SCHOOL NUTRITION ASSOCIATION

Feeding Bodies. Fueling Minds.™

School Nutrition Operations Report

The State of School Nutrition 2016

Executive Summary

One of the most important functions of the School Nutrition Association (SNA) is to collect up-to-date statistics and data from schools nationwide to ensure its members are kept abreast of trends affecting school foodservice and nutrition. The *School Nutrition Operations Report: The State of School Nutrition 2016* is an essential part of this process. The 2016 version of this survey is the ninth iteration of this research program that collects detailed data concerning school foodservice operations.

This report is based upon an analysis of the 960 survey responses received from SNA members representing districts nationwide. Major findings are summarized below.

Programs

- The NSLP, SBP, catering within schools and Summer Meal Program Sponsor are the most commonly offered programs, each cited by a majority of the districts in the 2016 sample. Variations from 2014 are usually modest, with the most significant being an increase in the prevalence of the Summer Meals Program Sponsor. As expected, district size is a major factor in the prevalence of many programs.

National School Lunch Program (NSLP)	100%
School Breakfast Program (SBP)	98.3%
Catering within schools	65.4%
Summer Meals Program Sponsor	54.8%
Afterschool Snacks Sponsor	43.9%
Fresh Fruit and Vegetable Program	29.1%
Vending services within cafeteria (non-reimbursable meal items)	28.8%
Catering outside of schools	20.4%
Backpack/Weekend/Holiday Program	14.1%
Afterschool Meal or Supper Program	12.6%
Summer Meals Program Vendor	7.6%
Afterschool Snacks Vendor	6.8%
School store	4.1%

- Usage of the Community Eligibility Provision (CEP) has increased significantly, with 24.3% of the districts stating that at least one school in their district is using CEP. Participation remains generally consistent across district size categories other than a dip in the smallest districts (18.7% participating) and a small peak in the largest districts (37.8%). Variations are far more pronounced based on free/reduced-price prevalence and region. The most common situation among the districts participating in CEP is to have all the schools in the district in CEP. On average, 71.3% of the schools in a CEP-participating district are in CEP. These CEP-participating districts show a number of distinguishing characteristics such as higher rates of breakfast and lunch participation, and are more apt than non-CEP districts to state that the reimbursement rate was sufficient to cover the cost of producing a reimbursable meal.

- Student taste tests/sampling is the most commonly implemented initiative of the seven initiatives examined in the 2016 survey, cited by 72.3% of the districts as in place, and by nearly 15% as being considered/planned. Three other initiatives — nutrition education, Smarter Lunchroom techniques and farm-to-school initiatives/ locally grown foods — have been implemented by a majority/near majority of the districts. Of the four initiatives tracked since 2014, three have gained in prevalence. The most significant long-term gain is seen for farm-to-school initiatives — implementation levels have risen from 32% in 2011 to nearly 50% in 2016. Gains are also seen for student taste tests/sampling and chef partnerships/ recipe development.

	Currently implemented	Being considered/ planned
Student taste tests/sampling	72.3%	14.6%
Nutrition education	54.1%	21.9%
Smarter Lunchroom techniques	53.5%	24.7%
Farm-to-school initiatives/locally grown foods	49.9%	20.2%
Social media outreach	38.1%	28.0%
School gardens	33.2%	20.7%
Chef partnerships/recipe development	18.4%	24.0%

Food and Beverage Trends

- Mexican food items, Asian food items, pre-packaged salads and salad/produce bars are the most popular food options examined in the 2016 survey, each cited by two-thirds or more of the districts as being offered on a consistent basis in any school in their district. Other popular options include locally sourced fruits and vegetables, vegetarian meals and gluten-free options, each cited by about 45% or more of the districts. The most consistent variations are driven by district size, with a substantial increase in the prevalence of several of the food options in the largest districts including gluten-free food options, locally sourced fruits and vegetables, and salad or produce bars.

