



# Results of USDA's Food and Nutrition Service-Administered School Food Authority Survey II on Supply Chain Disruption and Student Participation

## Background

The U.S. Department of Agriculture's (USDA) Food and Nutrition Service (FNS) administers 16 nutrition assistance programs with the mission to increase food security and reduce hunger—in partnership with cooperating organizations—by providing children and people with low-income access to food, a healthy diet, and nutrition education in a manner that supports American agriculture and inspires public confidence. Child Nutrition Programs such as the National School Lunch Program (NSLP) and School Breakfast Program (SBP) provide nutritionally balanced, low-cost or no-cost lunches to millions of children each school day. These programs are administered by School Food Authorities (SFAs), entities composed of one or more schools that receive reimbursements to serve meals meeting Federal requirements.

The COVID-19 pandemic significantly impacted school meal operations and has contributed to lasting supply chain issues affecting the cost and availability of food and labor. To provide the best possible support to States and Child Nutrition Program operators, FNS has increased its engagement with schools and SFAs to collect timely and accurate information regarding current school food challenges. The first School Food Authority Survey on Supply Chain Disruptions was administered by FNS from November 8, 2021, to December 13, 2021, and was published in March 2022 to gather information on the scope of supply chain disruptions during school year (SY) 2021–2022.<sup>1</sup>

The School Food Authority Survey II on Supply Chain Disruption and Student Participation was administered by FNS from November 22, 2022, to January 6, 2023, through a 20-minute online questionnaire. The survey was sent to all SFAs operating Child Nutrition Programs<sup>2</sup> in schools to gather information on the impacts of continued supply chain disruptions and the return to standard operations during SY 2022–2023. The response rate for the survey was 75 percent with SFAs from all States and territories responding. The results below were weighted<sup>3</sup> to be nationally representative.

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<sup>1</sup> [Results of the U.S. Department of Agriculture, Food and Nutrition Service-Administered School Food Authority Survey on Supply Chain Disruptions \(March 2022\)](#)

<sup>2</sup> Child and Adult Care Food Program (CACFP) At-risk Afterschool Meals; Fresh Fruit and Vegetable Program (FFVP); National School Lunch Program (NSLP); NSLP Afterschool Snack Service; School Breakfast Program (SBP); Special Milk Program (SMP); and Summer Food Service Program (SFSP) (only if operated during unanticipated school closures during SY 2022–2023).

<sup>3</sup> See Appendix A for weighting methodology.

## Key Findings

- **Ninety-seven percent of School Food Authorities (SFAs) continue to experience one or more supply chain-related challenges.** Increased costs, staffing shortages, and product shortages are the challenges most frequently identified by SFAs. Very large and large SFAs are generally more likely than small or medium SFAs to report supply chain-related challenges.<sup>4</sup>
- **There are some signs of improvement in how operational challenges are impacting school food service.** Compared with school year (SY) 2021–2022, SFAs were less likely to name increased staff stress or workload (61 percent, down from 77 percent) and difficulty complying with meal pattern requirements (24 percent, down from 58 percent), but were more likely to name reduced student participation (42 percent, up from 16 percent).
- **A vast majority of SFAs (92 percent) accepted all or some Supply Chain Assistance (SCA) funds in SY 2021–2022.** Private SFAs, SFAs not in rural areas, and small SFAs were more likely to decline SCA funds than their counterparts.
- **The end of the Seamless Summer Option Waiver and other waivers used during SY 2021–2022 has been a source of challenges for schools and parents/guardians.** Leading challenges included confusion from parents and guardians related to meal service, payment, and operations (47 percent); unpaid school meal debt (42 percent); challenges ordering or preparing the right amount of food (38 percent); and fewer parents/guardians submitting applications (35 percent).
- **The financial status of SFAs in SY 2021–2022 was more favorable than in a typical prepandemic year, while the financial status of SFAs in the first quarter of SY 2022–2023 was less favorable.** In a typical prepandemic year, 73 percent of SFAs reported breaking even or operating at a surplus.<sup>1</sup> This percentage increased to 82 percent by the end of SY 2021–2022, then decreased to 62 percent after the first quarter of SY 2022–2023. Small SFAs were less likely to operate at a surplus or break even, despite reporting fewer supply chain challenges.

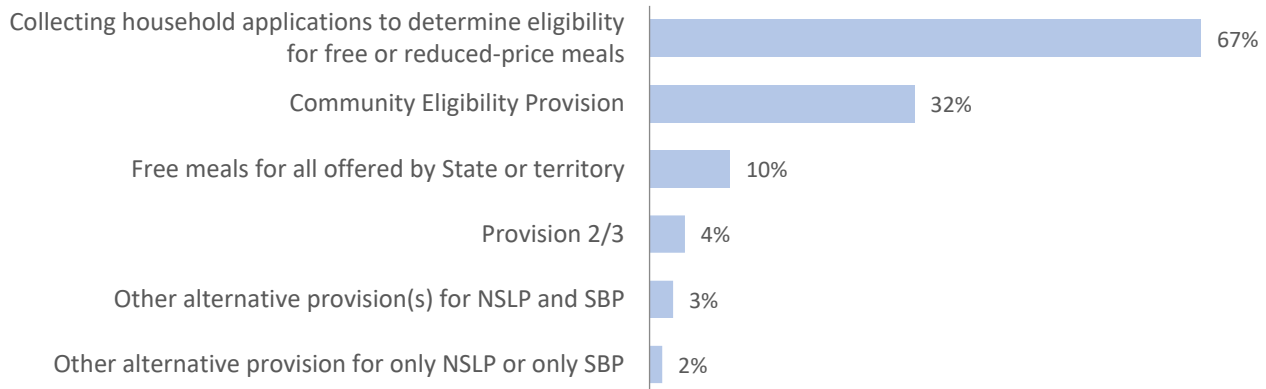
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<sup>4</sup> SFA size defined by student enrollment: Small (1-999); Medium (1,000-4,999); Large (5,000-24,999); Very Large (>25,000+).

## School Meal Applications and Eligibility

**Exhibit 1.1. About two-thirds (67 percent) of all School Food Authorities (SFAs) reported that schools were collecting household applications to determine eligibility for free or reduced-price meals in SY 2022–2023.** Almost one-third (32 percent) reported that schools were using the Community Eligibility Provision<sup>5</sup>, while one-in-ten (10 percent) were operating in a State or territory offering free school meals for all.<sup>6</sup>

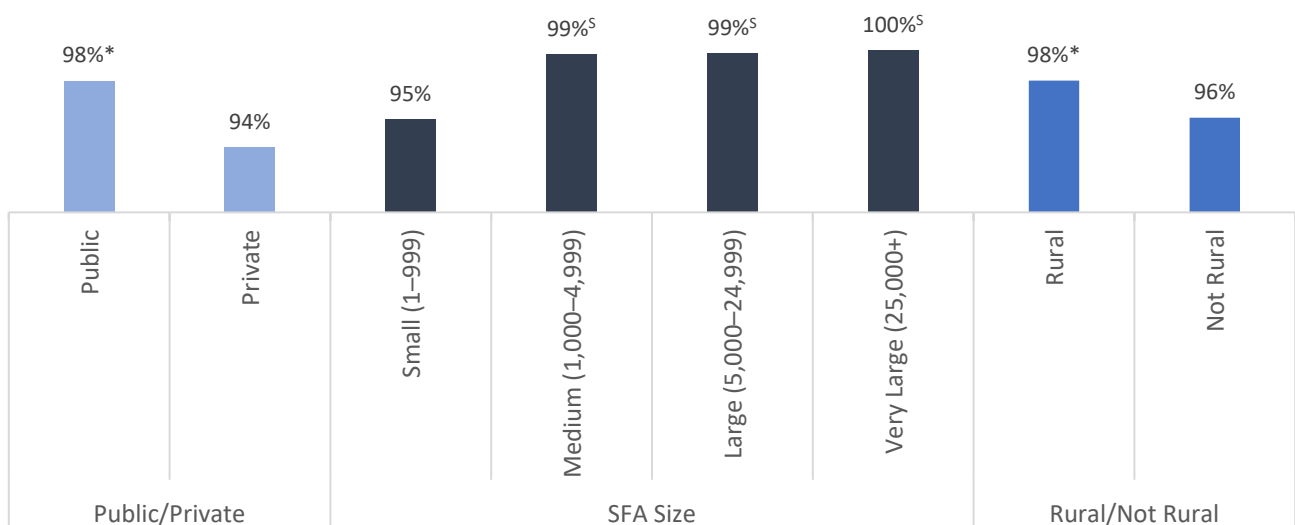
**Methods of Operating the National School Lunch Program (NSLP) and/or School Breakfast Program (SBP) in School Year 2022–2023**



## Supply Chain Challenges

**Exhibit 2.1. Almost all SFAs (97 percent) reported one or more supply chain-related challenges in the first quarter of SY 2022–2023.** Private SFAs, small SFAs, and SFAs not located in rural areas were marginally less likely than their counterparts to experience challenges, though challenges were reported by at least 94 percent of respondents in each group.

**Percent of School Food Authorities (SFAs) Reporting Supply Chain Challenges in School Year 2022–2023**



\* Indicates statistically significant difference (pairwise z-test;  $p < 0.10$ ) from lowest response of population subgroups.

† Indicates medium or large effect size across respondent groups (Cramér's V;  $> 0.3$  for two groups,  $> 0.21$  for three groups,  $> 0.17$  for four groups).

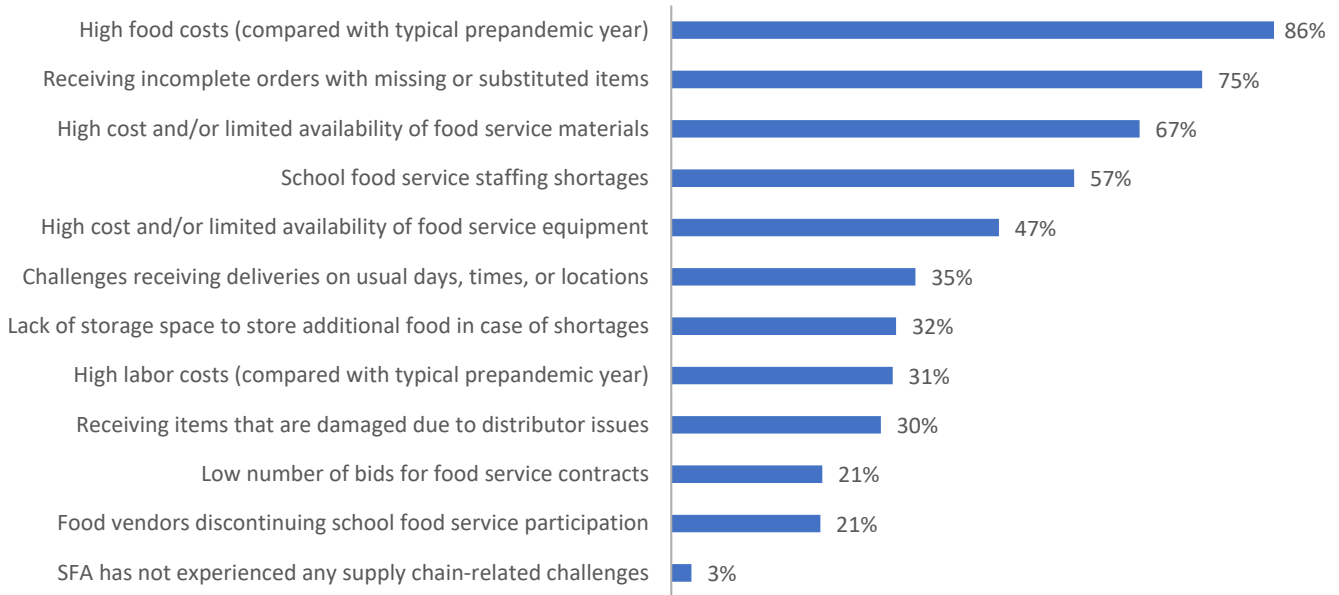
S, M, L, V indicate statistically significant difference from Small, Medium, Large, and Very Large School Food Authorities (SFAs), respectively.

<sup>5</sup> Schools operating the Community Eligibility Provision (CEP) are not required to collect applications to determine eligibility.

<sup>6</sup> At the time of publication, States offering free school meals for all in SY 2022–2023 include California and Maine.

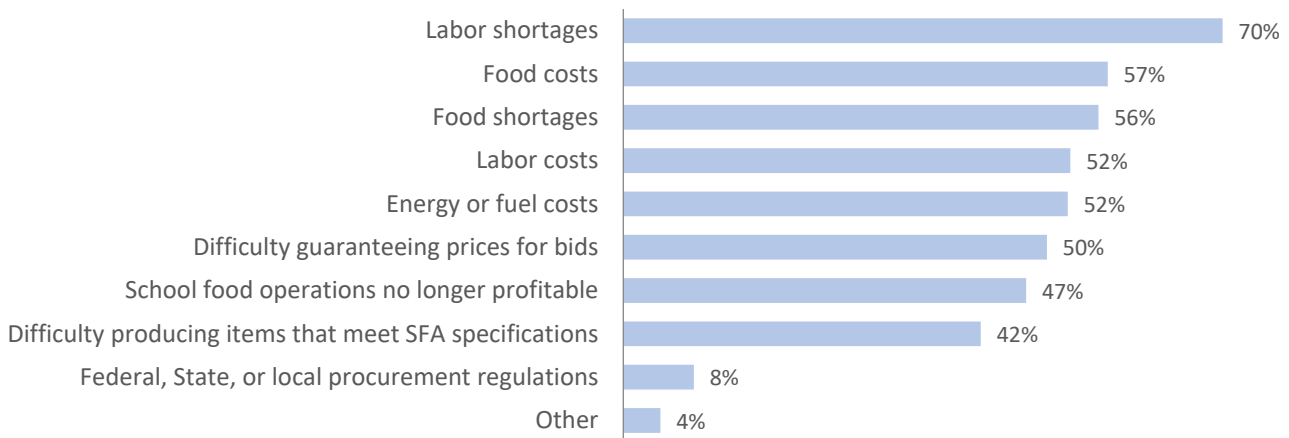
**Exhibit 2.2. High costs, staffing shortages, and product shortages were the most common supply chain challenges reported in SY 2022–2023.** There appear to be some improvements in supply chain challenges: Fewer SFAs reported receiving orders with missing or substituted items in SY 2022–2023 (75 percent, down from 84 percent in SY 2021–2022) and experiencing staffing challenges (57 percent, down from 73 percent).<sup>Error!</sup> Bookmark not defined. Three percent of SFAs did not experience any supply chain-related challenges in SY 2022–2023.

