

OPPORTUNITIES TO INCREASE ACCESS AND PARTICIPATION IN COLORADO'S FEDERAL CHILD NUTRITION PROGRAMS

An Assessment of Training and Technical Assistance Needs

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prepared by

Health Statistics And Evaluation Branch Colorado Department Of Public Health And Environment



COLORADO Center for Health & Environmental Data Department of Public Health & Environment prepared for

School Nutrition Unit Colorado Department Of Education





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OPPORTUNITIES TO INCREASE ACCESS AND PARTICIPATION IN COLORADO'S FEDERAL CHILD NUTRITION PROGRAMS

BACKGROUND

The Colorado Blueprint to End Hunger (Blueprint) lays out a shared vision to end hunger in Colorado. The Colorado Department of Education's (CDE) School Nutrition Unit (School Nutrition) is a committed partner in moving the Blueprint work forward, specifically in achieving Goal 5: maximize participation in federal child nutrition programs. This includes the National School Lunch Program (NSLP), School Breakfast Program (SBP), Afterschool Snack Program (ASP), and Summer Food Service Program (SFSP). School Nutrition contracted with the Colorado Department of Public Health and Environment's (CDPHE) Health Statistics and Evaluation Branch (HSEB) to plan and conduct a needs assessment in December 2018 to inform CDE's implementation plan for Goal 5 of the Blueprint.

School Food Authorities (SFA) administer federal child nutrition programs and include public school districts, charter schools, private schools and residential child care institutions. Summer Sponsors administer the Summer Food Service Program (SFSP) and SFSP administrators can be an SFA as well as public and private nonprofit organizations, government agencies, camps and universities. Both SFAs and Summer Sponsors receive reimbursement from the State agency to prepare and serve meals that follow state and federal requirements to eligible children.

The main program contact from each SFA and Summer Sponsor was engaged in the needs assessment to understand their opportunities, challenges, training and technical assistance needs to implement the federal child nutrition programs. The following questions guided the needs assessment:

- 1. What are the training or technical assistance needs of SFAs and Summer Sponsors to increase student participation and program access?
- 2. How do training or technical assistance needs vary based on SFA and Summer Sponsor characteristics (i.e., geographic designation, four-day school week designation, free and reduced lunch eligibility, total average daily participation rate, open or closed-enrollment sites)?
- 3. What are the best practices and challenges that SFAs and Summer Sponsors experience to increasing student participation and program access for each federal child nutrition program?

METHODS

The needs assessment used a mixed methods approach that included an SFA survey, Summer Sponsor survey and key informant interviews that took place between January 2019 and April 2019.¹ Federal child nutrition programmatic data (i.e., county geographic designations, district enrollment, average daily participation rates, four-day school week designation, free and reduced lunch eligibility, open or closed-enrollment sites, etc.) were also used to provide greater context to the survey and interview responses. Data from all sources were analyzed and triangulated to provide greater context to help School Nutrition inform their future work.

Surveys and key informant interview guides were approved by CDE's Education Data Advisory Committee (EDAC).

RESPONSE RATE

High response rates were achieved across all survey and interview data collections, including the SFA survey (88%), the Summer Sponsors survey (67%) and key informant interviews (85%).

RESULTS

- Results showed opportunities across child nutrition programs to maximize participation and expand access.
- Common best practices for increasing access to and/or participation in child nutrition programs included:
 - Improving meal quality.
 - Using alternative service models.
 - Involving students in menu development.
 - Coordinating with other summer activities or programs.
 - Ensuring locations are accessible in the community.
 - Ensuring that the community knows about the program via marketing and outreach.
- Common challenges for increasing access to and/or participation in child nutrition programs included:
 - Student taste preferences.
 - Stigma/attitude towards school meals.
 - Timing.
 - Alternative options.
 - Lack of school/summer programming to implement child nutrition programs.
 - Operations and program eligibility.
- Training and technical assistance needs to support child nutrition programs included:
 - Responsive and tailored training and technical assistance.
 - An interest in regional or live webinar trainings that include time for questions and answers to engage with their peers and the trainer.
 - An interest in short, easy-to-digest, on demand training modules that SFA Directors, who often provide their own training to site-level staff, could build into their larger trainings or quickly share.
 - More frequent technical assistance or coaching for newer food service directors, in addition to an onboarding "roadmap" resource to help navigate the implementation of child nutrition programs.
 - The most common training needs across SFAs were: program promotion and communication, stigma reduction, and improving the meal quality.

RECOMMENDATIONS

School Nutrition should consider the following recommendations to increase student participation in and access to child nutrition programs in Colorado to support the Blueprint to End Hunger.

- Consider developing a communication and education strategy to help bridge the gap between child nutrition programs and school stakeholders (parents, community members, school admins) to increase positive perceptions, benefits and impact of child nutrition programs on the well-being and academic achievement of students.
- Consider ways to incorporate and institutionalize the tenants of meal quality (consistency, local procurement, food safety, culinary arts, etc.) into existing and new trainings.
- Consider developing and sharing resources that include an onboarding "roadmap" for food service directors that clearly lays out a step-by-step path to navigate the implementation of federal child nutrition programs.
- Consider developing a coaching and/or mentoring program for food service directors or managers to learn from other "experts" in the field to help them navigate the implementation of the various child nutrition programs and troubleshoot challenges.
- Consider regional trainings and networking opportunities for food service directors, managers and staff to engage with one another, learn new skills or ideas, discuss ideas to overcome challenges or facilitate program improvements, and to build relationships with broader school stakeholders (i.e., administrators, community partners).
- Consider developing short, on-demand training modules for food service directors to share with their kitchen staff.
- Consider ways to share SFA and Summer Sponsors best practices, success stories and partner engagement that resulted in greater access and participation in child nutrition programs.
- Review and provide outreach to individual SFA and Summer Sponsor survey respondents to help understand their specific training needs, challenges, and opportunities to inform technical assistance and interactions with respondents.
- Continue to explore and refine methodologies used for targeting SFA and Summer Sponsors and better understanding of performance or progress made to increase access to and participation in child nutrition programs. Targeting could be based on a variety of factors such as: interest, perceived opportunity and need. Need can be further explored by using ADP benchmarks, FRL eligibility and four-day school week.
- Continue to build analytic and data utilization capacity of school nutrition data both at the state and local-level. At the local-level, School Nutrition could provide training or technical assistance to help SFAs and Summer Sponsors use and understand their data to inform program improvement efforts. At the state-level, School Nutrition could 1) establish standardized program data reporting processes and criteria to help with data validation and utilization and 2) develop a system to visualize program data in a more "real-time" manner to better inform technical assistance and program improvement efforts.

School Nutrition should continue to collaborate with CDPHE's Child and Adult Care Food Program (CACFP) to identify areas of alignment to support Blueprint Goal 5 and cross-promote programs to ensure full-year meal access to child nutrition programs

For more information about the Blueprint to End Hunger, Goal 5, Federal Child Nutrition Programs or the results, please contact Carrie Thielen at thielen_c@cde.state.co.us.



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List of Acronyms and Abbreviations

ADP	Average Daily Participation
ASP	. After School Snack Program
Blueprint	. Colorado Blueprint to End Hunger
CACFP	. Child and Adult Care Food Program
CDE	. Colorado Department of Education
CDPHE	. Colorado Department of Public Health and Environment
CEP	. Community Eligibility Provision
СНОР	. Cooking Up Healthy Options with Plants
EDAC	. Education Data Advisory Committee
FRL	. Free and Reduced Lunch
HSEB	. Health Statistics and Evaluation Branch
HUSSC	. Healthier U.S. School Challenge
NSLP	. National School Lunch Program
SBP	. School Breakfast Program
School Nutrition	School Nutrition Unit
SFA	. School Food Authority
SFSP	. Summer Food Service Program
USDA	. United States Department of Agriculture

OPPORTUNITIES TO INCREASE ACCESS AND PARTICIPATION IN COLORADO'S FEDERAL CHILD NUTRITION PROGRAMS

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BACKGROUND

The Colorado Blueprint to End Hunger (Blueprint) lays out a shared vision to end hunger in Colorado. The Colorado Department of Education's (CDE) School Nutrition Unit (School Nutrition) is a committed partner in moving the Blueprint work forward, specifically in achieving Goal 5: maximize participation in federal child nutrition programs. This includes the National School Lunch, School Breakfast, Afterschool Snack, and Summer Food Service programs. School Nutrition contracted with the Colorado Department of Public Health and Environment's (CDPHE) Health Statistics and Evaluation Branch (HSEB) to plan and conduct a needs assessment in December 2018 to inform CDE's implementation plan for Goal 5 of the Blueprint.