- Although it has declined in prevalence since 2014, flavored milk remains the most common beverage option by a wide margin, offered by nearly 71% of districts on a consistent basis in at least one school in their district. Lactose-free milk and soymilk are fairly popular,

	Offer in ANY school in the district
Mexican food items	86.4%
Asian food items	72.3%
Pre-packaged salads	70.8%
Salad or produce bars	66.5%
Locally sourced fruits and vegetables	57.0%
Vegetarian meals	55.1%
Gluten-free food options	44.5%
Smoothies	36.5%
Made-to-order items	21.7%
Vegan meal options	11.5%
Middle Eastern food items	11.5%
Greek food items	11.2%
Organic or hormone-free foods	4.2%
Indian food items	3.3%
Kosher/Halal food items	2.1%
Tofu	1.6%

offered by between one-quarter and one-third of the districts. Relatively few offer almond or rice milk. This overarching pattern remains generally true across segments. While there is some increase in the prevalence of all beverage options as district size increases, the variances are not as pronounced as the ones seen regarding food options. Note that white milk and water are required to be available with all reimbursable school meals.

- Overall, 38% of the respondents report that foods are banned in their district due to food allergies. About one in five (20.1%) report that the food ban is for some schools; nearly 18% report it is for all schools in their district. The presence of a food ban increases with district size, peaking at 51.4% among the largest districts. Peanuts lead the list of banned foods, cited by nearly every district with a food ban. About 42% of the districts with a ban extend it to cover tree nuts; fewer than 6% ban other foods (such as fish, shellfish, certain fruits, etc.). There have been only modest variations in the presence of a food ban and the specific items banned since 2009, with the most consistent trend being a gradual increase in the number of districts that enact a food ban for all the schools in their district, rather than just some schools.

		2016 survey	2014 survey	2011 survey	2009 survey
Food ban prevalence	All schools have banned certain foods	**17.8%**	14.1%	11.7%	10.2%
	Some schools have banned certain foods	**20.1%**	21.5%	21.0%	22.1%
Specific foods banned (1)	Peanuts	**98.6%**	97.2%	95.3%	95.6%
	Tree nuts	**41.9%**	38.5%	42.8%	36.2%
	All others	**5.8%**	5.6%	5.7%	4.1%
	Food not specified	**0.0%**	1.0%	2.1%	3.1%

(1) = the percentage base for each year is the number of districts that have a food ban in place.

Lunch Service

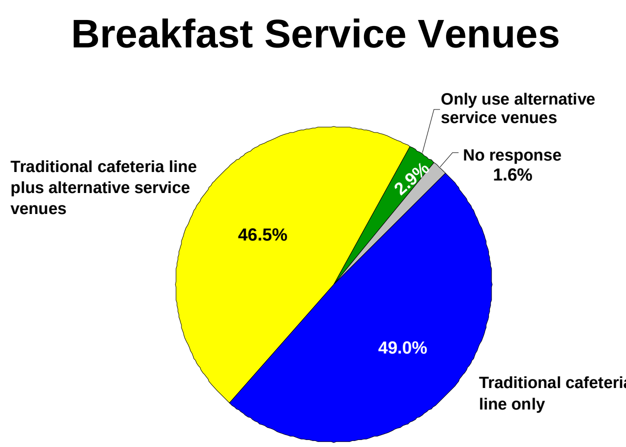
- The cafeteria line is the most common service venue for NSLP reimbursable lunch service, cited by 99.8% overall and by 100% of the districts in many segments. Grab & Go kiosks in the cafeteria is the next most common venue, cited by 24.1% overall. Grab & Go kiosks located outside the cafeteria is the only other venue that is cited by more than 10% of the districts overall. The least common venue is mobile food trucks/bus, cited by only 1.1% of the districts.

- An open-campus lunch is rarely seen at the elementary and middle school levels, with each option cited by fewer than 1% of the districts overall. An open campus lunch is somewhat common at the high school level, where it is cited by 26.5% overall, and by nearly 41% of the largest districts. The most significant differences are seen on a regional basis, with an open campus lunch cited by two-thirds of the districts in the Northwest versus fewer than 10% in the Southeast. Historical data show little variation in this metric over time, with the prevalence of open-campus lunch remaining at substantially the same level.