**Common Supply Chain Challenges Reported by School Food Authorities (SFAs) in School Year 2022–2023**



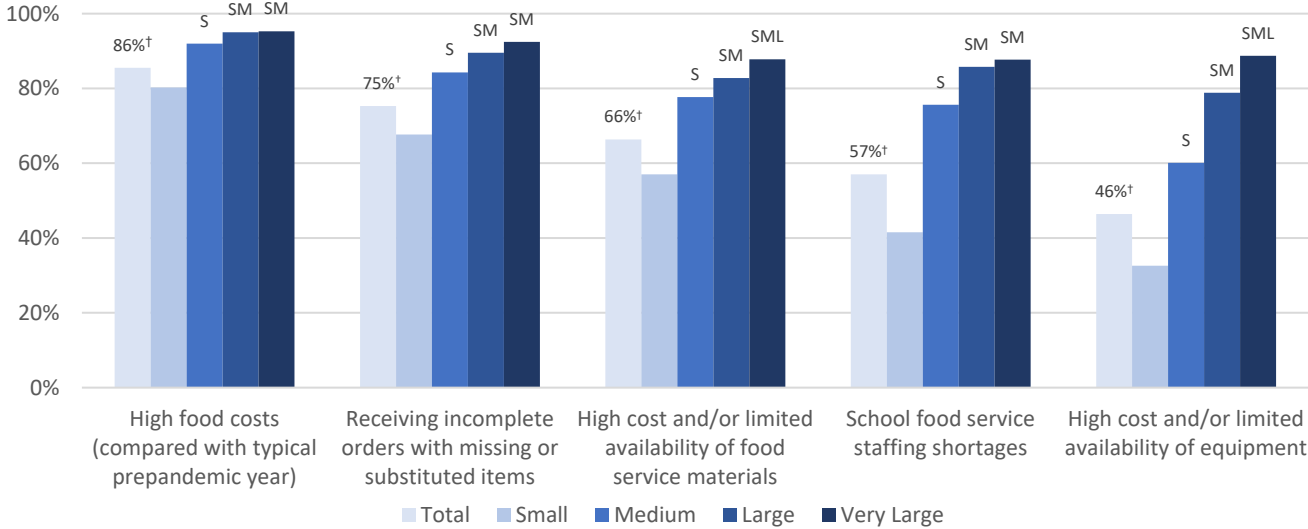
**Exhibit 2.3. About one-fifth (21 percent) of SFAs reported challenges with vendors discontinuing participation in school food service.** More than half of SFAs believed that vendors discontinued participation due to shortages of labor (70 percent) or food (56 percent), as well as the high cost of food (57 percent), labor (52 percent), or energy or fuel (52 percent). Relatively few SFAs (8 percent) identified Federal, State, or procurement regulations as a factor.

**Factors Driving Decreases in Vendor Participation in School Food Service Operations in School Year 2022–2023 as Reported by School Food Authorities (SFAs)**



**Exhibit 2.4. Larger SFAs tended to report supply chain challenges more frequently than smaller SFAs.** Across the top five supply chain-related challenges reported by SFAs, very large and large SFAs were more likely to report challenges than medium and small SFAs, while medium SFAs were more likely to report challenges than small SFAs.

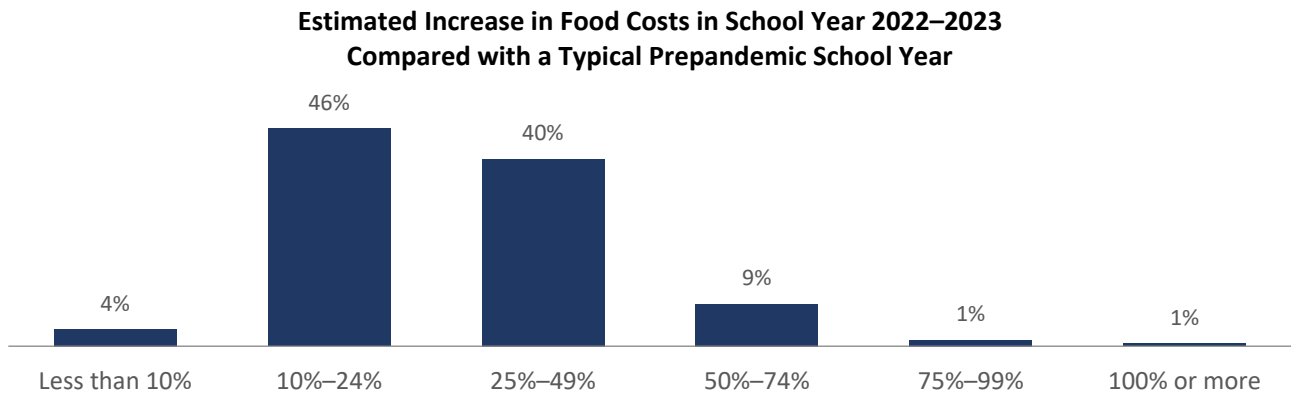
**Leading Supply Chain Challenges in School Year 2022–2023  
by School Food Authority (SFA) Size**



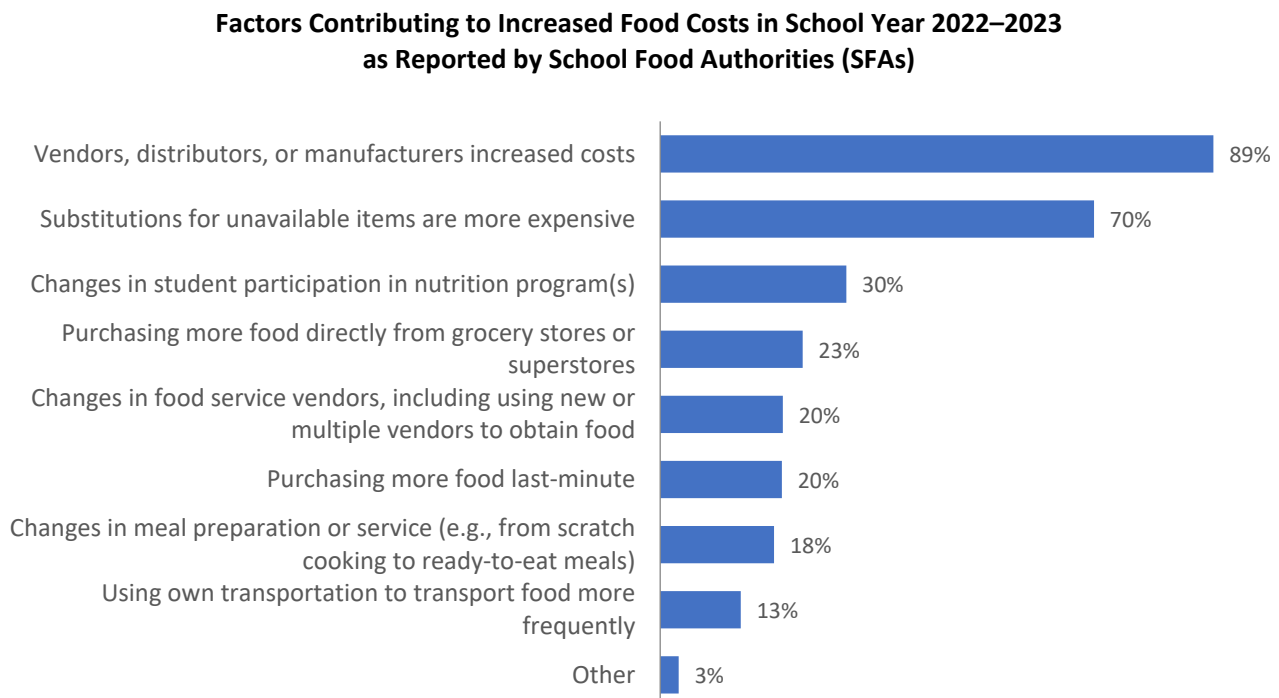
† Indicates medium or large effect size across respondent groups (Cramér’s V; > 0.3 for two groups, > 0.21 for three groups, > 0.17 for four groups). S, M, L, V indicate statistically significant difference from Small, Medium, Large, and Very Large School Food Authorities (SFAs), respectively.

## Changes in Food Costs

**Exhibit 3.1.** Of all School Food Authorities (SFAs) that reported facing higher food costs compared with a typical prepandemic year, nearly half (46 percent) estimated that food costs increased between 10 percent and 24 percent. Another 40 percent of SFAs estimated increases of between 25 percent and 49 percent, and about 11 percent of SFAs estimated that food costs increased by 50 percent or more compared with a typical prepandemic year.<sup>7</sup> In general, public SFAs and rural SFAs were more likely than their counterparts to report increases in food costs.



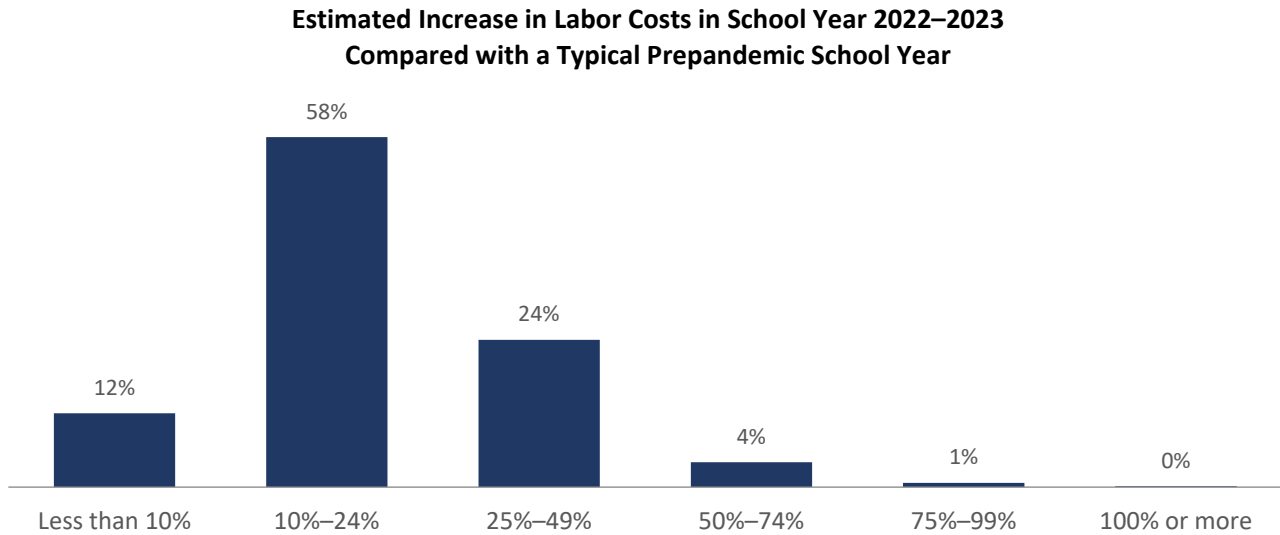
**Exhibit 3.2.** SFAs identified the primary drivers of increased food costs as cost increases by vendors, distributors, or manufacturers (89 percent) and more expensive items used as substitutions for unavailable items (70 percent).



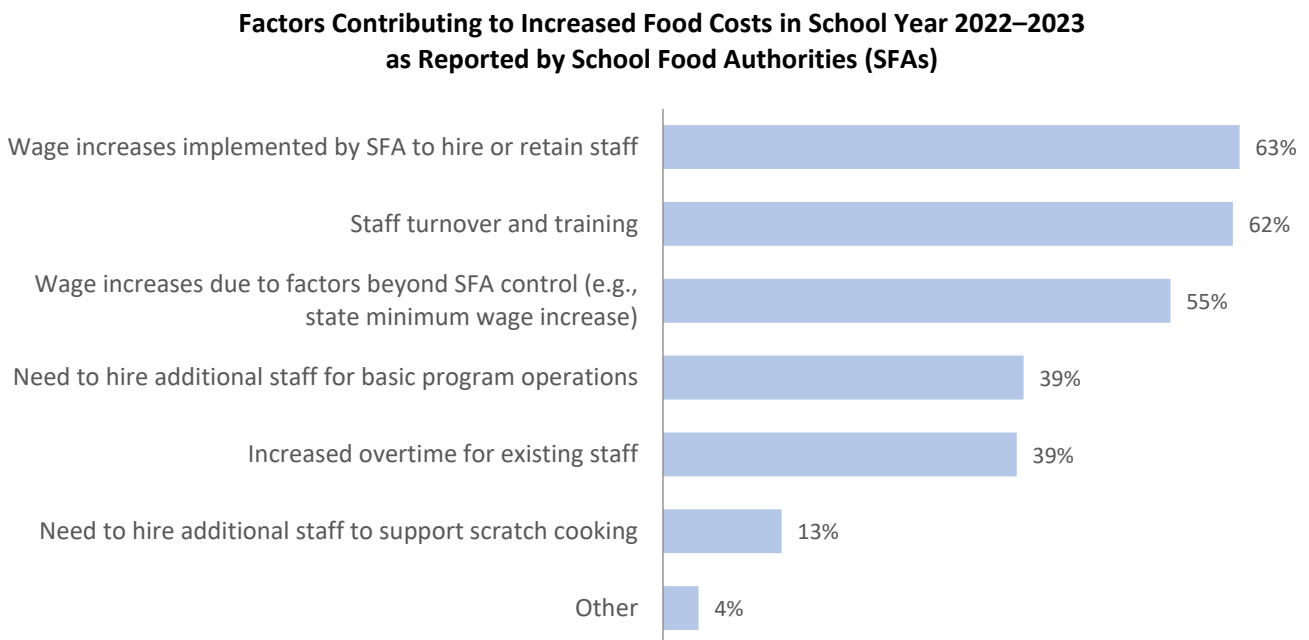
<sup>7</sup> For comparison, the price of food increased 25.7 percent due to inflation between 2018 and 2023. ([Bureau of Labor Statistics, Food Away From Home](#))

## Changes in Labor Costs

**Exhibit 4.1.** Of the 31 percent of School Food Authorities (SFAs) that reported facing higher labor costs compared with a typical prepandemic year, more than half (58 percent) estimated that labor costs increased between 10 percent and 24 percent. Another 24 percent of SFAs estimated increases of between 25 percent and 49 percent, and about 5 percent of SFAs estimated that labor costs increased by 50 percent or more between SY 2022–2023 and a typical prepandemic year. In general, public SFAs and SFAs not in rural areas were more likely than their counterparts to report increased labor costs.