Many factors are shown to increase student participation in (i.e. receiving school meals) and access to (i.e. availability of programs offered) federal child nutrition programs, which often vary at the state and local level, as well as by program. There are success stories nationally and in Colorado that identify best practices for increasing student participation and program access, which include effective financial and operational program management, community engagement, marketing and outreach to students, parents and communities, available funding/resources and utilization of innovative food service models (i.e. grab and go, mobile meals). While School Nutrition collects data on participation trends (i.e. number of students the sponsor claims for meal reimbursement) there was a lack of data identifying current practices and factors that influence participation at the local level. The needs assessment helps to understand current best practices, challenges, opportunities and needs of federal child nutrition program operators.

School Food Authorities (SFA) are the entity responsible for administering federal child nutrition programs and include public school districts, charter schools, private schools and residential child care institutions. Summer Sponsors are the entity responsible for administering the Summer Food Service Program (SFSP). The SFSP can be administered by an SFA as well as by public and private nonprofit organizations, government agencies, camps and universities. Both SFAs and Summer Sponsors receive reimbursement from the State agency to prepare and serve meals that follow state and federal requirements to eligible children.

The main program contact from each SFA and Summer Sponsor was engaged in the needs assessment to understand their opportunities, challenges, training and technical assistance needs to implement the federal child nutrition programs. The following questions guided the needs assessment:

- 1. What are the training or technical assistance needs of SFAs and Summer Sponsors to increase student participation and program access?
- 2. How do training or technical assistance needs vary based on SFA and Summer Sponsor characteristics (i.e., geographic designation, four-day school week designation, free and reduced lunch eligibility, total average daily participation rate, open or closed-enrollment sites)?
- 3. What are the best practices and challenges that SFAs and Summer Sponsors experience to increasing student participation and program access for each federal child nutrition program?

METHODS

The needs assessment used a mixed methods approach that included an SFA survey, Summer Sponsor survey and key informant interviews that took place between January 2019 and April 2019.¹ The SFA survey asked about all child nutrition programs, including the SFSP. The Summer Sponsor survey was sent to non-SFAs that operate only the SFSP. While the SFA and Summer Sponsor survey questions were similar, the Summer Sponsor survey was tailored to fit the community-based and nonschool operations of the program.

In addition, federal child nutrition programmatic data (i.e., county geographic designations, district enrollment, average daily participation rates, four-day school week designation, free and reduced lunch eligibility, open or closed-enrollment sites, etc.) were also used to provide greater context to the survey and interview responses. Gift card incentives were provided for a random selection of 22 survey respondents and all 12 key informant interviewees. The survey, interview and programmatic data were analyzed and triangulated to provide greater context to help School Nutrition inform their future work.

Response rates

School Nutrition generated SFA and Summer Sponsor contact lists, using annual program application information, to administer online surveys. Of the 208 SFAs invited to participate, 183 completed the survey, achieving a high response rate of 88%. The summer sponsor survey achieved a 67% response rate with 22 sponsors completing the survey of the 33 invited to participate. SFAs and Summer Sponsors of all characteristic types were well represented in the data as demonstrated by the high survey response rate. Achieving feedback and representation from all types of SFAs and Summer Sponsors was a goal driving this needs assessment.

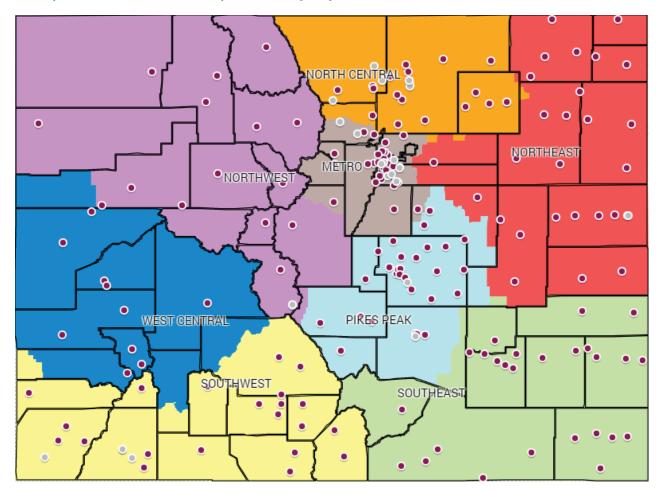
When SFAs or sponsors had two main contacts listed, the survey was sent to both and only one would complete or the contact would nominate the other person from their organization. Only one response from each organization was included in the results and response rate calculations. Figure 1 shows where SFA and Summer Sponsor respondents are located across the state and within CDE Field Service Regions.² Survey respondents were represented from across the state and from each CDE Field Service Region.

School Nutrition also generated a key informant contact list that included both SFAs and Summer Sponsors across multiple programs and various rural and urban sites. Twelve phone-based key informant interviews were conducted out of the 14 SFAs/sponsors invited. All but one of the SFAs also completed a survey.

¹ Surveys and key informant interview guides were approved by CDE's Education Data Advisory Committee (EDAC).

² For more information on CDE Field Service Regions: https://www.cde.state.co.us/cdeedserv/rgmapage.

Figure 1. Map of CDE SFA and Summer Sponsor survey respondents.

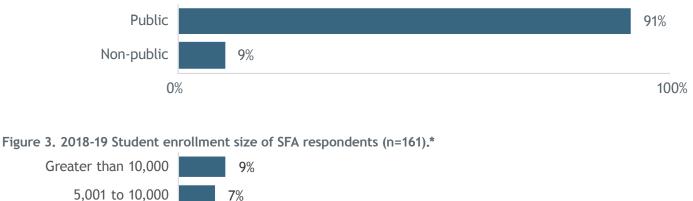


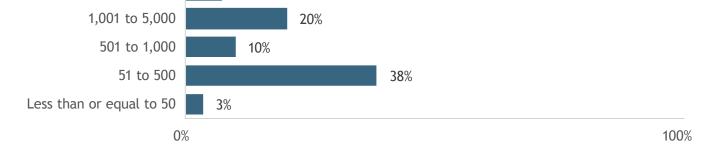
School Food Authority (SFA) characteristics

In order to better understand the SFAs that responded to the survey, the following characteristics were considered: public versus nonpublic district status, student enrollment, urban versus rural designation, CDE Field Service regions, four-day school week designation, and Free and Reduced Lunch (FRL) eligibility. These data were compared to overall SFA characteristics to ensure input was received and well represented from all types of SFAs. The characteristic data shown for the responding SFAs closely mirrored overall SFA characteristics.

Nearly all responding SFAs were operating in public school districts (n=166, 91%) (Figure 2). Student enrollment varied between "greater than 10,000" and "less than or equal to 50" students, with "51 to 500" students being the most common enrollment size (n=70, 43%) (Figure 3). Slightly more SFAs operated in a rural district (n=105, 57%) than an urban district (43%) (Figure 4). SFAs responding to the survey were fairly evenly represented across all eight CDE Field Service Regions (Figure 1).

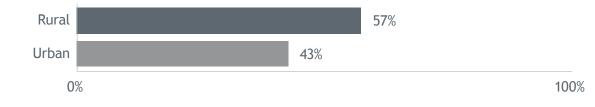
Figure 2. Public and nonpublic status of SFA respondents (n=183).





*Enrollment data was not available for 22 SFA respondents.

Figure 4. Urban versus rural designation of SFA respondents (n=183).



