memos, as well as other relevant guidance memos that were not designated in one of those categories. For guidance memos that were released in multiple versions, we considered each version to be a separate piece of guidance. We assessed the number of pages included in each document, defined as the number of digital pages for each guidance document, including attachments. In the case of spreadsheet files, we counted each worksheet within the file as a single page. We did not conduct an independent legal analysis of these guidance memos.

Site Visits

To gather information from the local level on implementation of the new nutrition requirements for school meals and competitive foods, we contacted the same eight school districts across the country that we had visited as part of our prior study of implementation of the new school lunch requirements in school year 2012-2013.⁶ From December 2014 through March 2015, we visited Carlisle Area School District (PA), Chicago Public Schools (IL), Coeur d'Alene School District (ID), Fairfax County Public Schools (VA), Irving Independent School District (TX), Mukwonago Area School District (WI), and Spokane Public Schools (WA). For the eighth district—Caddo Parish Public Schools (LA)—we gathered information over the phone from the SFA director and officials from two schools, as our on-site visit to the district was impeded by weather-related school closings. We selected these school districts because they provided variation across geographic location, district size, and certain characteristics of the student population and district food services. For example, the proportion of students eligible for free and reduced-price lunches and the racial and ethnic characteristics of the student population varied across the districts selected. Further, we selected districts with different food service approaches, including some that generally prepared school meals in one central kitchen before delivering them to schools, some that prepared meals in kitchens on-site in each school, and others that used alternative approaches for food preparation. Six of the school districts we contacted managed their own food service operations, while two districts contracted with food service management companies. We relied on the U.S. Department of

⁶ [GAO-14-104](#).

Education's Common Core of Data, which provides information on public schools,⁷ to ensure selected districts met several of our criteria. As a result, all of the districts we selected for site visits were public, although non-profit private elementary and secondary schools, as well as residential child care institutions, also participate in the National School Lunch Program and the School Breakfast Program.

In each of the districts we visited, to gather information on local level implementation of the new nutrition requirements, we interviewed the SFA director, as well as other key district-level SFA staff and food service staff in two schools. During these interviews, we collected information about lunch and breakfast participation trends; challenges, if any, implementing the new meal content requirements; challenges, if any, implementing new nutrition standards for competitive foods; and USDA and state assistance with the changes. To select the schools we visited in each district, we worked with the SFA director to ensure the schools included students of differing grade levels. This allowed us to observe any relevant differences in their reactions to the new meal and competitive food requirements. In each school we visited, we observed breakfast and lunch service, as well as competitive food sales—including students' food selections, consumption, and plate waste—and, when feasible, interviewed students and school staff to obtain their thoughts on the changes. We also interviewed the eight state child nutrition program directors overseeing these districts to gather information on statewide lunch and breakfast participation trends; SFA challenges, if any; and USDA and state assistance with implementation of the changes. Contacting these districts and states a second time provides a short-term longitudinal perspective on challenges related to implementation of the phased-in changes. However, we cannot generalize our findings from SFAs, districts, and states beyond those that we contacted.

Stakeholder and Industry Groups

To gather additional information we interviewed various school nutrition stakeholder groups, including subject matter experts, professional organizations, and industry representatives. We selected groups among

⁷ The Common Core of Data is a program of the U.S. Department of Education's National Center for Education Statistics that annually collects fiscal and non-fiscal data about all public schools, public school districts, and state educational agencies in the United States. The data are supplied by state educational agency officials and include information that describes schools, school districts, students, and staff, as well as fiscal data.

those that were involved with school meals, had an interest in children's nutrition, and/or were involved in competitive food snacks and beverages, as well as school fundraisers. This included the School Nutrition Association (SNA),⁸ the National PTA, the Center for Science in the Public Interest, and other members of the National Alliance for Nutrition and Activity. We also spoke with the American Beverage Association, the Snack Food Association, and a group of industry officials who are also members of SNA.

⁸ The School Nutrition Association (SNA) is a national non-profit organization that represents 55,000 members, which include those involved in serving meals to children in schools, as well as those that provide support, products or services to school foodservice professionals and school nutrition programs.

Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact

Kay E. Brown, (202) 512-7215, brownke@gao.gov

Staff Acknowledgments

In addition to the contact named above, Rachel Frisk (Assistant Director), Dan Meyer (Analyst-in-Charge), Luke Baron, Sara Pelton, and Christine San made key contributions to this report. Also contributing to this report were Divya Bali, James Bennett, Jessica Botsford, David Chrisinger, Aimee Elivert, Kathy Leslie, Theresa Lo, Jean McSween, Steve D. Morris, Lorin Obler, and Lindsay Read.

Appendix III: Accessible Data

Accessible Text and Data Tables

Accessible Text for Figure 1: Examples of Lunches Provided Pursuant to the New Content and Nutrition Requirements

Collage of photos shows five lunches that include at least the required minimum of three meal components under the “offer versus serve” policy. Some include four or five meal components...

- Baked potato with toppings, salad with dressing, pretzel, cookie bar, juice, and milk.
- Chicken sandwich, garden salad, and milk.
- Pizza slice, potato fries, and milk.
- Chicken sandwich and a banana.
- Spaghetti and sauce, salad, garlic bread, strawberry fruit cup, and milk.

Source: GAO. | GAO-15-656

Note: These are examples of lunches selected by students from meal components offered. These lunches all include at least the required minimum of three meal components under the offer versus serve policy and some include four or five meal components.