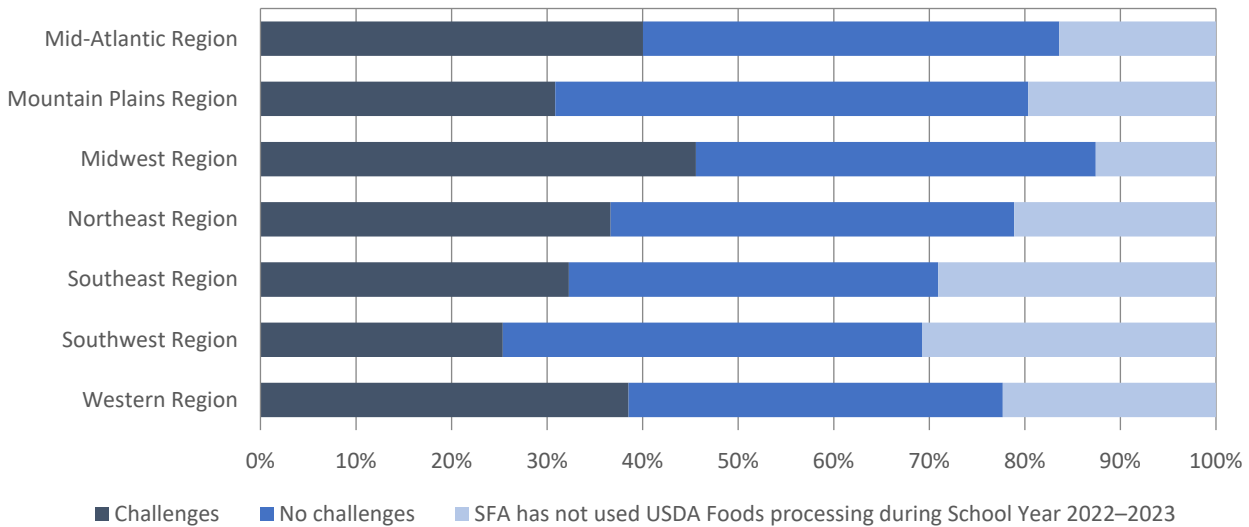
**Exhibit 4.2.** The primary drivers of increased labor costs, as identified by more than half of responding SFAs, were wage increases implemented by the SFA to hire or retain staff (63 percent); staff turnover and training (62 percent); and wage increases due to factors beyond the SFA’s control, such as statewide minimum wage increases (55 percent).



## USDA Foods

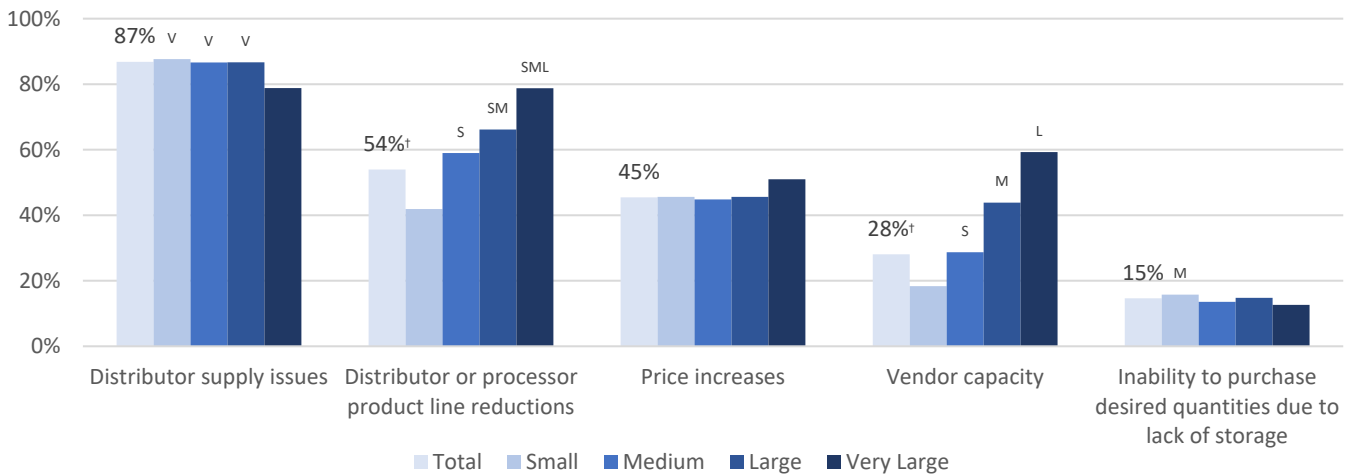
**Exhibit 5.1. Nearly half of all School Food Authorities (SFAs) using USDA Foods (46 percent) reported challenges receiving processed products, with some variation by region.** SFAs located in the Midwest region (MWRO) were most likely to use USDA Foods (87 percent) and to report challenges (52 percent among participating SFAs), while SFAs located in Southwest region (SWRO) were least likely to use USDA Foods (69 percent) and to report challenges (37 percent among participating SFAs).

**Percent of School Food Authorities (SFAs) Experiencing Challenges Receiving USDA Foods in School Year 2022–2023 by Region**



**Exhibit 5.2. Among the 37 percent of SFAs that reported challenges receiving USDA Foods processed end products, distributor supply issues (87 percent) were most frequently named as a contributing factor.** Overall, large and very large SFAs were most likely to report experiencing issues using USDA Foods and small SFAs were least likely. In some cases, the percentage of SFAs experiencing a particular issue also varied by size.

**Factors Contributing to Challenges Receiving USDA Foods in School Year 2022–2023**



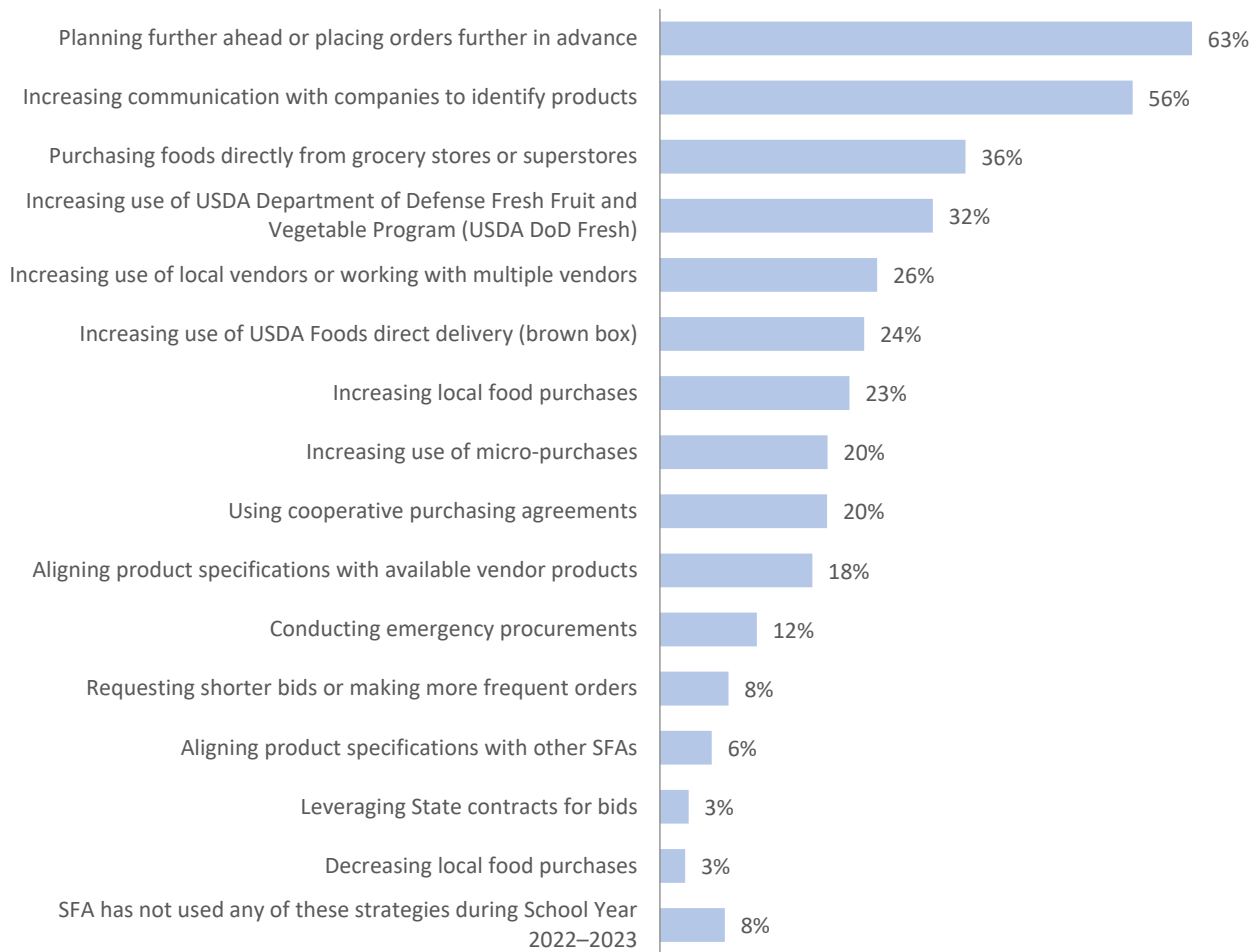
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## SFA Strategies to Address Supply Chain Challenges

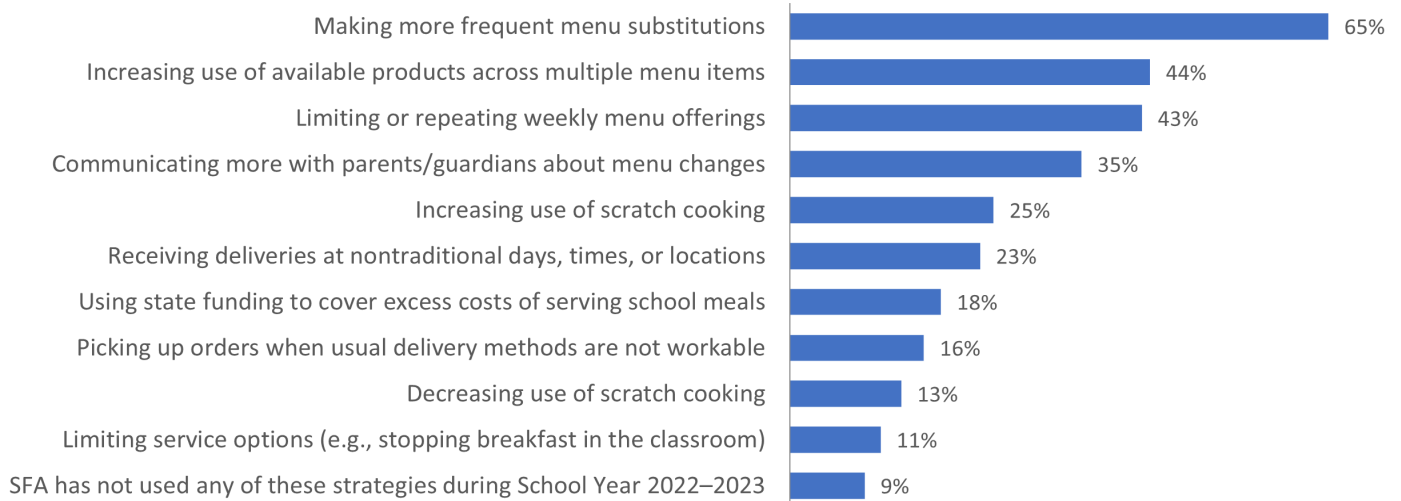
**Exhibit 6.1. Ninety-two percent of School Food Authorities (SFAs) reported using one or more purchasing strategies to help address supply chain issues.** More than half of all SFAs reported planning further ahead or placing orders further in advance (63 percent) or increasing communication with vendors, manufacturers, and distributors to identify available products (56 percent).

**Strategies Used by School Food Authorities (SFAs) to Address Supply Chain Challenges in School Year 2022–2023**



**Exhibit 6.2. Ninety-one percent of SFAs reported using other operational strategies to help address supply chain issues.** SFAs commonly used menus as a tool to adapt to supply chain challenges, including making more frequent menu substitutions (65 percent), increasing the use of available food products across multiple menu items (44 percent), and limiting or repeating weekly menu offerings (43 percent).