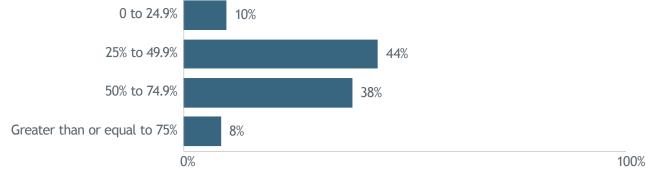
Among responding SFAs, slightly more than half (54%) operated in districts with a five-day school week (Figure 5), whereas 46% operated on a four-day school week. SFAs represented all FRL eligibility categories, with the majority (44%) having a FRL eligibility between 25-49.9%, followed by 38% of SFAs with an FRL eligibility between 50-74.9% during the 2018-19 school year (Figure 6).

Figure 5. SFA respondents operating on four or five or more-day school week in 2018-19 (n=183).*



*Some SFAs are residential facilities and operate all seven days. Operational school week status was not available for one SFA that did not complete a survey.





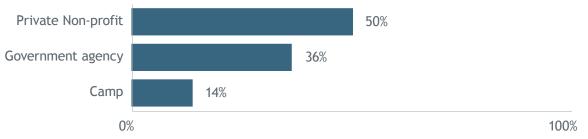
*FRL eligibility was not available for 28 SFA respondents.

Summer Sponsor characteristics

The SFSP can be implemented by an SFA or by another organization in the community, which are called 'Summer Sponsors.' While SFAs also implement the SFSP, the Summer Sponsor survey only went to the community-based organizations that operate the SFSP. The only characteristic data used for Summer Sponsors was the sponsor organization type and whether the program has open or closed enrollment.

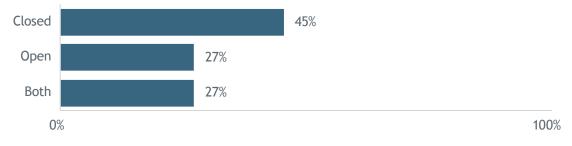
Of the twenty-two Summer Sponsor respondents, 50% were private nonprofit organizations (e.g., food banks, churches, family services), 36% were government agencies (e.g., local colleges, cities, recreation centers), and 14% were camps run by community-based organizations. Figure 7 shows the organization type of all sponsors surveyed compared to those who responded to the survey.





SFSPs can either limit meal participation to youth enrolled in the site's program or camp (i.e., "closed-enrolled site") or provide meals to all youth in eligible areas (i.e., "open site" to the general public). In addition, some Summer Sponsors may have multiple sites offering the program and could have a mix of open and closed enrollment programs. Of the 22 Summer Sponsor respondents, 45% operated closed-enrolled sites, 27% operated a mix of open and closed-enrolled sites (Figure 8).

Figure 8. Site enrollment type of SFSP for Summer Sponsor respondents (n=22).

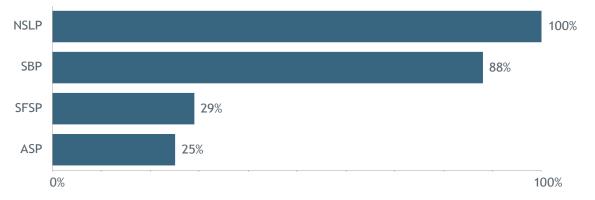


RESULTS

SFA program and site implementation

All 183 SFAs that completed the survey (100%) implement the National School Lunch Program (NSLP), the majority of which (88%) also implement the School Breakfast Program (SBP). Twenty-nine percent implement the Summer Food Service Program (SFSP) and 25% implement the Afterschool Snack Program (ASP) (Figure 9).





SFAs often have multiple sites (or schools) where federal child nutrition programs are offered. The majority of SFAs implementing these programs do so at all sites, particularly for lunch (94%) and breakfast (83%) programs. Slightly less than half of SFAs (46%) implement the ASP at all sites while only slightly more than a quarter of SFAs (28%) implement the SFSP (Figure 10).

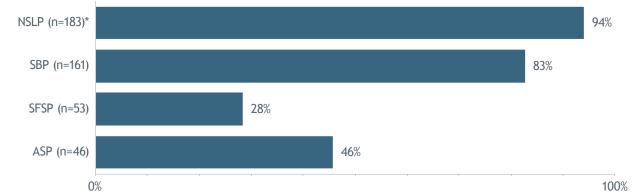


Figure 10. Program implemented at all SFA sites (100% site participation).

*One SFA that indicated implementing NSLP did not indicate whether all sites do or do not implement.

These data suggest that lunch programs are widely available to students whereas breakfast programs may have room to expand access. On the other hand, ASP and SFSP may be less reliable options for students though this may be due to a variety of reasons (program eligibility criteria, budgets, location, etc.). Specific child nutrition program implementation challenges are discussed in those sections of the report.

Slightly more than half of responding SFAs indicated that the district or facility operates on a five or more day schedule (54%). The SFAs that operate on a four-day school week were asked "who provides meals on the fifth day" when the district is not in operation. About a quarter of SFAs reported that there were no resources available (27%) or that food banks and pantries provide meals on the fifth day (22%), while 19% did not know who provided meals. One-fifth (20%) selected "Other," with the majority reporting that students most often ate at home (n=7) or that the SFA operates seven days a week (n=5). With slightly more than half of the SFAs operating on 4-day school weeks, there may be a potential need in the community for meals on the fifth day; however, this requires further investigation.

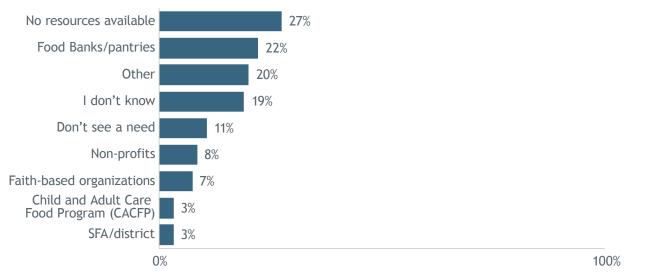


Figure 11. Who provides meal on fifth day if district operates on a four-day school week (n=95).

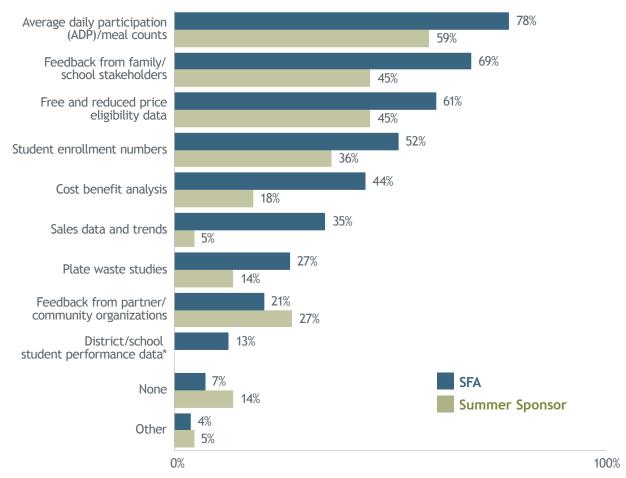
*Percentages do not sum to 100% as SFAs could select multiple responses, with the exception of "I don't know" and "No resources available."

Child nutrition program improvements

SFAs and Summer Sponsors were asked to indicate what types of information they used to inform program improvements, and had similar responses: Average Daily Participation (ADP) rates or meal counts, feedback from stakeholders (parents/guardians, students, teachers/administrators) and Free and Reduced Lunch (FRL) eligibility (Figure 12).

Interviews confirmed that data-informed decision making was often based on convenience, access and experience. ADP and meal counts, for instance, were easily accessible data, even among directors "on the ground" (in kitchens) who had little desk time. Directors from larger districts who were centrally located may have relied more on reports and formal studies. Creative data collection was also noted by interview participants. For instance, one food service director mentioned that custodians were valuable resources for gauging food waste, which could help to inform future menu selection and purchasing decisions.

Figure 12. Information SFAs (n=183) and Summer Sponsors (n=22) used to inform program improvements.



*Was not an option on the summer sponsor survey.