Accessible Text for Figure 2: Examples of Breakfasts Provided Pursuant to New Content and Nutrition Requirements

Collage of photos shows four breakfasts that include at least the required minimum of three food items under the “offer versus serve” policy...

- Cereal (in a disposable bowl), milk, and juice.
- Muffin, string cheese, fruit punch, milk, and applesauce.
- Egg and cheese sandwich, fruit punch, milk, and applesauce.
- Egg sandwich and juice.

Source: GAO. | GAO-15-656

Note: These are examples of breakfasts selected by students from food items offered. These breakfasts all include at least the required minimum of three food items under the offer versus serve policy, and some include more.

Data Table for Figure 3: Participation Changes Since School Year (SY) 2000-2001 in the National School Lunch Program for SY 2000-2001 through 2013-2014

School year	Change in number of students since 2000-01 (in millions)	Total participants (in millions)
2000-01	n/a	27.46
2001-02	0.477901	
2002-03	0.86518	
2003-04	1.4272	28.89
2004-05	2.12327	
2005-06	2.58682	

School year	Change in number of students since 2000-01 (in millions)	Total participants (in millions)
2006-07	3.1355	30.60
2007-08	3.53039	
2008-09	3.8386	
2009-10	4.24143	
2010-11	4.36587	31.83
2011-12	4.2973	
2012-13	3.26225	
2013-14	2.92525	30.39

Source: GAO analysis of United States Department of Agriculture (USDA) data. | GAO-15-656

Note: Each month, states report to USDA the number of lunches served in the program and USDA adjusts the data to determine the number of students participating. Our analysis of school year data represents an average of 9 months—September through May—for each school year.

Change in number of students in SY 2013-14 is down 1.44 million from the high in SY 2010-11.

Data Table for Figure 4: Participation in the National School Lunch Program by Category of Student, School Years 2000-2001 through 2013-2014

Number of students (in millions)

School year	Paid	Reduced-price	Free	Total number of students
2000-01	12.0074	2.55302	12.9026	27.46
2001-02	12.0424	2.6259	13.2726	27.94
2002-03	11.9394	2.7117	13.677	28.33
2003-04	12.009	2.7788	14.1024	28.89
2004-05	12.1792	2.86712	14.5399	29.59
2005-06	12.3679	2.93038	14.7516	30.05
2006-07	12.6125	3.04757	14.9384	30.60
2007-08	12.5562	3.11591	15.3213	30.99
2008-09	11.9665	3.17262	16.1624	31.30
2009-10	11.189	3.05552	17.4598	31.70
2010-11	10.8206	2.71227	18.296	31.83
2011-12	10.2772	2.7609	18.7222	31.76
2012-13	9.22846	2.59644	18.9003	30.73
2013-14	8.78384	2.50338	19.101	30.39

Source: GAO analysis of United States Department of Agriculture (USDA) data. | GAO-15-656

Note: Each month, states report to USDA the number of lunches served in the program by category of student and USDA adjusts the data to determine the number of students participating. Our analysis of school year data represents an average of 9 months—September through May—for each school year.

Data Table for Figure 5: Participation Changes Since School Year (SY) 2000-2001 in the School Breakfast Program for SY 2000-2001 through 2013-2014

School year	Change in number of students since 2000-01 (in millions)	Total participants (in millions)
2000-01	n/a	7.76
2001-02	0.363994	
2002-03	0.621306	
2003-04	1.09574	8.85
2004-05	1.55488	
2005-06	1.94499	
2006-07	2.32298	10.08
2007-08	2.79732	
2008-09	3.27886	
2009-10	3.83589	11.59
2010-11	4.33615	12.09
2011-12	5.07131	
2012-13	5.38004	
2013-14	5.7789	13.54

Source: GAO analysis of United States Department of Agriculture (USDA) data. | GAO-15-656

Note: Each month, states report to USDA the number of breakfasts served in the program and USDA adjusts the data to determine the number of students participating. Our analysis of school year data represents an average of 9 months—September through May—for each school year.

Change in number of students in SY 2013-14 is up 1.44 million since SY 2010-11.

Data Table for Figure 6: Participation in the School Breakfast Program by Category of Student, School Years 2000-2001 through 2013-2014

Number of students (in millions)

School year	Paid	Reduced-price	Free	Total number of students
2000-01	1.31	0.66	5.78	7.75
2001-02	1.41	0.7	6.01	8.12
2002-03	1.46	0.74	6.18	8.38
2003-04	1.57	0.79	6.49	8.85
2004-05	1.68	0.85	6.78	9.31
2005-06	1.84	0.91	6.96	9.71
2006-07	1.98	0.97	7.13	10.08
2007-08	2.09	1.04	7.43	10.56
2008-09	2.02	1.08	7.94	11.04
2009-10	1.93	1.05	8.61	11.59
2010-11	2.00	0.97	9.12	12.09

Appendix III: Accessible Data

School year	Paid	Reduced-price	Free	Total number of students
2011-12	2.05	1.04	9.74	12.83
2012-13	2.02	1.02	10.1	13.14
2013-14	2.08	1.02	10.44	13.54

Source: GAO analysis of United States Department of Agriculture (USDA) data. | GAO-15-656

Notes: Participation is expressed in average daily breakfasts served, adjusted for attendance using USDA's adjustment factor. Each month, states report to USDA the number of breakfasts served in the program by category of student and USDA adjusts the data to determine the number of students participating. Our analysis of school year data represents an average of 9 months—September through May—for each school year.

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