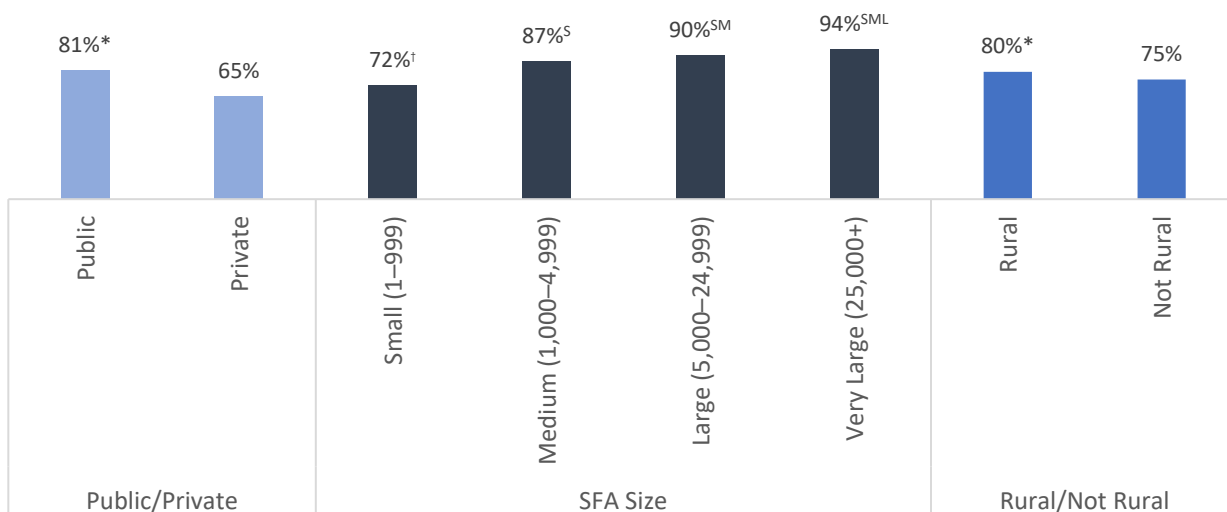
**Strategies Used by School Food Authorities (SFAs) to Address Operational Challenges in School Year 2022–2023**



### Challenges Related to the Return to Standard Operations

**Exhibit 7.1. About 79 percent of all School Food Authorities (SFAs) reported experiencing one or more challenges related to the return to standard operations in the first quarter of SY 2022–2023.** Public SFAs and SFAs in rural areas were more likely than their counterparts to report one or more challenges. The likelihood of reporting one or more challenge also increased with SFA size.

**Percent of School Food Authorities (SFAs) Challenged by the Return to Standard Operations in School Year 2022–2023**



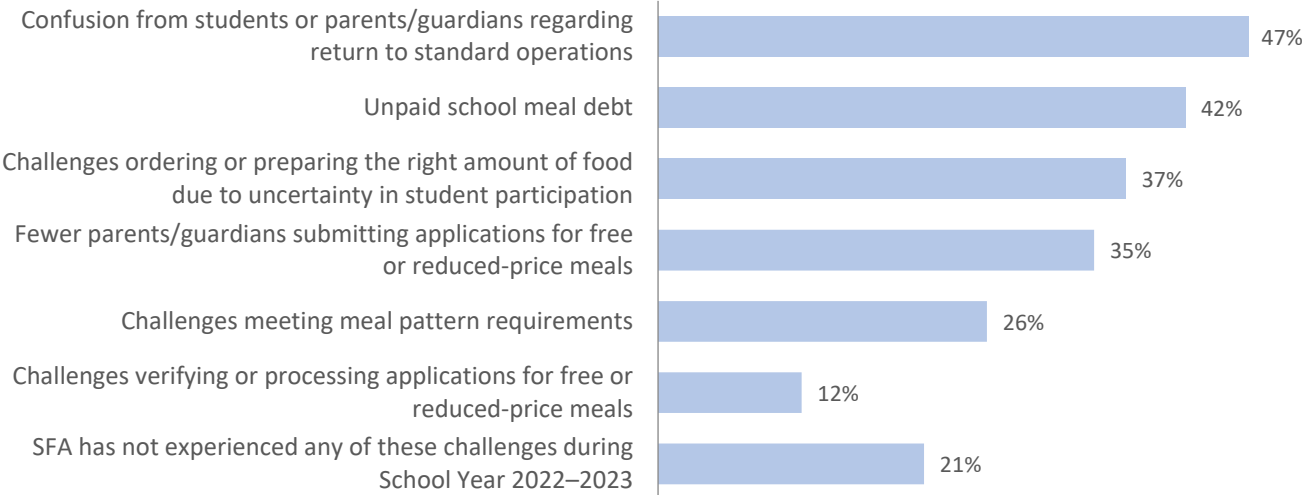
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S, M, L, V indicate statistically significant difference from Small, Medium, Large, and Very Large School Food Authorities (SFAs), respectively.

**Exhibit 7.2. The leading challenges related to the return to standard operations were confusion from students or parents/guardians related to meal service, payment, and operations (47 percent); unpaid school meal debt (42 percent); challenges ordering the right amount of food (37 percent); and fewer parents or guardians submitting applications for free and reduced-price meals (35 percent).**

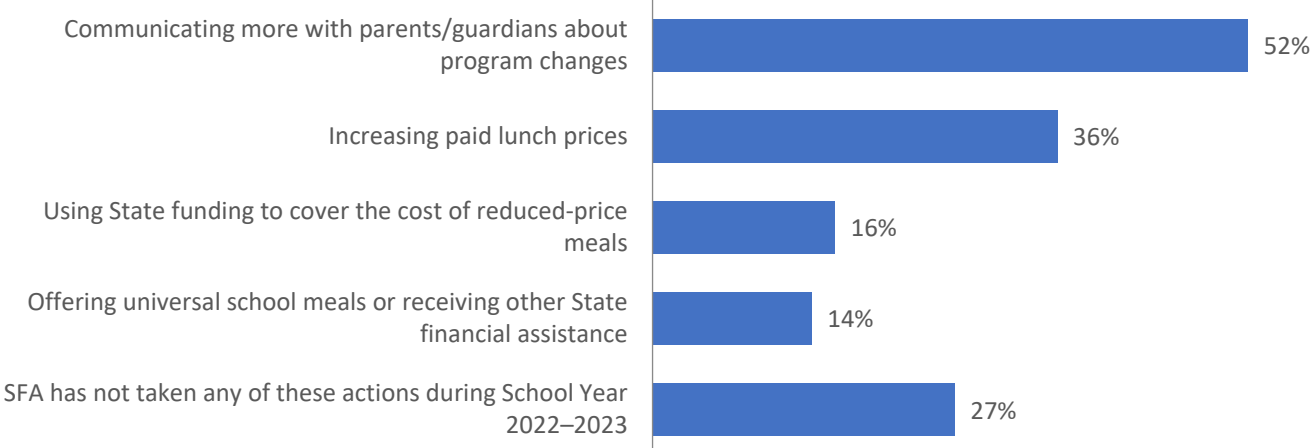
**Common Challenges Related to the Return to Standard Operations Reported by School Food Authorities (SFAs) in School Year 2022-2023**



**SFA Strategies to Address Challenges with the Return to Standard Operations**

**Exhibit 8.1. Seventy-three percent of School Food Authorities (SFAs) adopted strategies to address the challenges associated with returning to standard operations in School Year (SY) 2022–2023.** Strategies included increased communication with parents and guardians about program changes (52 percent) and increasing paid lunch prices (36 percent). SFAs also used State funding to cover the cost of reduced-price meals (16 percent) and received other forms of State financial assistance, including the ability to offer universal meals (14 percent).

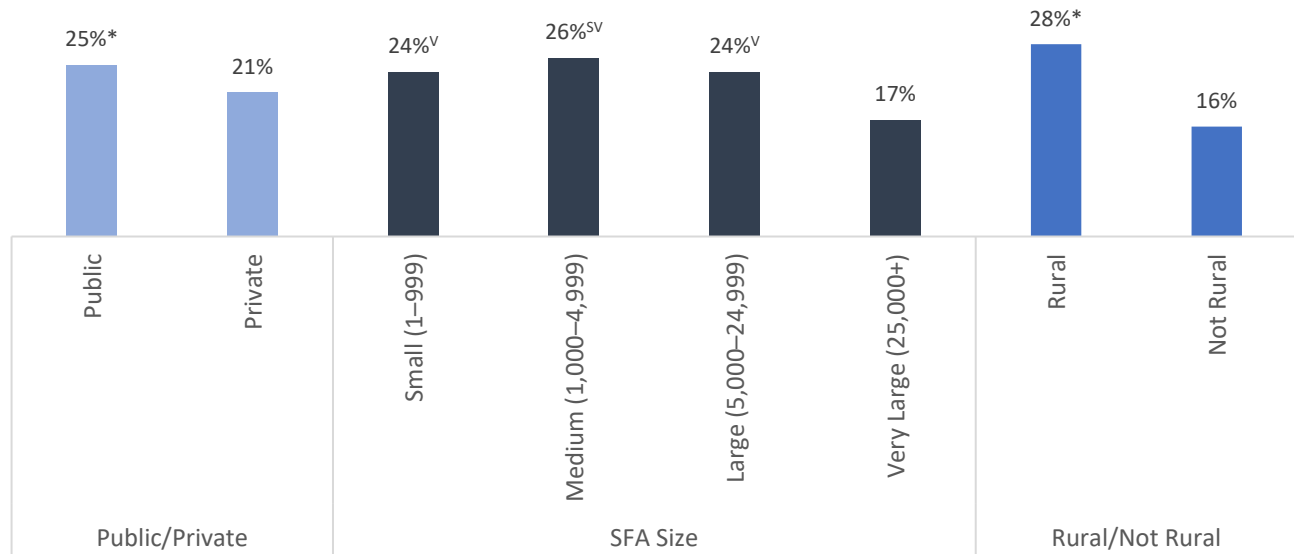
**Actions Taken by School Food Authorities (SFAs) Related to the Return to Standard Operations in School Year 2022–2023**



## Changes in Scratch Cooking

**Exhibit 9.1. One-quarter (25 percent) of School Food Authorities (SFAs) reported increasing the use of scratch cooking to address supply chain challenges, while 14 percent of SFAs decreased the use of scratch cooking.** Respondent populations most likely to increase the use of scratch cooking were public SFAs (25 percent), rural SFAs (28 percent), and SFAs in the Mountain Plains region (32 percent) and Western region (32 percent).

**Percent of School Food Authorities (SFAs) Increasing Scratch Cooking to Address Supply Chain Challenges in School Year 2022–2023**



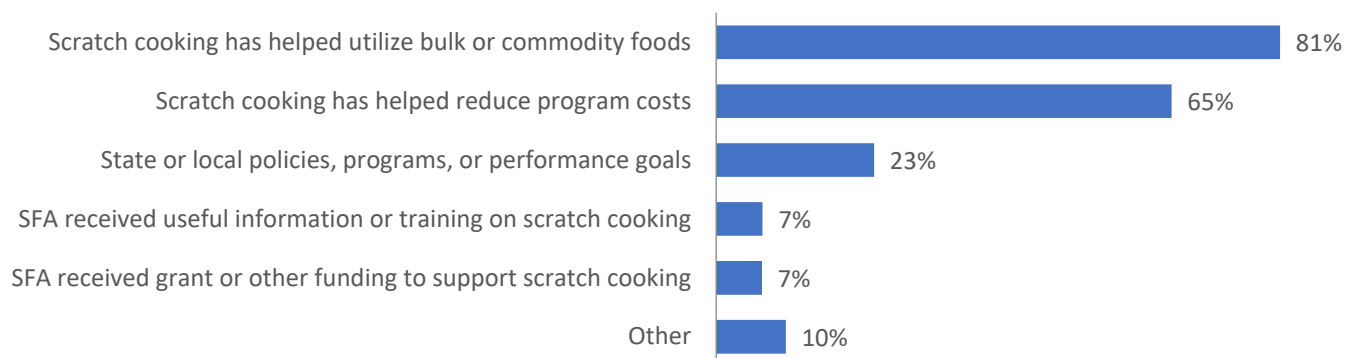
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S, M, L, V indicate statistically significant difference from Small, Medium, Large, and Very Large School Food Authorities (SFAs), respectively.

**Exhibit 9.2. Among SFAs that increased the use of scratch cooking, 81 percent reported that it helped to utilize bulk or commodity foods, and 65 percent reported it helped to reduce program costs.** Among SFAs that decreased the use of scratch cooking, 84 percent found that it was more difficult due to lack of staff or training. There was a statistically significant relationship between increasing scratch cooking and increasing local food purchases; among all SFAs that increased local food purchases, 39 percent increased scratch cooking.<sup>8</sup>

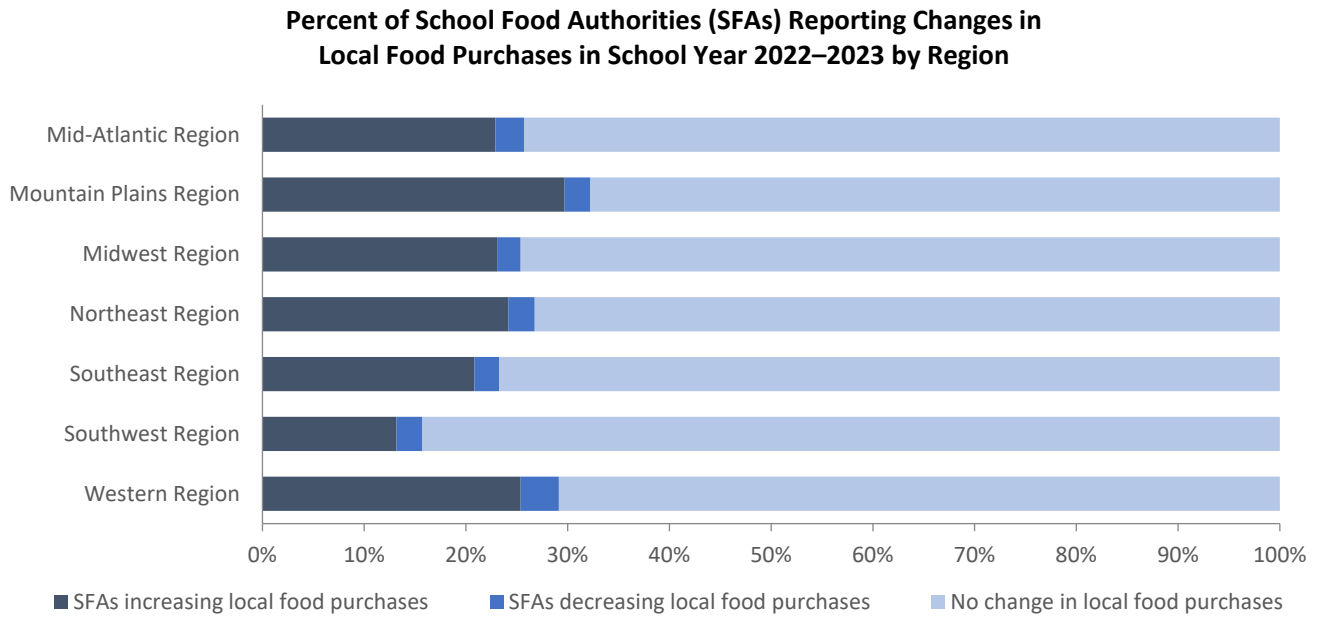
**School Food Authority (SFA) Reasons Provided for Increasing Scratch Cooking in School Year 2022–2023**