Training and technical assistance preferences and needs

Preferred mode of training of SFA and Summer Sponsors

To inform the School Nutrition's training and technical assistance plans, SFAs and Summer Sponsors were asked which modes of training were preferred (Figure 13). Both groups most commonly selected online trainings and webinars. SFAs also reported interest in small group/individualized workshops and regional trainings, which was the preferred mode among those interviewed. Interviews provided additional details about mode preferences, particularly a desire for local in-person trainings or live webinars with time for questions and answers for small districts that could not travel easily for trainings. Short, easy-to-access, topic specific, online training modules would be particularly useful for SFA directors, including charter co-ops, to pass along to staff and participating sites. The need for earlier trainings (e.g., 6am-2pm) to maintain consistency with existing "regular" food service hours was also suggested.





Overall SFA and Summer Sponsor training needs

SFAs and Summer Sponsors were asked to select their top three overall training needs to increase student participation in child nutrition programs (Figure 14). Training needs varied across all topic areas and between SFAs and Summer Sponsors, likely due to the type of SFA or sponsor (i.e. school district vs. community organization), regional needs or challenges, and experience level of directors and staff. The training needs most frequently reported for SFAs were: Program promotions and communications (i.e., marketing/social media), strategies to reduce stigma, and improving meal quality. Interviews revealed that stigma about school food is often the product of lagging parental attitudes. While food service directors and their staff are passionate about providing high quality, nutritious, fresh food the legacy of "bad" cafeteria food remains, particularly among middle- and high-school students. One interviewee noted that student taste preferences and willingness to try new foods, the need to meet USDA nutritional guidelines and budget limitations can be a challenge to offering high quality meals. SFAs offering universal free meals reported little to no stigma connected to cafeteria meals, particularly at the elementary level.

In addition to program promotion and communications and strategies to reduce stigma, Summer Sponsors most frequently cited grant writing and management & procurement of local/fresh foods as training needs. In fact, interviewees from both SFAs and Summer Sponsors indicated that what little extra time is available is often dedicated to budgeting and securing additional resources, such as grants to support aging infrastructure or to supplement the costs of universal meal policies not fully covered from program reimbursement or sales.

Interestingly, 14% of SFAs and 18% of Summer Sponsors reported no need for training in the survey. Food service directors noted during interviews that they (and their staff) have limited capacity for additional engagement, particularly those in smaller (often rural) districts who wear multiple hats. Training basics for food service workers were often well covered by existing USDA or CDE trainings. Newer directors sought more specific and direct assistance, such as one-to-one coaching/mentoring and a "roadmap" to onboard, particularly for those who had no school nutrition experience or came from the restaurant industry. Seasoned

directors close to retirement saw a need for help with succession planning. Many interview participants mentioned that School Nutrition was already responsive to inquiries and generally helpful, though newer directors often "didn't know what they didn't know." Peer-to-peer learning opportunities were also desirable, particularly among rural SFAs. Local, in-person, small-group trainings was the preferred mode among interviewees, particularly to engage with others doing the same work and have the opportunity to ask questions. Some mentioned that online trainings could help to mitigate the need to travel for more distant trainings, but preferred a live format.

In addition to specific training needs, interview participants suggested that CDE could help educate school leaders about the importance of nutrition. While sympathetic to the often competing demands faced by school leaders, interview participants were often frustrated by the fact that district wellness policies were not always prioritized at local school sites. Some felt that if school leadership had an "informational authority" like CDE provide data-driven research that demonstrated a clear connection between nutrition, physical activity and student performance/behavior, school leaders may be more willing to align their priorities in a way that supported wellness policies.

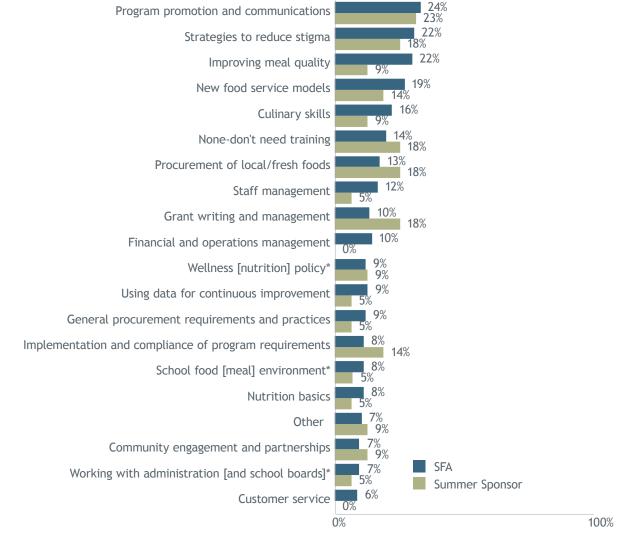


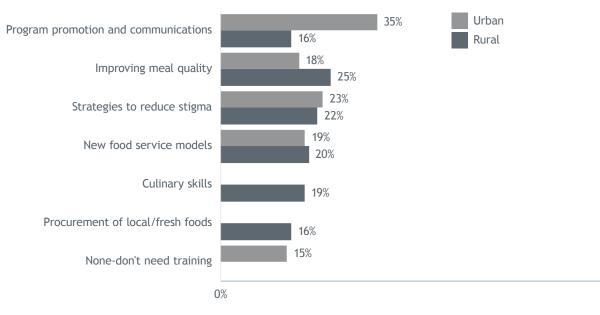
Figure 14. Top training needs of SFAs (n=175) and Summer Sponsors (n=22) to increase participation in meal programs.

*Brackets indicate differences in response options between the SFA and Summer Sponsor surveys.

Training needs by SFA geographic designation

In order to inform the School Nutrition's targeted training plans, training needs were examined based on an SFA's geographic designation (urban versus rural) and CDE Field Service Region.

Training needs for rural and urban SFAs were similar, both groups indicated training needs related to: program promotion and communications, improving meal quality, strategies to reduce stigma and new food service models. Rural SFAs had unique additional needs in the areas of culinary skills and fresh food procurement. Figure 15 shows the top training needs for rural and urban SFAs.





Training need by SFA CDE field service region

Training needs by CDE Field Service Regions were identified as a top need if at least 25% of SFAs in those regions reported it as a need (Table 1).³ Top training needs for the regions included: program promotion and communications, new food service models, improving meal quality, strategies to reduce stigma, working with school boards and administration, grant writing/management, procurement of local/fresh foods, staff management, and general procurement requirements and practices. Tailored trainings should be considered by region to help SFAs overcome challenges to student participation. Interview participants from rural areas did note a desire for more regional connections and suggested School Nutrition could broker those relationships.

100%

³ Summer Sponsors were not included in geographic designation or field service region results.

Table 1: Top training need by CDE Field Service Regions.

Top Training Need	Metro	North Central	Northeast	Northwest	Pikes Peak	Southeast	Southwest	West Central
Program promotion and communications								
New food service models								
Improving meal quality								
Strategies to reduce stigma								
Working with school boards and administration								
Grant writing and management								
Procurement of local/fresh foods								
Staff management								
General procurement requirements and practices								

Free and Reduced Lunch eligibility and training needs

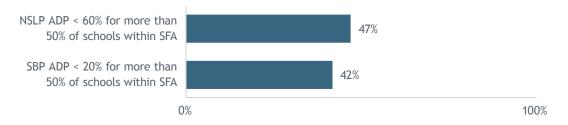
Training needs were examined based on an SFA's Free and Reduced Lunch (FRL) eligibility percentage. SFAs with an FRL of at least 50% were compared to SFAs with an FRL less than 50%. For the most part, training needs of the two FRL groups were similar and aligned with overall training needs. Top training needs for both groups included program promotion and communication and improving meal quality. Strategies to reduce stigma was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL less than 50% while new food service models was a top need of SFAs with an FRL service models was a top need of SFAs with an FRL service models was a top need of SFAs with an FRL service models was a top need service models was a top nee

Average daily participation benchmarks and training needs

Many factors can affect ADP at the school level and due to the wide range in ADPs for each school within an SFA, CDPHE and School Nutrition developed a methodology to inform which SFAs to target for training and technical assistance to help increase student participation. Since there are no universally used standards for ADP, the U.S. Department of Agriculture (USDA) Healthier U.S. School Challenge (HUSSC) was chosen because of its use as a recognition program to identify healthier school environments. The HUSSC ADP "Silver" benchmark was used to flag schools with less than 20% SBP ADP and less than 60% NSLP ADP. When more than 50% of schools within an SFA did not meet the Healthier U.S. School Challenge ADP Silver benchmark, that entire SFA was identified as a potential target for School Nutrition for training and technical assistance.