- There has been no change since 2009 in the median length of the lunch period, with 25 minutes reported for elementary schools, and 30 minutes for middle and high schools. To explore trends over a longer time span, the data are also expressed as averages, since this was the only methodology used prior to 2009. Again, a highly consistent pattern is seen, with the average number of minutes varying very little since 1999. Consistency is also seen in the number of lunch periods over the past several years, with the most common situation continuing to be the presence of five or more lunch periods at the elementary level, and three lunch periods at the middle and high school levels.

Breakfast Service

- Alternative service venues for breakfast are common, used to some extent by nearly one-half of the districts for their breakfast service. The most common way alternative venues are used are in combination with traditional cafeteria line service. The usage of alternative breakfast service venues climbs sharply as district size increases.



- The districts that offer breakfast via alternative venues most commonly do so via Grab & Go kiosks located either inside or outside of the cafeteria, with these two venues cited by a majority of the districts as a venue offered in any school. Direct delivery to the classroom is less prevalent, but still cited by a significant number (42.9%) of the districts. Reimbursable vending lags in prevalence, used by fewer than 5% of the districts that offer breakfast via alternative venues.

- Hot breakfast items are commonly offered at alternative breakfast service venues, with 76.6% of the districts that offer alternative breakfast venues reporting hot food service for at least one of those venues. Hot items are most commonly offered at Grab & Go kiosks either outside or inside the cafeteria.

- Breakfast service before the start of the official school day is the most common service option by a wide margin. Breakfast service in the first 10-to-15 minutes of the school day is far less popular, but does show a fair response level, especially at the elementary school level. Least common is breakfast service during a morning break, although this does increase in use at the high school level where it is cited by 22.4%.

Breakfast Service Times

	For any elementary school	For any middle school	For any high school	For any school
Before start of the official school day	83.8%	80.8%	83.1%	92.3%
In the first 10-15 minutes of the official school day	27.6%	17.3%	14.5%	32.2%
During a morning break	4.1%	8.9%	22.4%	26.8%

Note: Response base limited to the 944 districts that offer breakfast service.

- Most districts (55.7%) report that the amount of protein being menued for reimbursable breakfasts has remained the same since the implementation of the new meal pattern requirements. About one-quarter say they are menuing protein items less frequently; 11.4% are menuing protein items more frequently. Those who are menuing protein less frequently most often cite minimum grain requirements, cost and sodium limits as the reasons for the change.

Meal Prices and Participation

- The 2016 sample encompasses a highly diverse group of districts with regard to the percentage of students in the district who qualify for free or reduced-price meals. On average, 49% of the students in the district (across the full sample) quality for free or reduced-price meals. Segmenting the data by district size shows a fairly consistent pattern, with average values remaining in the 45% to 52% range across all size segments. Greater variations are seen based on region, with the highest average rates in the Southeast (61.3%) and the lowest in the Northeast (37.9%). The overall average rate for 2016 is highly analogous with the average seen in 2014 (48.6%) and 2011 (46.5%).

- Average full-paid lunch meal prices show a consistent increase over time, reaching $2.34 at the elementary level, $2.54 at the middle school level, and $2.60 at the high school level for the 2015/2016 school year. Much the same situation is seen for breakfast meal prices, with averages for the 2015/2016 school year reaching $1.39 (elementary), $1.47 (middle school) and $1.51 (high school).