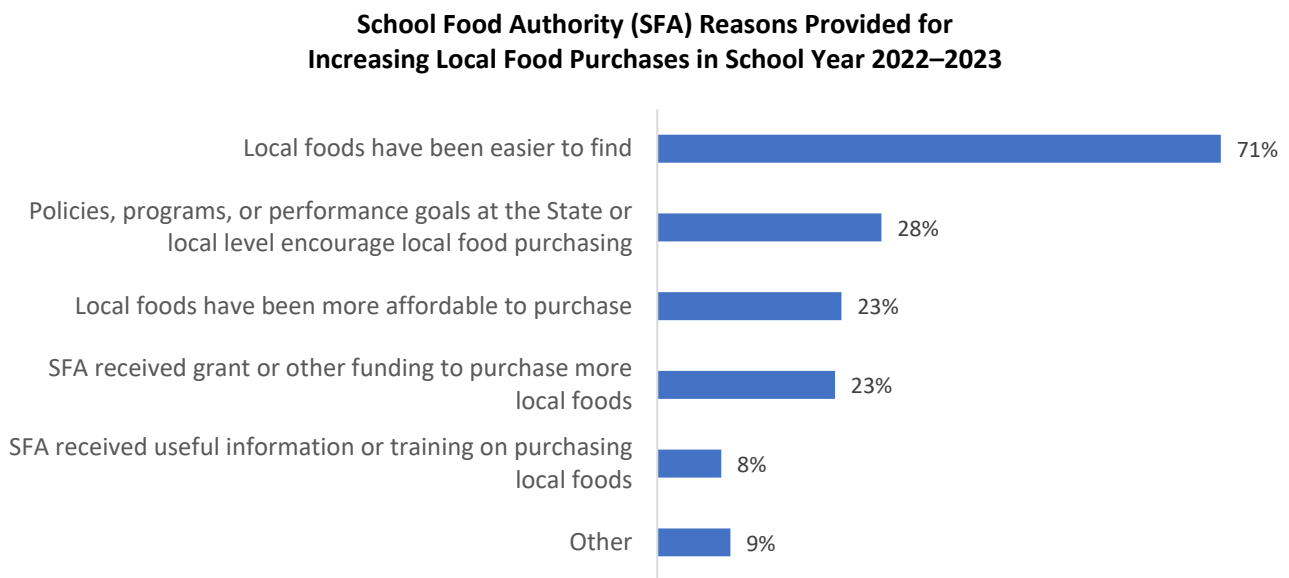
<sup>8</sup> Chi-squared test ( $p < .00001$ ) with small effect size (Cramér's V;  $> 0.1$  for two groups).

## Changes in Local Food Purchases

**Exhibit 10.1. Nearly one-quarter (23 percent) of School Food Authorities (SFAs) reported increasing purchases of local foods to address supply chain challenges, while just 3 percent of SFAs decreased local food purchases.** Across all regions, SFAs in the Mountain Plains region were most likely to increase local foods purchases (30 percent) and SFAs in the Southwest region were least likely (13 percent). Private SFAs (27 percent) and rural SFAs (23 percent) were also more likely to increase local food purchases than their counterparts. There were no significant variations by SFA size.



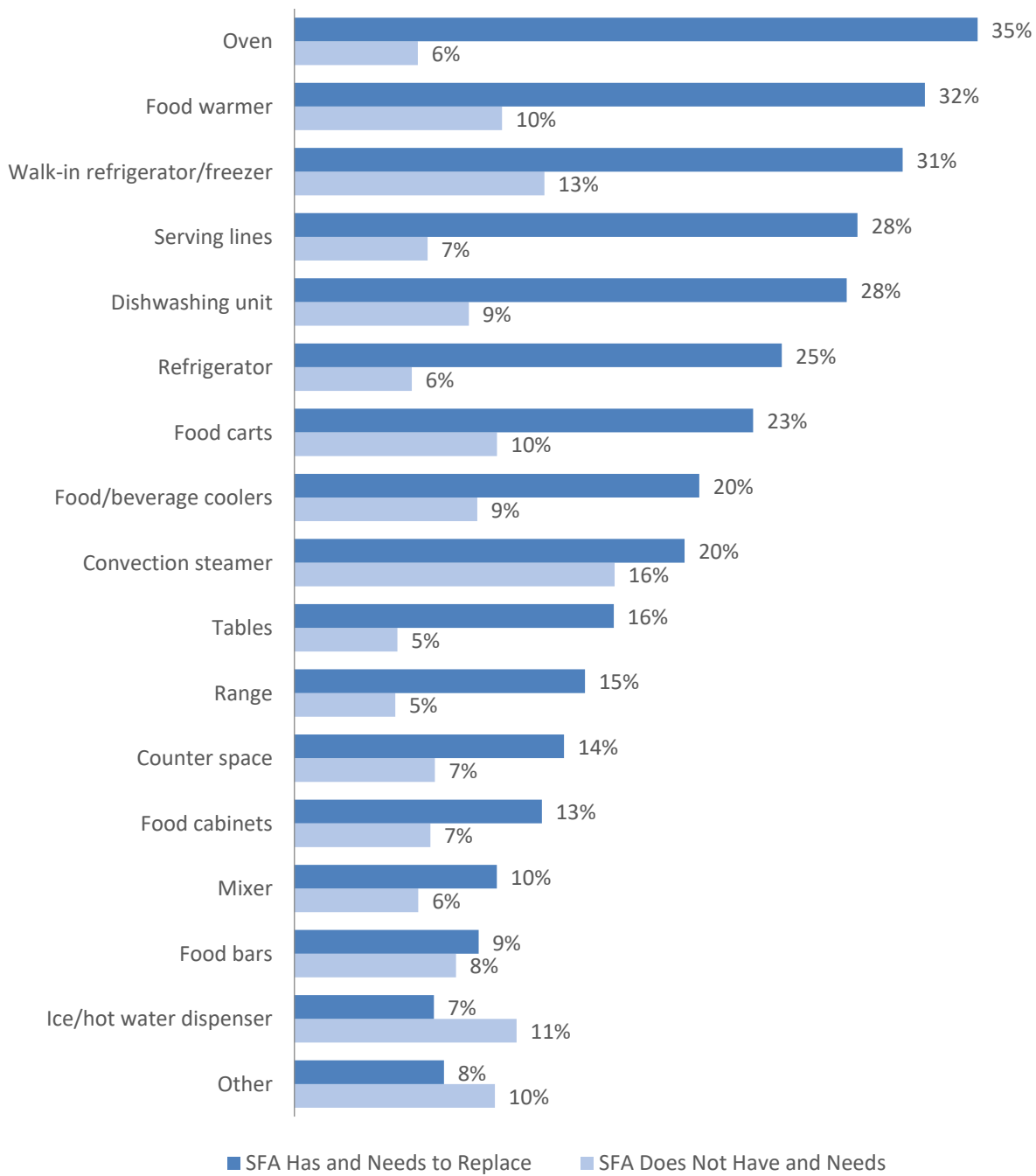
**Exhibit 10.2. Among SFAs that increased purchase of local foods, 71 percent reported that local foods were easier to find.** Respondent populations that were most likely to cite the relative ease of finding local foods included rural SFAs (72 percent), small SFAs (74 percent), private SFAs (75 percent), and SFAs in the Mountain Plains region (75 percent) and Southeastern region (80 percent).



## Kitchen Equipment

**Exhibit 11.1. A majority of School Food Authorities (SFAs) (84 percent) identified a need to replace existing kitchen equipment, including ovens (35 percent), food warmers (32 percent), and walk-in refrigerators/freezers (31 percent). About two-thirds of SFAs (64 percent) also identified a need to purchase equipment they do not currently have, such as convection steamers (16 percent) or walk-in refrigerators/freezers (13 percent).**

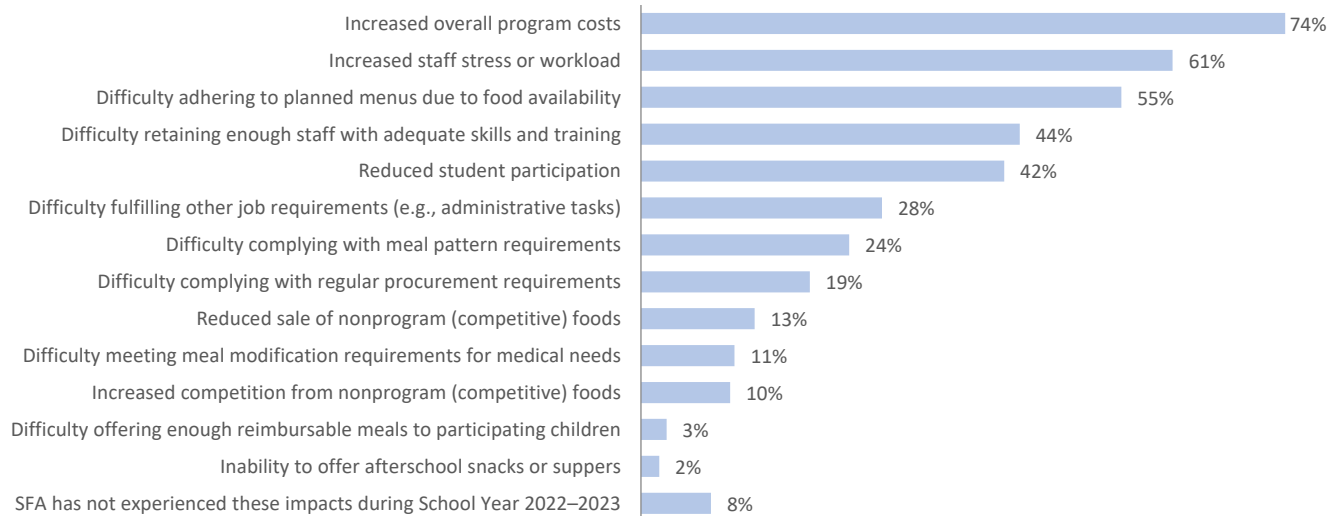
**Percent of School Food Authorities (SFAs) Needing to Replace or Purchase New Kitchen Equipment**



## Impacts on School Food Operations

**Exhibit 12.1. Ninety-two percent of School Food Authorities (SFAs) reported that supply chain challenges and the return to standard operations impacted school food operations.** More than half of all SFAs reported increased overall program costs (74 percent), increased staff stress or workload (61 percent), or difficulty adhering to planned menus due to food availability (55 percent). Compared with SY 2021–2022, SFAs were less likely to name increased staff stress or workload (61 percent, down from 77 percent) and difficulty complying with meal pattern requirements (24 percent, down from 58 percent), but were more likely to name reduced student participation (42 percent, up from 16 percent).

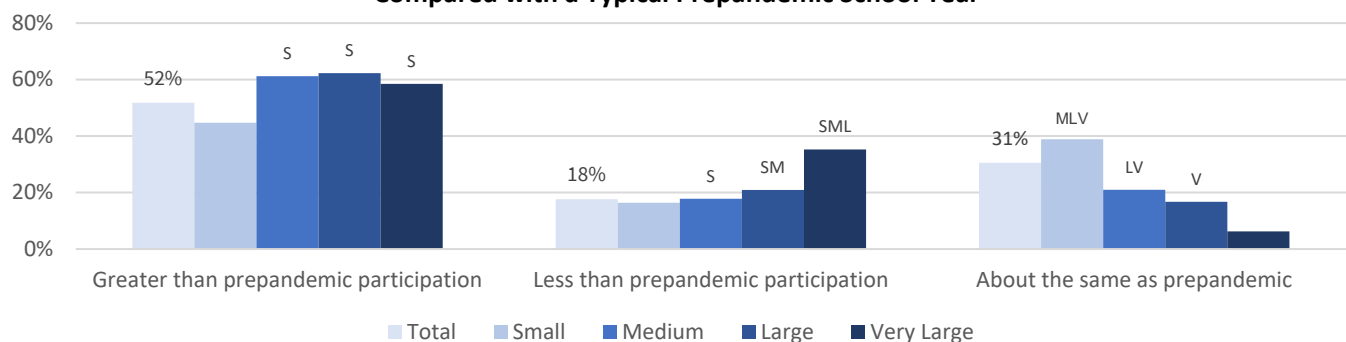
### Impacts of Challenges Facing School Food Authorities (SFAs) in School Year 2022–2023



## Changes in Student Participation

**Exhibit 13.1. More than half of School Food Authorities (SFAs) (52 percent) estimated that student participation in SY 2021–2022 was greater than student participation in a typical prepandemic year, though responses varied by SFA size.** Small SFAs were more likely than medium, large, or very large SFAs to report that participation in SY 2021–2022 was about the same as participation in a typical prepandemic year.