Figure 15 shows that 47% of SFAs did not meet this criteria for NSLP and 42% did not meet this criteria for SBP. When looking at the SFAs together that did not meet this criteria, 59 did not meet criteria for both child nutrition programs, SBP and NSLP.

To help School Nutrition further prioritize SFAs for training and technical assistance, available FRL eligibility data was cross-checked with the SFAs that did not meet the established ADP benchmarks. Of the 86 SFAs that did not meet the NSLP benchmark, 12 had an FRL greater than 50%. Of the 68 SFAs that did not meet the SBP benchmark, six had an FRL greater than 50%.





*19 responding SFAs do not implement SBP and one did not have SBP ADP data

Training needs for SFAs that did not meet ADP benchmark for NSLP or SBP were similar to overall training needs. SFAs not meeting ADP benchmarks top training needs were program promotion and communications and strategies to reduce stigma.

The ADP data layered with the FRL eligibility data helps show the opportunity and need to improve participation in both lunch and breakfast programs across the state to ensure students have access to healthy meals. School Nutrition should consider using this methodology to examine the full list of SFAs to help prioritize SFAs for tailored training and technical assistance (25 SFAs were not included in these results as they did not complete the survey).

Valuable partners

SFAs and Summer Sponsors were asked to indicate up to three valuable partners in promoting student participation in school nutrition programs. Of the 177 SFAs that responded, approximately one-third (34%) selected "I don't know" and nearly one-third (30%) selected "None." Of the 64 SFAs that provided a partner, common partners included community partners and/or resources (45%), such as local coalitions, local businesses, and nonprofits; school staff and/or administration (45%); parents (22%); federal or local government agencies (17%); and Parent Teacher Associations/Organizations (13%).

Twenty-one Summer Sponsors shared a response about their valuable partners in promoting participation in the summer food program. The most common partners included community partners and/or resources (67%), such as Boys and Girls Club and recreational centers, and local schools and/or school districts (48%). One sponsor selected "I don't know" and one selected "None."

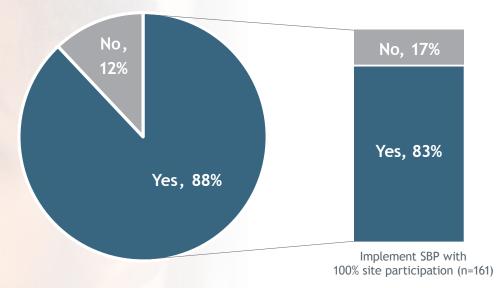
School Nutrition should consider sharing best practices or success stories related to community and partner engagement that resulted in increased participation in child nutrition programs.

16 OPPORTUNITIES TO INCREASE ACCESS AND PARTICIPATION IN COLORADO'S FEDERAL CHILD NUTRITION PROGRAMS

Program implementation

Eighty-eight percent of the responding SFAs implement the SBP and most of those SFAs provide breakfast at all sites (Figure 17).





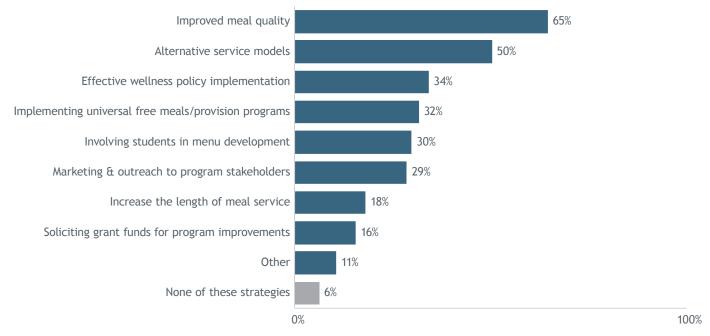
Strategies/best practices for increasing student participation

SFAs implementing SBP were asked what strategies and/or best practices have been most effective in increasing student participation in the SBP (Figure 18). The most common strategies/best practices selected were:

- Improved meal quality (65%).
- Alternative service models (50%).
- Effective wellness policy implementation (34%).

Interview participants noted that breakfast after the bell was most successful, particularly among SFAs with universal free meals or that participate in the Community Eligibility Provision (CEP). CEP is a program that provides free school meals to all students in eligible high poverty schools. Grab-n-go offerings were also successful models, particularly for middle and high school students who could reserve the meal for a later time. Meals offered during classroom hours, such as the breakfast in the classroom service model, showed the most participation.



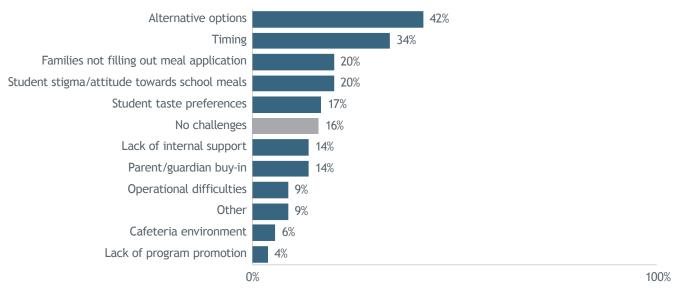


*Survey participants could select more than one strategy/best practice, with the exception of "None of these strategies." Thus, percentages do not sum to 100%.

Challenges to increasing student participation

SFAs implementing SBP reported on challenges to increasing student participation. The most common challenges included: alternative options (42%) and timing (34%). Nearly half of SFAs selected three challenges (44%) (Figure 19). Interview participants cited more issues with participation when breakfast was offered before school hours (e.g., due to late bus arrivals or parental drop-off) or had an associated charge. Some interviewees mentioned that older students in middle and high school often had no appetite in the morning (hence the popularity with stable grab-n-go offerings). No interview participants knew if (or where) students were eating breakfast, though one mentioned a noticeable increase of students arriving with fast food meals. Challenges should be considered and further explored when School Nutrition provides technical assistance or develops trainings and resources.



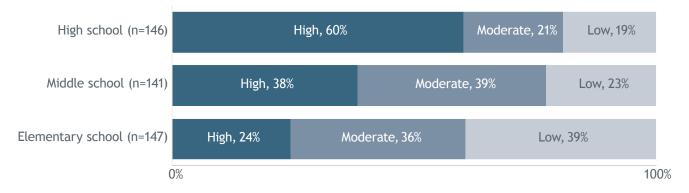


*Survey participants could select up to three challenges, with the exception of "No challenges." Thus, percentages do not sum to 100%.

Opportunities to increase student participation

SFAs implementing SBP reported the perceived level of opportunity for increasing Average Daily Participation (ADP) in elementary, middle and high school sites. Of those SFAs that indicated implementing SBP at the various school level sites, the greatest opportunity was reported for high school (60%), followed by middle school (38%) and elementary school (24%) (Figure 20).

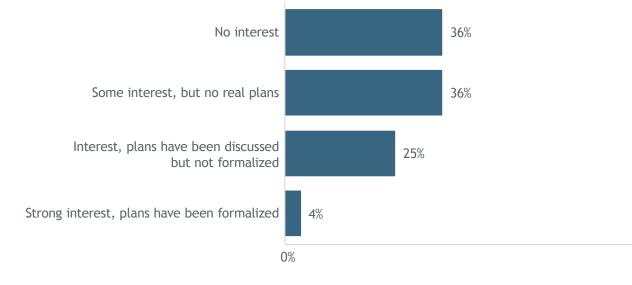




*Four SFAs indicated SBP is not implemented in Elementary School, eight SFAs indicated SBP is not implemented in Middle School and seven SFAs indicated SBP is not implemented in High School. These SFAs were not included in the percentage calculations in the above figure.