		Full-Paid: 2015/2016 school year					
		10th percentile	25th percentile	**50th percentile (median)**	75th percentile	90th percentile	Average
Lunch	Elementary	$1.85	$2.15	**$2.35**	$2.55	$2.75	$2.34
	Middle	$2.00	$2.30	**$2.55**	$2.75	$3.00	$2.54
	High	$2.08	$2.40	**$2.60**	$2.80	$3.00	$2.60
Breakfast	Elementary	$1.00	$1.25	**$1.35**	$1.50	$1.75	$1.39
	Middle	$1.00	$1.25	**$1.50**	$1.65	$1.85	$1.47
	High	$1.00	$1.25	**$1.50**	$1.74	$2.00	$1.51

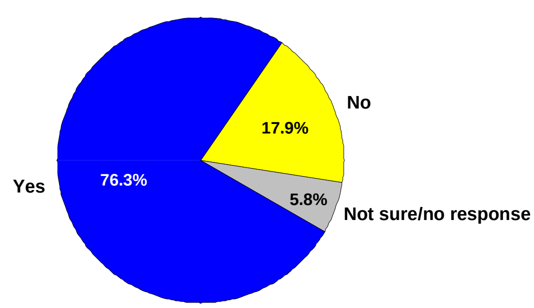
- The incidence of a year-to-year full-paid lunch price increase has increased slightly in prevalence compared with the 2014 survey results, with a majority of districts reporting that they increased full-paid lunch prices from the 2014/2015 to 2015/1016 school years. Breakfast prices increases are less common, but still above the prevalence levels seen in the 2014 survey, with almost one-third of the districts raising breakfast prices. The dollar amount of the price increase (a median of $0.10) has remained mostly unchanged since the 2011 survey, and remains constant for both breakfast and lunch across all grade levels.

- In addition to looking at meal price changes that have occurred, respondents were asked to forecast if an increase in either breakfast or lunch meal prices will occur in the coming school year (2016/2017). A majority (or near majority) expect lunch prices to increase; just over one-quarter expect breakfast prices to increase.

- A majority of the districts have a formal district-wide policy or procedure to address the situation of students within the paid or reduced-price category who do not have funds to pay for breakfast or lunch. This policy is usually a formal policy or procedure enacted district-wide (cited by 52.6%) or is an informal district-wide policy (cited by 30.2%). The remaining districts are about equally divided between having policies/procedures only at the individual school level or not having a policy of any type in place. The lack of a policy or procedure is most often seen in the smaller districts, where it is cited by nearly 17%. Comparing 2016 results with those of 2014 shows more districts moving to a formal district-wide policy (an increase to 52.6% from 45.8%).

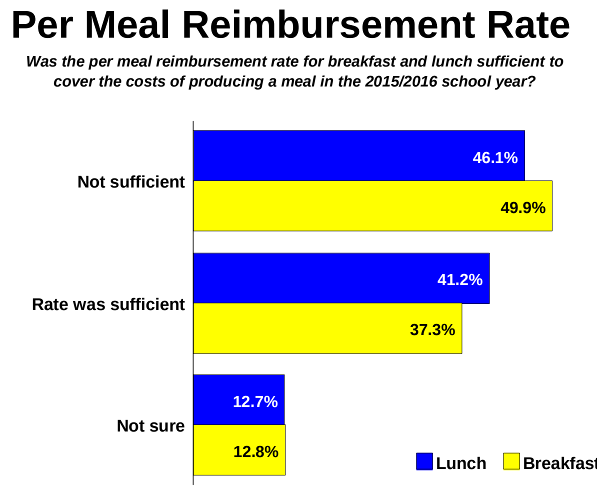
- Having unpaid student meal debt is the norm, a situation faced by about three-quarters of the districts at the end of the 2014/2015 school year. This represents an increase from the 2014 results which saw 70.8% of the districts with unpaid student meal debt. The amount of the debt has remained stable since 2014.

Presence of Unpaid Student Meal Debt



- A plurality of districts overall (37.7%) report that the number of students within the paid or reduced-price category who do not have funds to pay for breakfast or lunch has increased from the 2014/2015 to 2015/2016 school years. About the same number (33.5%) say there has been no change. The balance report either a decline or are unsure. This represents no appreciable shift from the results seen in the 2014 survey.