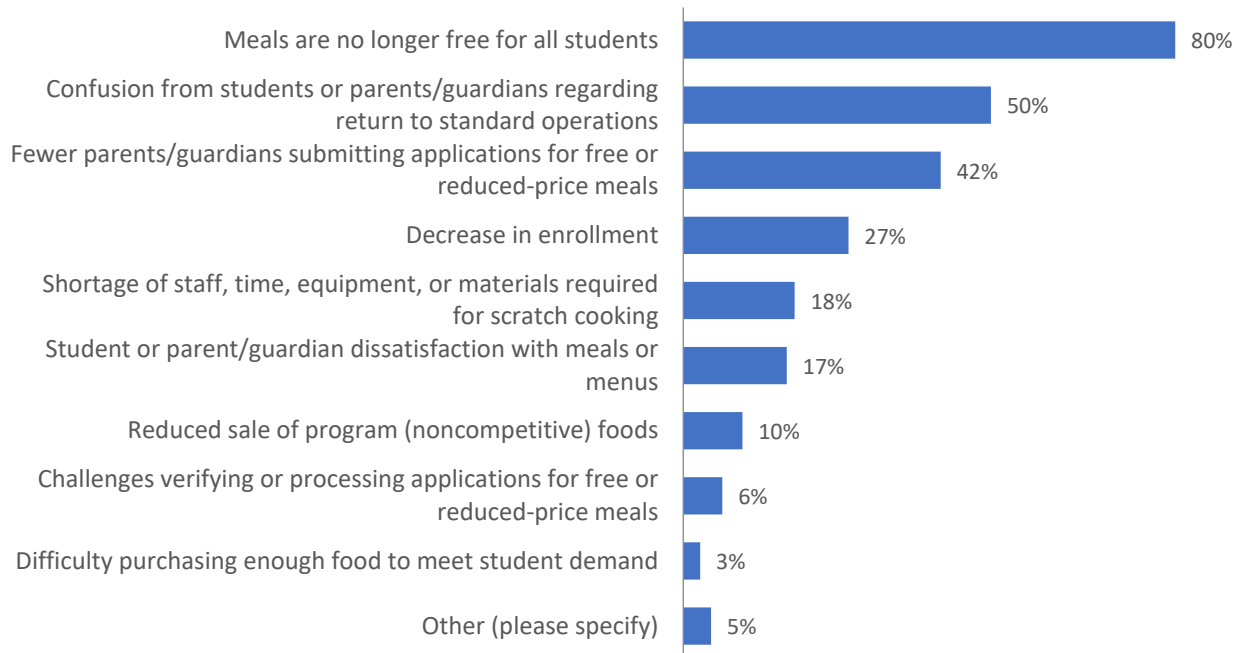
### Student Participation in School Meal Programs in School Year 2022–2023 Compared with a Typical Prepandemic School Year



† Indicates medium or large effect size across respondent groups (Cramér's V; > 0.3 for two groups, > 0.21 for three groups, > 0.17 for four groups). S, M, L, V indicate statistically significant difference from Small, Medium, Large, and Very Large School Food Authorities (SFAs), respectively.

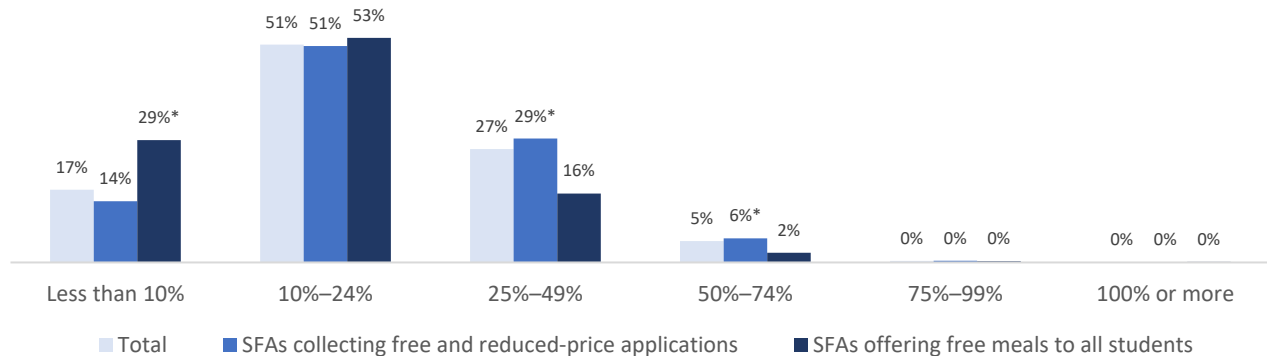
**Exhibit 13.2.** SFAs identified the primary drivers of decreased student participation as meals no longer being free for students (80 percent), followed by confusion from students, parents, and guardians regarding the return to standard operation (50 percent), and fewer parents and guardians submitting applications for free and reduced-price meals (42 percent).

**Factors Contributing to Decreased Student Participation in School Year 2022–2023  
Among Select School Food Authorities (SFAs)**



**Exhibit 13.3.** SFAs with schools providing free meals to all were less likely to report decreases in participation (26 percent) compared with SFAs with schools collecting applications for free and reduced-price meals (53 percent).<sup>9</sup> SFAs with schools providing free meals also tended to report smaller participation decreases.

**Decreases in Student Participation in School Year 2022–2023  
Among Select School Food Authorities (SFAs)**



\* Indicates statistically significant difference (pairwise z-test;  $p < 0.10$ ) from lowest response of population subgroups.

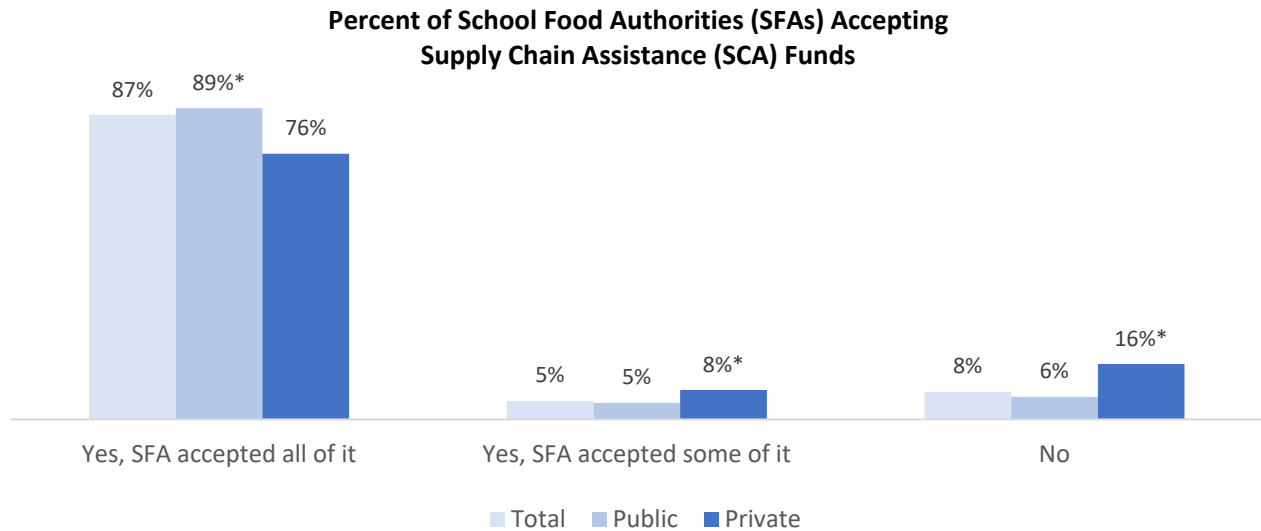
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<sup>9</sup> Compares trends in student participation only among SFAs not reporting decreases in student enrollment in SY 2022-2023. Because an SFA may include multiple schools using different provisions, there is overlap between respondent groups.



## Supply Chain Assistance Funds

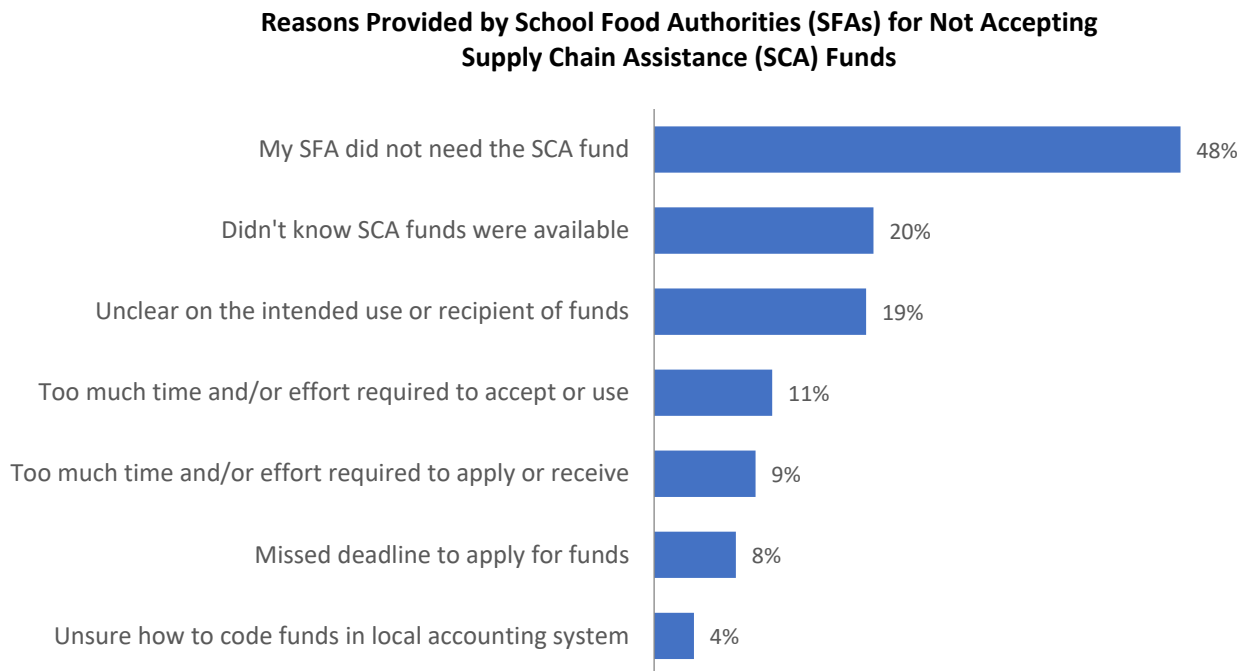
**Exhibit 14.1. A vast majority of School Food Authorities (SFAs) (87 percent) accepted the Supply Chain Assistance (SCA) funds made available in SY 2021–2022.** About three-quarters of private SFAs (76 percent) accepted SCA funds, while about 9-in-10 (89 percent) public SFAs accepted SCA funds.



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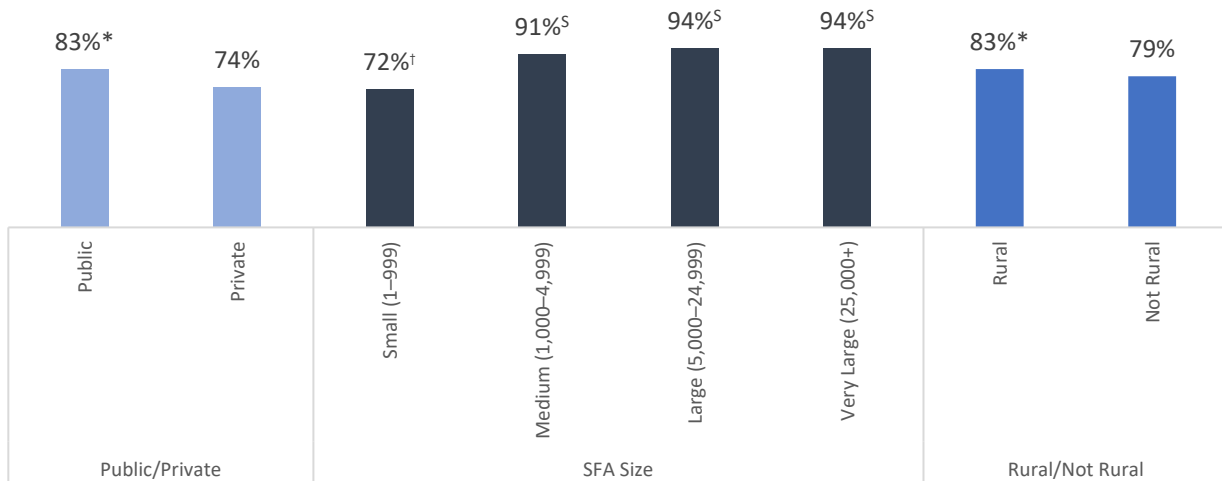
**Exhibit 14.2. Among the small percentage of SFAs (8 percent) that did not accept any SCA funds in SY 2021–2022, nearly half cited not needing the funds as the reason.** One-in-five SFAs that did not accept SCA funds (20 percent) did not know SCA funds were available, and about one-in-five (19 percent) were unclear on the intended use or recipient of the funds.



## SFA Nonprofit School Foodservice Account Status

**Exhibit 15.1.** At the end of school year (SY) 2021–2022, 82 percent of all School Food Authorities (SFAs) reported either operating at a surplus (68 percent) or breaking even (14 percent). Public SFAs and rural SFAs were more likely than their counterparts to operate at a surplus or break even, while small SFAs were least likely to operate at a surplus or break even.

**Percent of School Food Authorities (SFAs) Operating at a Surplus or Breaking Even at the End of School Year 2021–2022**



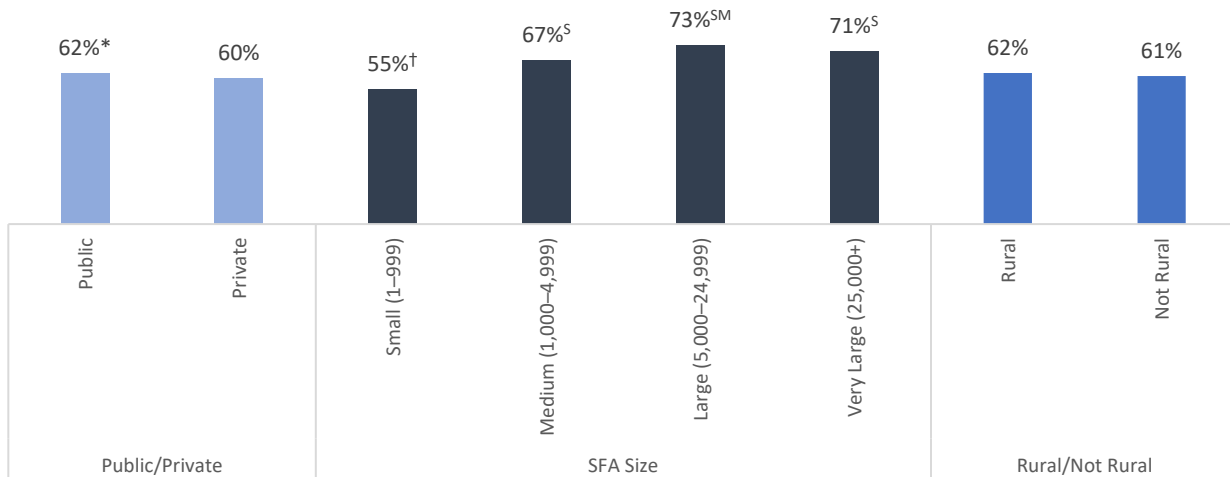
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S, M, L, V indicate statistically significant difference from Small, Medium, Large, and Very Large School Food Authorities (SFAs), respectively.