Interest in expanding SBP to new sites

Most SFAs that reported "not having full site participation" expressed some level of interest in expanding to additional sites (64%), while 36% were not interested in expanding to additional sites (Figure 21). School Nutrition should consider outreaching to those SFAs with interest in expanding SBP to new sites to provide technical assistance.





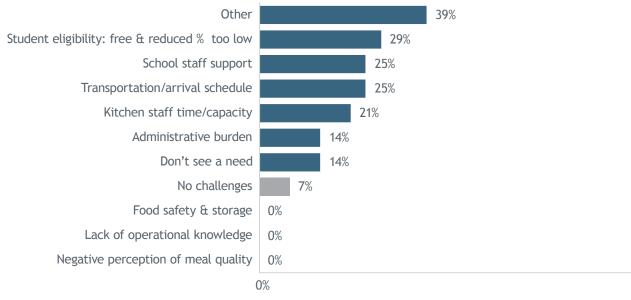
Challenges to expanding SBP to new sites

The SFAs without full site participation shared challenges to expanding to additional sites. Nearly half selected only one challenge (n=12, 46%), and the most common challenges included "student eligibility" (29%), "school staff support" (25%), and transportation/arrival schedule (25%) (Figure 22). Interview participants also noted that site-specific expansion was dependent upon eligibility, and many sites had low free and reduced eligible students. Interview participants also mentioned a lack of interest among site-level staff.

100%

Thirty-nine percent of survey respondents selected "other" but many did not specify additional details. Of the 11 that provided details, the most common reason was that most sites already participated (n=5, 45%). Challenges should be considered and further explored when School Nutrition provides technical assistance or develops trainings and resources.

Figure 22. Challenges to expanding SBP to new sites (n=28).



*Survey participants could select up to three challenges, with the exception of No Challenges; Thus, percentages do not sum to 100%.

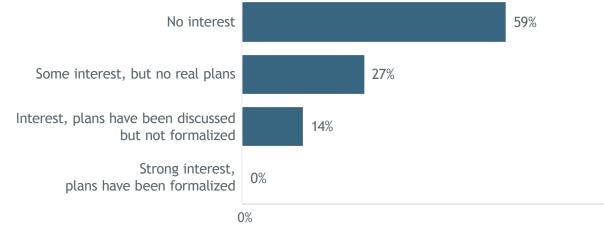
Interest in implementing SBP for the first time

Of the 22 responding SFAs not currently implementing SBP, most (59%) were not interested in implementing the program (Figure 23). The remaining nine SFAs have some level of interest, but no real plans yet to implement SBP. School Nutrition should consider targeting the interested SFAs in an effort to provide support and increase access to breakfast for students.

100%

100%

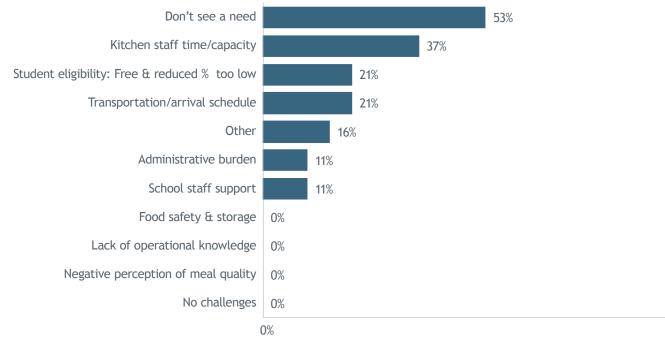




Challenges to implementing SBP for the first time

Nineteen of the SFAs not currently implementing SBP shared challenges to implementing SBP. More than half selected only one challenge (n=11, 58%), and the most common challenges were "Don't see a need" (53%) and "Kitchen staff time/capacity" (37%) (Figure 24). Staffing challenges (e.g., kitchen labor availability, meal prep timing between breakfast and lunch) and teacher resistance (particularly to breakfast in the classroom) were also discussed during interviews as the biggest barriers to implementation. Challenges should be considered and explored when School Nutrition provides technical assistance or develops trainings and resources.





*Survey participants could select up to three challenges, with the exception of No Challenges; Thus, percentages do not sum to 100%.

100%

NATIONAL SCHOOL LUNCH PROGRAM (NSLP) RESULTS

Program implementation

All of the 183 responding SFAs currently implement NSLP and the vast majority provide lunch at all sites (Figure 25).

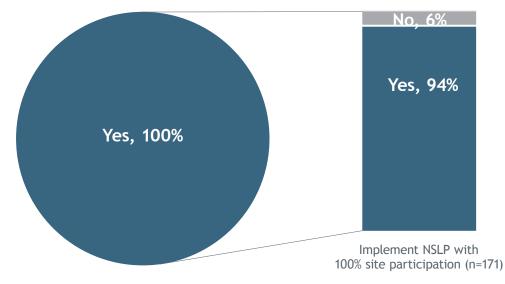


Figure 25: National School Lunch Program implementation (n=183) and site participation (n=182).

Strategies/best practices for increasing student participation

SFAs reported what strategies and/or best practices have been most effective in increasing student participation in the NSLP (Figure 26). The most common strategies/best practices included:

- Improved meal quality (81%).
- Involving students in menu development (41%).

Meal quality improvements were a front-and-center effort among many of the interview participants. Many kitchens were making a concerted effort to return to scratch cooking, as well as offering meals that catered to student taste preferences (including culturally relevant meals) while adhering to nutritional guidelines. Plate waste studies and creative on-the-spot data collection, such as making note of "share table" and trash contents, were tactics used by some SFAs to keep menus creative, fresh and interesting. Interview participants described a variety of ways they involve students, ranging from taste testing prior to launching a new menu item to focus groups and space planning. Schools with closed campuses and those with universal free meals also had greater participation overall. Alternative service models such as bringing lunch carts with

grab-n-go items to the main quad was a successful approach to engaging older students who were less inclined to participate in "cafeteria culture."

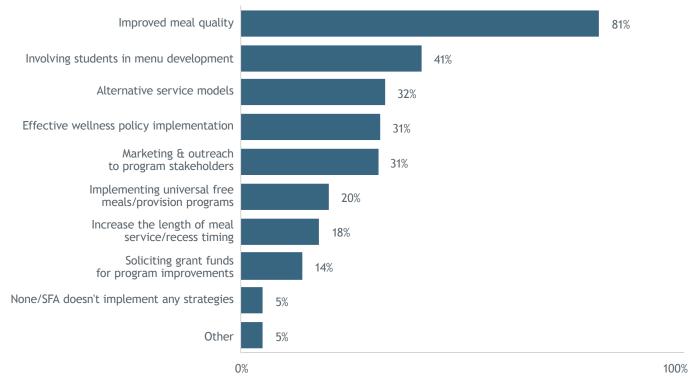


Figure 26: Strategies/best practices for increasing student participation (n=182).

*Survey participants could select more than one strategy/best practice, thus, percentages do not sum to 100%.

Challenges to increasing student participation

SFAs were asked to indicate the top three challenges to increasing NSLP participation (Figure 27). Over half selected three challenges (54%). The most common challenges included:

- Student stigma/attitude towards school meals (38%).
- Student taste preferences (35%).
- Alternative options (31%).

Interview participants confirmed the survey findings, noting that many FRL-eligible elementary-aged students still bring (often unhealthy) lunches to school and high school students with open campuses are more likely to seek off-site (often fast food) meals. Food service directors also expressed frustration with students' limited taste preferences and unwillingness to try new things. Some interviewees did acknowledge that taste tests and early education food exposure, such as CDPHE's Cooking Up Healthy Options with Plants (CHOP), went a long way in mitigating this. Some interviewees suggested that parental attitudes (based on their own

experiences with the school cafeteria) may influence student behavior and attitudes as well. Thus, more work is needed to engage and educate parents that schools can and do provide quality, healthy and tasty meals.