- A new area of investigation in the 2016 survey is the sufficiency of the per-meal reimbursement rate. The respondents were asked to indicate if the reimbursement rate for breakfast and lunch was sufficient to cover the costs of producing a meal (including food, labor, supplies, etc.) in the 2015/2016 school year. The responses for lunch show a mixed picture, with 46.1% reporting it was not sufficient and nearly the same number (41.2%) reporting it was sufficient. There is a more pronounced gap between these two options with regard to breakfast, with nearly 50% reporting the reimbursement rate was not sufficient for breakfast, and 37.3% reporting it was sufficient. Some of the strongest differences across segments are seen based on CEP usage, with CEP-participating districts more likely to deem the per meal reimbursement rate as sufficient for both breakfast and lunch.



- The typical district has a program/district-wide meal average daily participation (ADP) rate of 61% for lunch and 26% for breakfast. ADP rates vary substantially for lunch (10th to 90th percentile range of 37% to 84.2% district-wide) and show an even greater range for breakfast (10th to 90th percentile range of 9% to 65% district-wide). In a repeat of the customary pattern, median ADP rates peak at the elementary school level, especially for breakfast. Median ADP rates for both breakfast and lunch tend to decline as enrollment increases, and also show notable variations based on region. The most consistent variations are driven by free/reduced-price prevalence and CEP status. ADP rates for both breakfast and lunch are substantially higher among districts with a high prevalence of students who qualify for free/reduced-price lunch, and among districts that have schools participating in CEP.

- Trends from 2011 show a moderate but consistent decline in lunch ADP rates at every grade level. The most significant decline has been at the middle school level, with the median ADP dropping from 71% in 2011 to 62% in 2016. Changes in breakfast ADP show the inverse pattern, with rates remaining the same or increasing a small amount at every grade level.

Average Daily Participation Rates

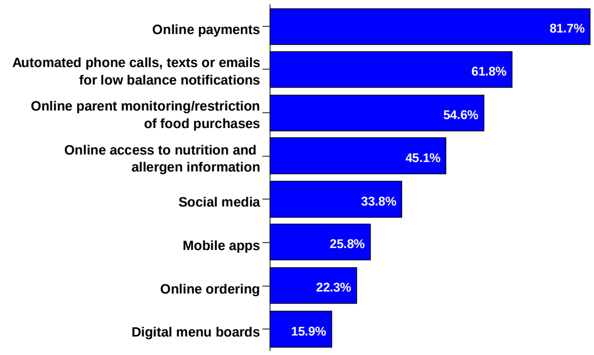
	Lunch			Breakfast		
All data are medians.	**2016**	2014	2011	**2016**	2014	2011
Program/District-wide	**61.0%**	64.0%	68.0%	**26.0%**	25.0%	24.9%
Elementary	**67.0%**	68.0%	73.0%	**32.0%**	30.0%	30.0%
Middle	**62.0%**	65.0%	71.0%	**20.0%**	20.0%	19.0%
High	**50.0%**	51.0%	55.0%	**15.0%**	14.7%	15.0%

- In a typical district, 38.4% of lunches served are to students in the paid meal category. Average values are somewhat higher in the smaller districts, but the variation is modest. The average value has rebounded a small amount from the level seen in 2014, but remains below the high point of 42% seen in 2011.

Technology

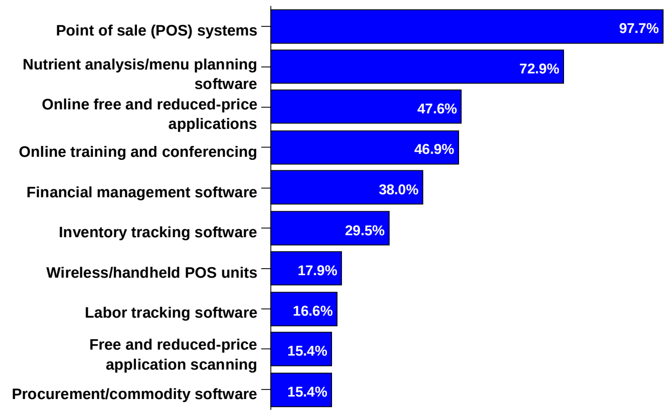
- Online payments, automated contact for low balances, and online parent monitoring/ restrictions for food purchases are the most common parent/student communication technologies, each cited in use by a majority of the districts overall. Online access to nutrition and allergen information is also fairly common, cited by about 45% of the districts. As expected, usage increases with district size, with a majority/near majority of the largest districts using six of the eight communications technologies examined in the survey. In contrast, majority-level use is seen for only two of the technologies among the smallest districts.