**Exhibit 15.2.** In the first quarter of SY 2022–2023, only 62 percent of all SFAs predicted operating at a surplus (27 percent) or breaking even (35 percent). Gaps between public and private SFAs and rural and not rural SFAs narrowed, but small SFAs were still less likely to anticipate operating at a surplus or breaking even.

**Percent of School Food Authorities (SFAs) Operating at a Surplus or Breaking Even After the First Quarter of School Year 2022–2023**



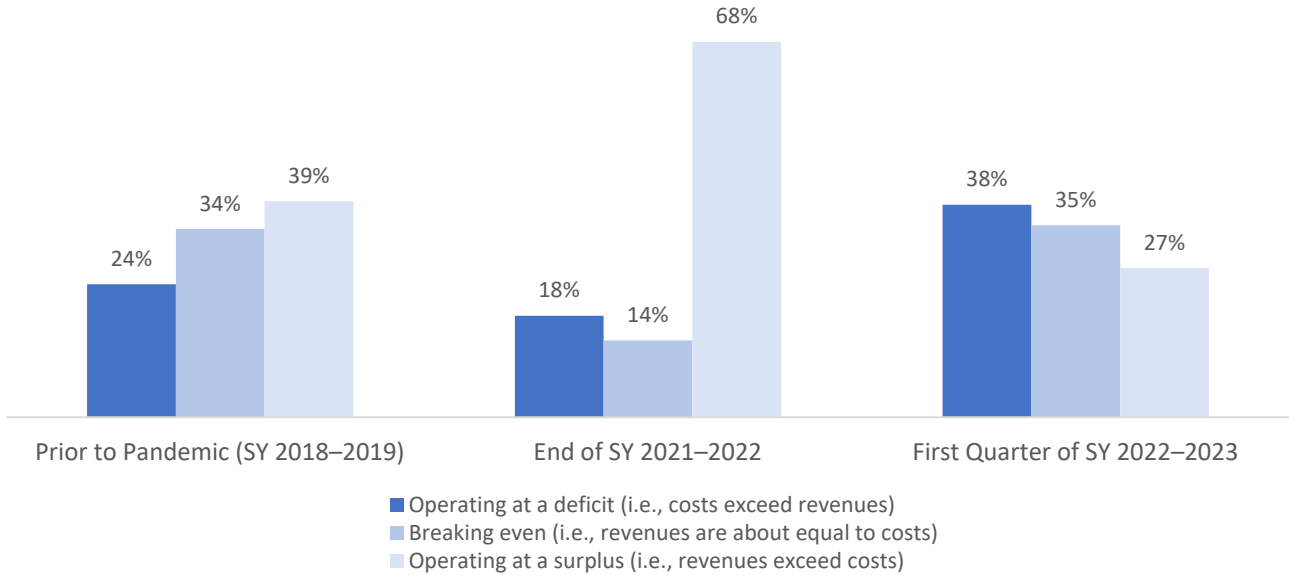
\* Indicates statistically significant difference (pairwise z-test;  $p < 0.10$ ) from lowest response of population subgroups.

† Indicates medium or large effect size across respondent groups (Cramér's  $V$ ;  $> 0.3$  for two groups,  $> 0.21$  for three groups,  $> 0.17$  for four groups).

S, M, L, V indicate statistically significant difference from Small, Medium, Large, and Very Large School Food Authorities (SFAs), respectively.

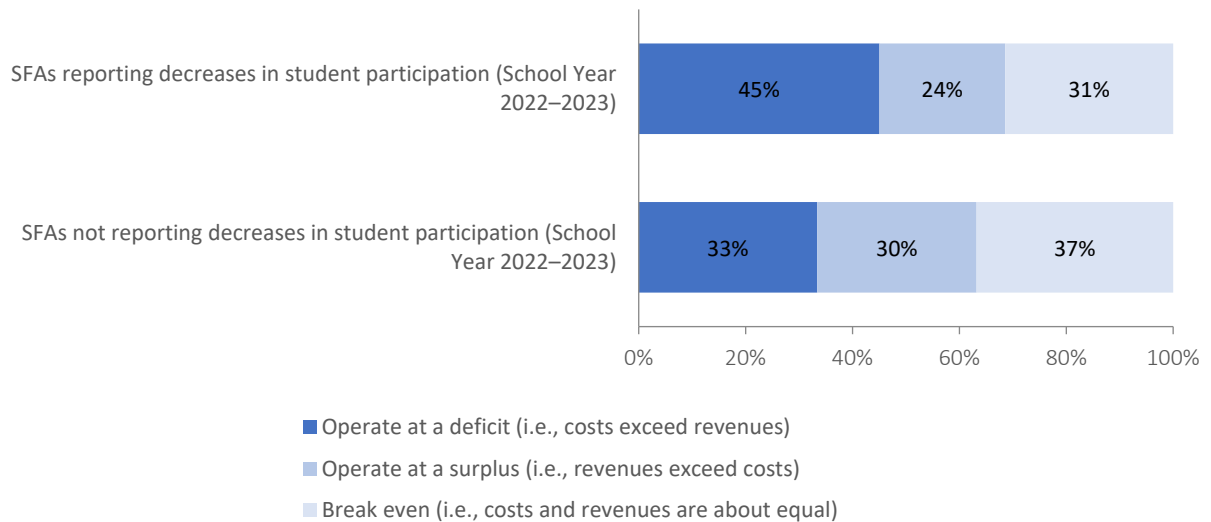
**Exhibit 15.3. The percentage of SFAs operating at a surplus in SY 2021–2022 was greater than in a typical prepandemic year but expected to decrease below prepandemic levels in the first quarter of SY 2022–2023.** The percentage of SFAs breaking even or operating at a surplus decreased from 82 percent in SY 2021–2022 to 62 percent in the first quarter of SY 2022–2023.

**Financial Status of School Food Authorities (SFAs) Across Multiple School Years (SYs)**



**Exhibit 15.4. SFAs reporting decreases in student participation in SY 2022–2023 were more likely to predict operating at a deficit in the first quarter of the school year.** Among SFAs reporting decreased student participation in SY 2022–2023, nearly half (45 percent) predicted operating at a deficit quarter, compared with a third (33 percent) of SFAs that did not report decreased student participation.

**Relationship Between Student Participation and School Food Authority (SFA) Financial Status in School Year 2022–2023**



## APPENDIX A

### Weighting Methodology

The response rate for the survey was 75 percent. Estimates may be biased if respondents are systematically different from non-respondents. The United States Department of Agriculture (USDA) Food and Nutrition Service (FNS) used a similar approach to addressing non-response bias as the approach used in the Farm to School Census.<sup>10</sup> Response rates by key characteristics were assessed to determine any potential bias and non-response weights were created to adjust for this variation. School Food Authority (SFA) size, public/private status, and region were all deemed significant predictors of non-response through estimating a probit model. FNS used coefficients from the probit model to predict the propensity of each SFA to complete the survey and took the inverse of these propensities to create inverse propensity weights. The resulting weights were then adjusted so that the sum of the weights of responding SFAs was equal to the number of SFAs in the population.

FNS applied urbanicity classifications for SFAs at the Zip Code Tabulation Area (ZCTA) level using ZCTA locale assignments from the National Center for Education Statistics (NCES). These locale assignments were not available for all SFAs, resulting in missing data. Because of this, FNS used the same methods to create a second set of weights for analyses of urbanicity.

Characteristic	Population [Percent (N)]	Unweighted Respondents [Percent (N)]	Weighted Respondents [Percent (N)]
<b>Total</b>	100% (18,843)	75.9% (14,301)	100% (18,890)
MWRO (Midwest Regional Office)	29.5% (5,554)	29.7% (4,250)	29.4% (5,587)
SWRO (Southwest Regional Office)	15.8% (2,973)	16.1% (2,301)	16.0% (3,030)
MPRO (Mountain Plains Regional Office)	12.9% (2,432)	13.1% (1,867)	12.9% (2,454)
NERO (Northeast Regional Office)	11.5% (2,173)	11.4% (1,627)	11.5% (2,189)
WRO (Western Regional Office)	11.2% (2,108)	11.2% (1,602)	10.8% (2,038)
MARO (Mid-Atlantic Regional Office)	10.1% (1,899)	9.8% (1,395)	10.0% (1,899)
SERO (Southeast Regional Office)	9.0% (1,704)	8.8% (1,259)	8.9% (1,693)
Small (1-999 students)	59.5% (11,203)	58.0% (8,302)	59.7% (11,334)
Medium (1,000-4,999 students)	29.4% (5,534)	30.7% (4,396)	29.6% (5,611)
Large (5,000-24,999 students)	9.1% (1,712)	9.1% (1,296)	9.1% (1,724)
Very Large (25,000+ students)	1.5% (286)	1.5% (215)	1.5% (289)
Public	81.0% (15,260)	81.7% (11,688)	81.5% (15,467)
Private	19.0% (3,583)	18.3% (2,613)	18.5% (3,514)
Rural	65.4% (12,315)	68.4% (9,785)	66.3% (12,580)

<sup>10</sup> [Farm to School Census and Comprehensive Review | Food and Nutrition Service \(usda.gov\)](#)

Characteristic	Population [Percent (N)]	Unweighted Respondents [Percent (N)]	Weighted Respondents [Percent (N)]
Not Rural	33.4% (6,285)	30.4% (4,348)	33.9% (6,401)

## APPENDIX B



OMB control number: 0584-0677  
Expiration date: 05/31/2023

### SFA SURVEY II ON SUPPLY CHAIN DISRUPTION AND STUDENT PARTICIPATION

#### INTRODUCTION

Throughout the pandemic, school nutrition professionals have met extraordinary challenges to ensure every child can get the food they need to learn, grow, and thrive. As SFAs across the country return to standard operations in school year 2022-2023, the US Department of Agriculture (USDA) seeks to understand the continued challenges SFAs are facing due to ongoing food and labor supply chain disruptions, as well as the ways in which this transition is impacting student participation in nutrition programs.

This survey is mandatory and is intended to ensure the USDA has national, representative-level information to assess the scope, reach, and variation in challenges and mitigation strategies. The results will be used to assist USDA's Food and Nutrition Service (FNS) and its partners to enhance the toolbox for school nutrition professionals working hard to make sure students are served healthy and nutritious meals. The survey is estimated to take approximately 20 minutes to complete.

**FNS is asking all SFAs that participate in Child Nutrition Programs to complete this survey by January 6, 2023.**

Please complete the survey regardless of how you procure meals. If you are unable to respond to a question (for example, if your SFA purchases vended meals and does not have access to the information needed), you may select the response "I don't know." You are also welcome to share your unique survey link with colleagues, staff, contracted companies, and others to help you respond to questions. Food Service Management Companies (FSMCs) and others serving multiple SFAs may receive multiple survey links and should complete a separate survey for each SFA.

Please note that the survey includes questions about changes in overall food costs, labor costs, and student participation during the last several years. If this information is not readily available to you, we encourage you to provide your best estimates. Some survey questions will be hidden or displayed based on your responses to previous questions; you should not be concerned if survey question numbers are not consecutive.

Finally, you may start and come back to the survey at any time prior to submitting your responses, but you will be unable to edit your responses after submitting.

We sincerely appreciate your participation in this survey, particularly given the time and exceptional effort you dedicate to making Child Nutrition Programs work for children and families. As such, we have made this survey as simple to complete as possible.

If you have any questions about the survey, please email us at [CNSurveys@usda.gov](mailto:CNSurveys@usda.gov).

We thank you in advance for your contribution to this important effort.

**Please click Next>> to begin the survey.**

**1. Since the start of the regular 2022-2023 school year, which Child Nutrition Programs has your SFA operated?** For this and all other questions, do not include programs operated during summer 2022. Select all that apply.

- National School Lunch Program (NSLP)
- School Breakfast Program (SBP)
- NSLP Afterschool Snack Service
- Child and Adult Care Food Program (CACFP) At-risk Afterschool Meals
- Fresh Fruit and Vegetable Program (FFVP)
- Special Milk Program (SMP)
- Summer Food Service Program (SFSP) (select only if SFA operated SFSP during unanticipated school closures since the start of the regular 2022-2023 school year)
- SFA is not operating any of the above Child Nutrition Programs during school year 2022-2023

**38. Has your SFA experienced any challenges operating the Special Milk Program or procuring milk during school year 2022-2023?** If your SFA does not operate the Special Milk Program, please click the Back button and select a different response.