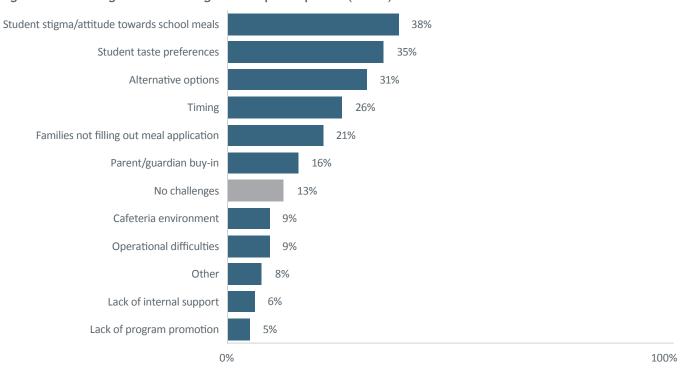


Figure 27. Challenges to increasing student participation (n=183).

*Survey participants could select up to three challenges, with the exception of No Challenges; Thus, percentages do not sum to 100%.

Opportunities to increase student participation

SFAs implementing NSLP reported the perceived level of opportunity for increasing Average Daily Participation (ADP) in elementary, middle and high school sites (Figure 28). Of those SFAs that implement NSLP in the various school level sites, the greatest opportunity was reported for high school (41%), followed by some moderate level opportunity across the school levels.

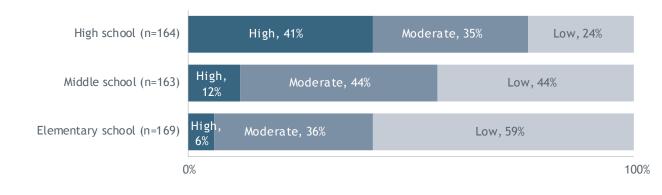


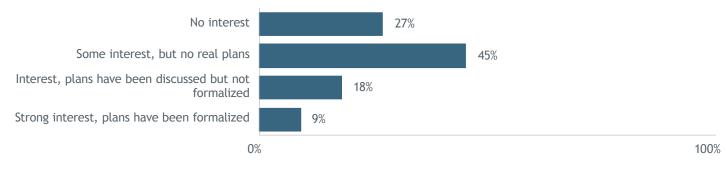
Figure 28. Level of opportunity for increasing ADP in elementary school, middle school, and high school.¹

Four SFAs indicated NSLP is not implemented in Elementary School, seven SFAs indicated NSLP is not implemented in Middle School and 10 SFAs indicated NSLP is not implemented in High School. These SFAs were not included in the percentage calculations in the above figure.

Interest in expanding NSLP to new sites

Most of the 11 SFAs that reported "not having full site participation" expressed some level of interest in expanding to additional sites (73%, n=8), but only one has formalized plans to do so, and three have no interest (Figure 29).

Figure 29. Interest in expanding NSLP to new sites (n=11).



Program implementation

Twenty-five percent (n=46) of the responding SFAs implement the ASP and nearly half of those SFAs (n=21) provide after school snacks at all sites (Figure 30).

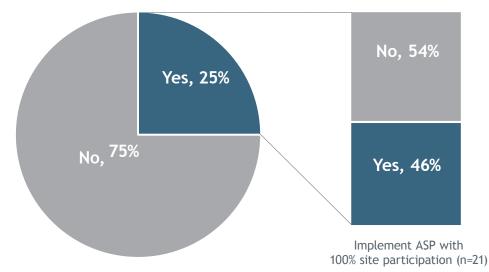


Figure 30. After School Snack Program implementation (n=183) and site participation (n=46).

Interest in expanding ASP to new sites

Just over half of 25 SFAs that reported "not having full site participation" expressed some level of interest in expanding to additional sites, while 44% were not interested in expanding to additional sites (Figure 31). School Nutrition should consider outreach to those SFAs with interest in expanding ASP to new sites to provide technical assistance.

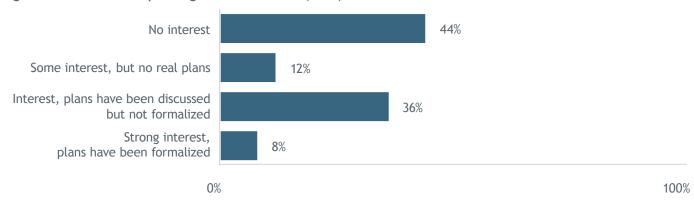


Figure 31. Interest in expanding ASP to new sites (n=25).

Challenges to expanding ASP to new sites

The 24 responding SFAs without full site participation shared challenges to expanding to additional sites (Figure 32). The most common challenges included lack of afterschool programming/enrichment activities

(46%) and program eligibility (29%). Interview participants echoed these findings, noting that many schools have no, or very few, afterschool activities, making the reimbursement for such a small amount of snacks not worth the effort. Some schools or districts also have universal access policies that would require snacks be available to any student on campus for any reason (not just afterschool programming/activities), which they believe would be logistically problematic and potentially cost prohibitive if all snacks could not be reimbursed. Challenges should be considered and further explored when School Nutrition provides technical assistance or develops trainings and resources.

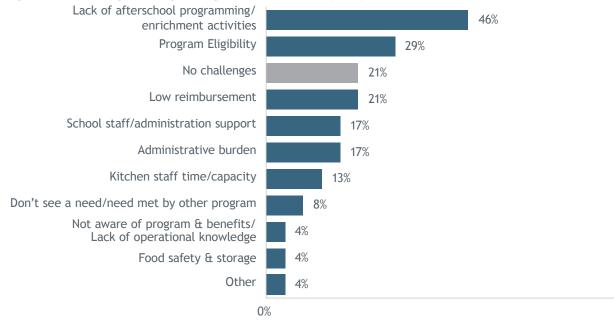


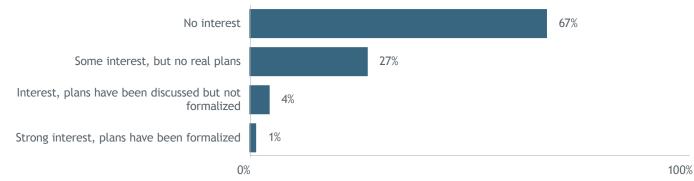
Figure 32. Challenges to expanding ASP to new sites (n=24).

*Survey participants could select up to three challenges, with the exception of No Challenges; Thus, percentages do not sum to 100%.

Interest in implementing ASP for first time

Of the 135 responding SFAs not currently implementing ASP, most (67%) were not interested in implementing the program (Figure 33). Only two SFAs (1%) reported having a plan for implementing ASP. The remaining SFAs reported some level of interest but no plans to implement ASP. School Nutrition should consider targeting the interested SFAs to provide support to increase access to afterschool snack programs for students.

Figure 33. Interest in implementing new ASP (n=135).



100%

Challenges to implementing ASP for the first time

The 111 responding SFAs not currently implementing ASP shared challenges to implementing an ASP (Figure 34). The most common challenges included:

- Other (29%).
- Kitchen staff time/capacity (27%).
- Program eligibility (20%).

Common open-ended responses to "Other" included that the SFA does not have or offer an ASP (n=14), students ride the bus home or go straight to after school sports (n=5), and afterschool snacks/programming are provided by another program or organization (n=4). Two SFAs indicate that they do not qualify for the ASP. Interviews supported survey findings, particularly those issues around logistics of implementation (e.g., timing with students leaving campus, staff availability to manage snack distribution, etc.). Challenges should be considered and further explored when School Nutrition provides technical assistance or develops trainings and resources.

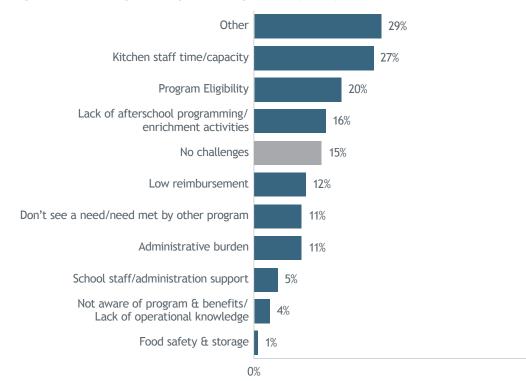


Figure 34. Challenges to implementing an ASP (n=111).