Parent/Student Communications Technologies



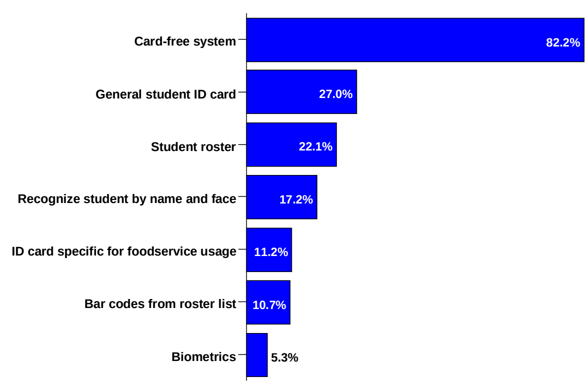
- A point of sale (POS) system and nutrient analysis/menu planning software are the two most commonly used operational technologies, each cited by about three-quarters or more of the districts overall. As expected, usage of all the technologies increases with district size, often by a wide margin. Operational technology usage continues to increase over time, with most of the technologies posting usage gains since 2011.

Operational Technologies



- A card-free system (such as a PIN number, a student ID number or another system that does not use a card) is by far the most popular method to identify students when purchasing a meal from a student account. Cited by 82.2%, a card-free system is trailed by a general student ID card (27%), student rosters (22.1%) and other such methods. A card-free system is the only method that receives majority-level response across all segments, often by a wide margin compared with other identification methods.

Student Identification Methods

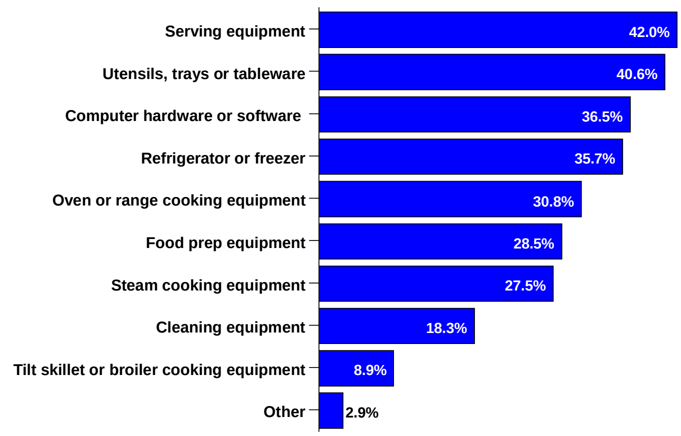


Equipment and Construction Projects

- Overall, nearly 82% of the districts report that their school nutrition program plans to purchase new equipment of some sort within the next year. Districts with purchasing plans remain at the majority level across all segments, and surpass the 90% level among the mid to large size districts. Serving equipment leads the list of planned purchases, followed closely by utensils, trays or tableware, with each category cited by more than 40%. Computer hardware or software (for school nutrition program use) and refrigeration round out the categories cited by at least one-third of the districts overall as planned purchases.

- A fair number of districts have implemented a renovation project in the past two years, with roughly one-quarter renovating production areas and/or serving areas/lines. Less prevalent is a dining area renovation, implemented by nearly 16%. Between 11.5% and 16.1% are planning these renovation projects for the coming two years. New construction projects are less common, but are still cited by as many as 16.8% of the districts as being implemented over the past two years. Looking forward, between 11% and 15.7% are planning a new construction project launch in the coming two years.