- Yes
- No
- I don't know

**39. Please describe any challenges your SFA has experienced operating the Special Milk Program or procuring milk during school year 2022-2023.**

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**2. How are the schools in your SFA operating the school lunch and/or breakfast programs in school year 2022-2023? Select all that apply.**

- Collecting household applications to determine eligibility for free or reduced-price meals
- Provision 2/3
- Community Eligibility Provision
- Universal free meals offered by state or territory
- Other alternative provision(s) for NSLP and SBP
- Other alternative provision for only NSLP or only SBP

**3. Which food service model(s) does your SFA use? Select all that apply.**

- Food Service Management Company (FSMC)
- Vended meals company (provides meals only)
- Purchase meals from other schools or central kitchens
- Self-preparation (e.g., independent kitchen, base kitchen, production kitchen)



**4. What, if any, supply chain-related challenges has your SFA experienced during school year 2022-2023?**

*Select all that apply.*

- High food costs (compared with a typical pre-pandemic school year)
- High labor costs (compared with a typical pre-pandemic school year)
- High cost and/or limited availability of food service materials (e.g., plates, trays, utensils)
- High cost and/or limited availability of food service equipment or parts
- School food service staffing shortages
- Challenges receiving deliveries on usual days, times, or locations
- Receiving incomplete orders with missing or substituted items
- Receiving items that are damaged or unusable due to distributor issues
- Food vendors discontinuing participation in school food service operations
- Low number of bids for food service contracts
- Lack of storage space to store additional food in the event of shortages
- SFA has not experienced any of these supply chain-related challenges during school year 2022-2023
- I don't know

**5. Has your SFA experienced any challenges getting USDA Foods processed end products during school year 2022-2023?**

- Yes
- No
- SFA has not used USDA Foods processing during school year 2022-2023
- I don't know

**6. To the best of your knowledge, what factors have contributed to challenges getting USDA Foods processed end products during school year 2022-2023? Select all that apply.**

- Vendor capacity
- Distributor supply issues
- Distributor or processor product line reductions (SKU rationalization)
- Price increases
- Inability to purchase as much food as SFA would like due to lack of storage space
- I don't know

**7. What, if any, challenges has your SFA experienced related to the return to standard operations during school year 2022-2023? Select all that apply.**

- Fewer parents/guardians submitting applications for free or reduced-price meals
- Challenges verifying or processing applications for free or reduced-price meals
- Confusion from students or parents/guardians regarding return to standard operations (e.g., changes to meal service, payment, or applications)
- Challenges ordering or preparing the right amount of food due to uncertainty in student participation
- Challenges meeting meal pattern requirements
- Unpaid school meal debt
- SFA has not experienced any of these challenges during school year 2022-2023
- I don't know

**8. This question pertains to all of the challenges you selected in previous questions. How are the challenges your SFA is experiencing impacting school meal operations? *Select all that apply.***

- Reduced student participation
- Reduced sale of nonprogram (competitive) foods
- Increased competition from nonprogram (competitive) or off-campus food sales
- Increased overall program costs
- Difficulty offering enough reimbursable meals to participating children due to lack of food
- Difficulty meeting meal modification requirements for children with food and nutrition-related disabilities
- Difficulty adhering to planned menus due to changing or limited food availability
- Difficulty complying with meal pattern requirements
- Difficulty complying with regular procurement requirements
- Inability to offer afterschool snacks or suppers
- Increased staff stress or workload
- Difficulty retaining enough staff with adequate skills and training
- Difficulty fulfilling other job requirements, such as completing federal or state reporting forms, due to time spent addressing challenges
- SFA has not experienced any of these impacts during school year 2022-2023
- I don't know

**9. What, if any, purchasing strategies has your SFA used to address supply chain challenges during school year 2022-2023? Select all that apply.**

- Aligning product specifications with other SFAs
- Aligning product specifications with available vendor products
- Using cooperative purchasing agreements
- Increasing use of local vendors or working with multiple vendors
- Increasing use of USDA Foods direct delivery (brown box)
- Increasing use of USDA DoD Fresh
- Leveraging state contracts for bids
- Conducting emergency procurements
- Increasing use of micro-purchases
- Purchasing foods directly from grocery stores or superstores
- Increasing local food purchases
- Decreasing local food purchases
- Requesting shorter bids or making more frequent orders
- Increasing communication with vendors, distributors, or manufacturers to identify available products
- Planning further ahead or placing orders further in advance
- SFA has not used any of these strategies during school year 2022-2023
- I don't know

**10. What other strategies has your SFA used to address supply chain challenges during school year 2022-2023?**

*Select all that apply.*

- Communicating more with parents/guardians about menu changes
- Increasing use of scratch cooking
- Decreasing use of scratch cooking
- Limiting or repeating weekly menu offerings
- Making more frequent menu substitutions
- Increasing use of available products across multiple menu items
- Using state funding to cover excess costs of serving school meals
- Limiting service options (e.g., stopping breakfast in the classroom)
- Receiving deliveries at nontraditional days, times, or locations
- Picking up orders when usual delivery methods are not workable
- SFA has not used any other strategies to address supply chain issues in school year 2022-2023
- I don't know

**11. What, if any, actions has your SFA taken in response to the return to standard operations during school year 2022-2023? *Select all that apply.***

- Increasing paid lunch prices
- Using state funding to cover the cost of reduced-price meals
- Communicating more with parents/guardians about program changes (e.g., changes to meal service, payment, or applications)
- Offering universal school meals or receiving other financial assistance from the state
- No longer participating in NSLP
- No longer participating in SBP
- No longer participating in other USDA Child Nutrition Programs (e.g., afterschool snack programs)
- SFA has not taken any of these actions during school year 2022-2023
- I don't know

**12. You indicated that your SFA has faced challenges due to increased food costs. To the best of your knowledge, approximately how much have your food costs increased from a typical pre-pandemic school year (e.g., 2018-2019)?**

- Less than 10 percent
- 10 percent - 24 percent
- 25 percent - 49 percent
- 50 percent - 74 percent
- 75 percent - 99 percent
- 100 percent or more
- I don't know

**13. To the best of your knowledge, what factors have contributed to changes in your food costs? *Select all that apply.***

- Changes in student participation in nutrition program(s)
- Changes in food service vendors, including using new or multiple vendors to obtain food
- Changes in meal preparation or service (e.g., from scratch cooking to ready-to-eat meals)
- Vendors, distributors, or manufacturers increased costs
- Purchasing more food directly from grocery stores or superstores
- Purchasing more food last-minute
- Using own transportation to transport food more frequently
- Substitutions for unavailable items are more expensive
- I don't know
- Other (please specify) \_\_\_\_\_

**14. You indicated your SFA has faced challenges due to increased labor costs. To the best of your knowledge, approximately how much have your labor costs increased from a typical pre-pandemic school year (e.g., 2018-2019)?**

- Less than 10 percent
- 10 percent - 24 percent
- 25 percent - 49 percent
- 50 percent - 74 percent
- 75 percent - 99 percent
- 100 percent or more
- I don't know

**15. To the best of your knowledge, what factors have contributed to changes in your labor costs? *Select all that apply.***

- Wage increases due to factors beyond SFA control (e.g., state minimum wage increase)
- Wage increases implemented by SFA to hire or retain staff
- Need to hire additional staff for basic program operations
- Need to hire additional staff to support scratch cooking
- Increased overtime for existing staff
- Staff turnover and training
- I don't know
- Other (please specify) \_\_\_\_\_

**16. You indicated your SFA has faced challenges leading to reduced student participation. To the best of your knowledge, approximately how much has student participation decreased across the Child Nutrition Programs your SFA operates since the start of last school year (2021-2022)?**

- Less than 10 percent
- 10 percent - 24 percent
- 25 percent - 49 percent
- 50 percent - 74 percent
- 75 percent - 99 percent
- 100 percent or more
- I don't know

**17. To the best of your knowledge, what factors have contributed to decreases in student participation? *Select all that apply.***

- Fewer parents/guardians submitting applications for free or reduced-price meals
- Challenges verifying or processing applications for free or reduced-price meals
- Confusion from students or parents/guardians regarding return to standard operations (e.g., changes to meal service, payment, or applications)
- Decrease in enrollment
- Difficulty purchasing enough food to meet student demand
- Meals are no longer free for all students
- Reduced sale of program (noncompetitive) foods
- Shortage of staff, time, equipment, or materials required for scratch cooking
- Student or parent/guardian dissatisfaction with meals or menus
- I don't know
- Other (please specify) \_\_\_\_\_



**18. In general, how did student participation in your SFA's Child Nutrition Programs last school year (2021-2022) compare with participation in a typical pre-pandemic school year (e.g., 2018-2019)?**

- Greater than pre-pandemic participation
- Less than pre-pandemic participation
- About the same as pre-pandemic participation
- I don't know
- Not applicable (my SFA is new and was not in operation)

**19. You indicated your SFA has received orders with missing or substituted items. To the best of your knowledge, how frequently do you receive incomplete orders with missing or substituted items?**

- Rarely
- Sometimes
- About half of the time
- Most of the time
- Almost always

**20. To the best of your knowledge, when you receive an order with missing or substituted items, approximately how many items in the order are affected?**

- Less than a quarter of items
- About a quarter of items
- About half of items
- About three quarters of items
- More than three quarters of items

**21. You indicated your SFA has experienced food vendors discontinuing participation in school food service operations. To the best of your knowledge, which of the following factors are driving this change? *Select all that apply.***

- Federal, state, or local procurement regulations (please specify) \_\_\_\_\_
- Labor shortages
- Food shortages
- Labor costs
- Food costs
- Energy or fuel costs
- Difficulty producing items that meet SFA specifications
- Difficulty guaranteeing prices for bids due to changes in food costs
- School food operations are no longer profitable for vendor
- I don't know
- Other (please specify) \_\_\_\_\_

**22. You indicated your SFA increased its local food purchases during school year 2022-2023 due to supply chain challenges. To the best of your knowledge, what factors contributed to this decision? *Select all that apply.***

- Local foods have been easier to find
- Local foods have been more affordable to purchase
- Policies, programs, or performance goals at the state or local level encourage local food purchasing
- SFA received grant or other funding to purchase more local foods
- SFA received useful information or training on purchasing local foods
- I don't know
- Other (please specify) \_\_\_\_\_

**23. You indicated your SFA decreased its local food purchases during school year 2022-2023 due to supply chain challenges. To the best of your knowledge, what factors contributed to this decision? *Select all that apply.***

- Local foods have been more difficult to find
- Local foods have been more expensive to purchase
- Local foods have been more difficult to process or prepare due to lack of staff or training
- Local foods have been more difficult to process or prepare due to kitchen equipment
- Local foods have been more difficult to prepare or serve due to changes in meal service (e.g., use of grab-and-go meals)
- I don't know
- Other (please specify) \_\_\_\_\_

**24. You indicated your SFA increased its use of scratch cooking during school year 2022-2023 due to supply chain challenges. To the best of your knowledge, what factors contributed to this decision? *Select all that apply.***

- Scratch cooking has helped reduce program costs
- Scratch cooking has helped utilize bulk or commodity foods
- Policies, programs, or performance goals at the state or local level encourage scratch cooking
- SFA received grant or other funding to support scratch cooking
- SFA received useful information or training on scratch cooking
- I don't know
- Other (please specify) \_\_\_\_\_

**25. You indicated your SFA decreased its use of scratch cooking during school year 2022-2023 due to supply chain challenges. To the best of your knowledge, what factors contributed to this decision? *Select all that apply.***

- Scratch cooking has been more difficult due to cost or availability of ingredients
- Scratch cooking has been more difficult due to lack of staff or training
- Scratch cooking has been more difficult due to lack of kitchen equipment
- Scratch cooking has been more difficult due to changes in meal service (e.g., use of grab-and-go meals)
- I don't know
- Other (please specify) \_\_\_\_\_

**26. What kitchen equipment does your SFA currently have and need to replace? *Select all that apply.***

- Oven
- Refrigerator
- Walk-in refrigerator/freezer
- Food cabinets
- Convection steamer
- Serving lines
- Food/beverage coolers
- Dishwashing unit
- Food bars
- Tables
- Range
- Food warmer
- Mixer
- Food carts
- Ice/hot water dispenser
- Counter space
- SFA does not have any kitchen equipment that needs replacing
- I don't know
- Other (please specify) \_\_\_\_\_

**27. What kitchen equipment does your SFA not currently have and need to purchase? *Select all that apply.***

- Oven
- Refrigerator
- Walk-in refrigerator/freezer
- Food cabinets
- Convection steamer
- Serving lines
- Food/beverage coolers
- Dishwashing unit
- Food bars
- Tables
- Range
- Food warmer
- Mixer
- Food carts
- Ice/hot water dispenser
- Counter space
- SFA does not have any kitchen equipment that needs to be purchased
- I don't know
- Other (please specify) \_\_\_\_\_

**28. Did your SFA accept all or some of its Supply Chain Assistance (SCA) fund?**

- Yes, SFA accepted all of it
- Yes, SFA accepted some of it
- No
- I don't know
- Not applicable (my SFA is new and was not in operation when SCA funds were available)

**29. To the best of your knowledge, why didn't your SFA accept its Supply Chain Assistance (SCA) fund? Select all that apply.**

- Didn't know SCA funds were available
- Missed deadline to apply for funds
- Too much time and/or effort required to apply to receive SCA funds
- Too much time and/or effort required to accept and use SCA funds
- Unclear on the intended use or recipient of funds
- Unsure how to code funds in local accounting system
- My SFA did not need the SCA fund
- I don't know

**30. At the end of school year 2021-2022, what was the status of your school food service account balance?**

- Operated at a surplus (i.e., revenues exceeded costs)
- Operated at a deficit (i.e., costs exceeded revenues)
- Broke even (i.e., costs and revenues were about equal)
- I don't know
- Not applicable (my SFA is new and was not in operation during school year 2021-2022)

**31. To the best of your knowledge, how has your SFA used surplus funds (or how does your SFA plan to use surplus funds)? Select all that apply.**

- Cover the cost of reduced-price meals
- Hire new staff
- Increase pay rate for staff
- Improve meal quality
- Kitchen equipment repair or maintenance
- Purchase new kitchen equipment
- I don't know

**32. What do you predict will be the status of your school food service account balance in the first quarter of school year 2022-2023?**

- Operate at a surplus (i.e., revenues exceed costs)
- Operate at a deficit (i.e., costs exceed revenues)
- Break even (i.e., costs and revenues are about equal)
- I don't know

**33. What else would you like FNS to know about challenges your SFA is experiencing? If there are particular strategies you would like to use to address your SFA's challenges, but you are experiencing barriers to doing so, please explain.**

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**Survey submission**

**Please click the Next>> button to submit your responses. Please note that, once submitted, your SFA will not be able to return to the survey to make any edits.**