Equipment Purchase Plans



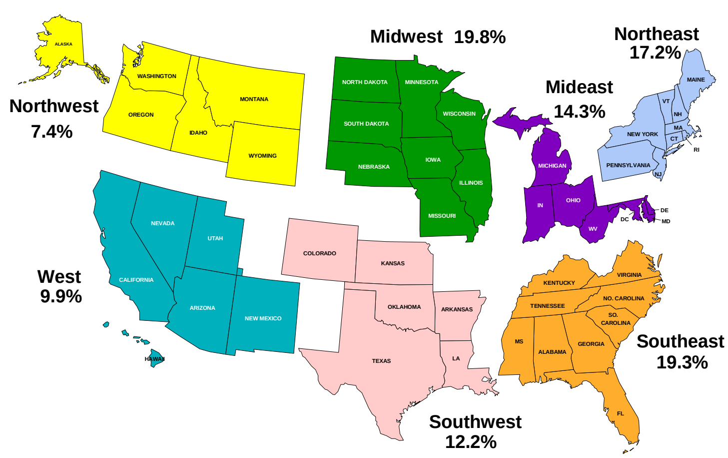
	Occurred in past two years	Will begin in next two years
Renovation of production area	23.6%	14.9%
Renovation of serving area/line	26.6%	16.1%
Renovation of dining area	15.7%	11.5%
New production area	14.6%	13.5%
New serving area/line	16.8%	15.7%
New dining area	9.8%	11.0%

District Demographics and Operational Parameters

- The 2016 sample is drawn from 47 states, with California, Pennsylvania and Ohio best-represented. Segmenting the data by region shows the largest concentration of respondents are located in the Southeast and Midwest regions, with each region accounting for slightly more than 19% of the sample.

- A majority of the districts (50.2%) report an enrollment of 1,000 to 4,999 students. Average enrollment is 7,933 students, virtually the same as the 8,019 reported in 2014.

Regional Distribution



- The school composition landscape remains stable over the past several surveys, with the large majority of districts reporting the presence of elementary, middle and high schools in their district. Charter and satellite schools remain far less common, cited by 9.9% and 13.8% of the districts respectively. The most common situation is to have four elementary schools, one middle school and one high school in the district.

- Total foodservice staffing has a 10th to 90th percentile range of 10.0 to 171.8; the total foodservice budget has a range of $450,000 to nearly $9 million over the same intervals. The "typical" district in the 2016 sample has 24 employees who work 20 or more hours per week, 5.0 employees who work less than 20 hours per week, and a total budget of $1.8 million.

District Foodservice Operational Profile

	10th percentile	25th percentile	**Median (50th percentile)**	75th percentile	90th percentile	Average
Number of employees working 20 or more hours per week	6.0	12.0	**24.0**	50.0	120.0	55.4
Number of employees working less than 20 hours per week	0.0	1.0	**5.0**	18.0	50.0	19.3
Total number of employees	10.0	18.0	**35.0**	72.0	171.8	74.7
Total full-time equivalent (FTE) employees	9.0	15.0	**30.0**	63.5	144.5	65.0
Total foodservice budget	$450,000	$900,000	**$1,800,000**	$4,000,000	$8,930,000	$4,030,241

- There has been no appreciable change in the incidence of having school nutrition programs provide school nutrition services for more than one district, with this situation cited by only 6% of the 2016 respondents.

- A majority of districts (65.8%) belong to a purchasing cooperative of some type. A multi-district cooperative for commodities and other items is the most popular option, cited by more than one-third of the districts overall. A Group Purchasing Organization (GPO) also garners a significant response rate of nearly 25%. Overall purchasing cooperative participation levels have remained fairly stable since 2007, with the percentage of districts that participate in a purchasing cooperative of any type remaining above 60%.

Purchasing Cooperatives

Is your school nutrition program part of a purchasing cooperative or Group Purchasing Organization (GPO)?