*Survey participants could select up to three challenges, with the exception of No Challenges; Thus, percentages do not sum to 100%.

100%



SFAs and Summer Sponsors results

SFA Program implementation

Twenty-nine percent (n=53) of the responding SFAs implement the SFSP and 28% (n=15) of those SFAs provide summer meals at all sites (Figure 35).

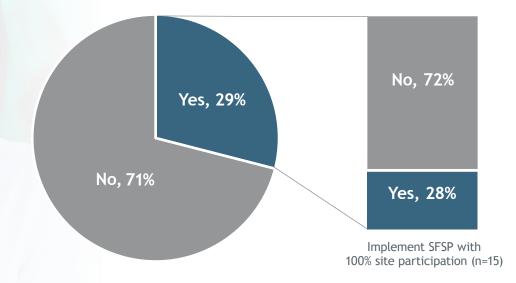


Figure 35. SFA Summer Food Service Program implementation (n=183) and site participation (n=53).

Summer Sponsor Program meal offerings

Of the 22 responding Summer Sponsors, all offered lunch, 64% offered breakfast, 27% offered snacks and 36% offered supper (Figure 36).

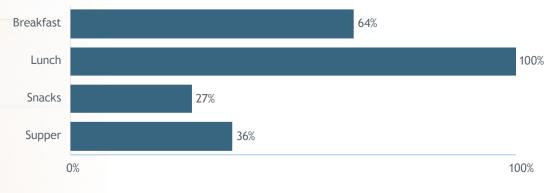


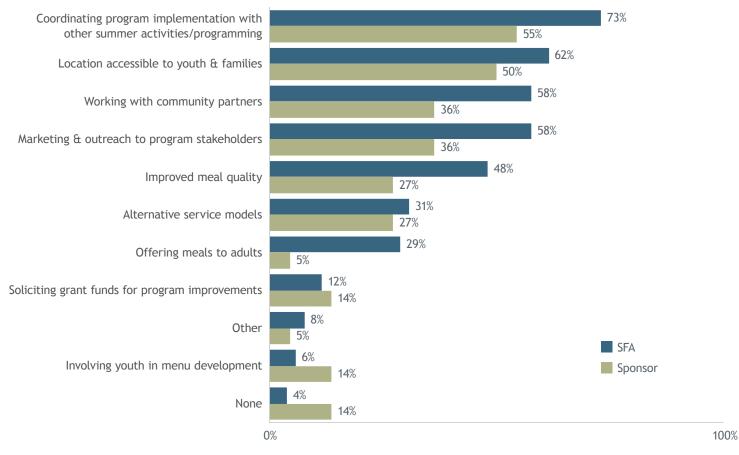
Figure 36. Summer Sponsor meal offerings (n=22).

Strategies/best practices for increasing student participation

SFAs and Summer Sponsors implementing SFSP were asked what strategies and/or best practices have been most effective in increasing student participation (Figure 37). Both groups reported the same most common strategies/best practices:

- Coordinating program implementation with other summer activities/programming.
- Identifying locations accessible to youth and families.

Figure 37. Strategies/best practices for increasing student participation for SFAs (n=52) and Summer Sponsors (n=22).



Challenges to increasing student participation

SFAs and Summer Sponsors implementing SFSP reported on the challenges to increasing student participation (Figure 38). SFA's most commonly reported challenge was site location (37%), while Summer Sponsors most commonly reported challenge was youth stigma/attitude towards summer meals (27%). Other challenges reported by SFAs and Summer Sponsors included: transportation issues, cost issues in general and with parent meals, parents wanting to pick up meals, poor turnout/participation. Thirty-six percent of Summer Sponsors reported no challenges to increasing student participation. Though it is important to note that most (75%) of these Summer Sponsors required enrollment (i.e. closed-enrolled site), thus increasing student participation may not be a relevant goal for their program. Challenges should be considered and explored when School Nutrition provides technical assistance or develops trainings and resources.

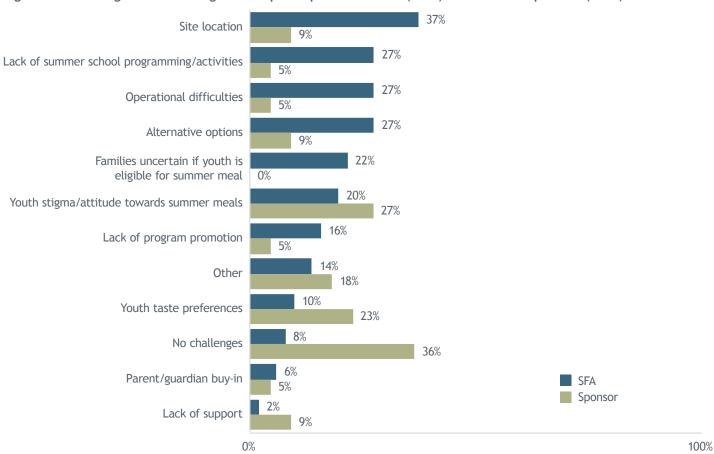


Figure 38. Challenges to increasing student participation for SFAs (n=51) and Summer Sponsors (n=22).

SFA opportunities to increase student participation

SFAs implementing SFSP reported the perceived level of opportunity for increasing participation for the meal types each offered (Breakfast, Lunch, Snack and Dinner) (Figure 39). While it appears there is opportunity to increase participation for snack and supper, very few SFAs offer those meal types. Interview participants noted that meal offerings are dictated by summer school programming, which typically has limited (morning) hours. SFAs saw the most opportunity for increasing participation with breakfast and lunch.

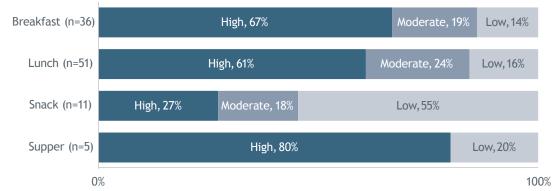


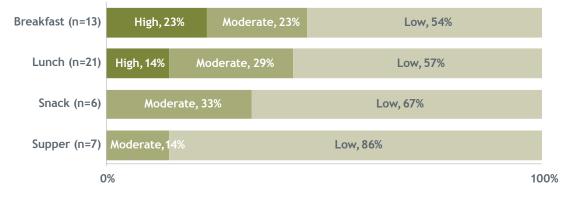
Figure 39. SFA level of opportunity for increasing participation by meal type.*

*13 SFAs indicated that Breakfast is not implemented for SFSP, 31 SFAs indicated that Snack is not implemented for SFSP, and 35 indicated that Supper is not implemented for SFSP. These SFAs were not included in the percentage calculations in the above figure.

Summer Sponsor opportunities to increase student participation

Summer Sponsors also reported the perceived level of opportunity for increasing participation for the summer meal types each offered (Breakfast, Lunch, Snack, Supper) (Figure 40). Similarly to the SFAs perceived opportunity, Summer Sponsors saw the most opportunity to increase participation for breakfast and lunch. Fewer sponsors provide snacks and supper. It is important to note that most of the Summer Sponsors that indicated there is a low level of opportunity to increase participation require enrollment to participate (i.e., closed-enrolled site). Summer Sponsors indicated during interviews that meal offerings were often synced with partner programming, so activity timing often dictated meal types. Likewise, meals offered at open sites without scheduled programming (e.g., open swim time at community pools) were typically aimed at high attendance times like lunch.

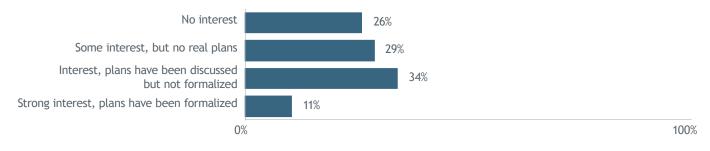
Figure 40 Summer Sponsor level of opportunity for increasing participation by meal type.



SFA interest in expanding SFSP to new sites

Most SFAs that reported "not having full site participation" for SFSP expressed some level of interest in expanding to new sites (74%), while 26% were not interested in expanding to new sites (Figure 41). School Nutrition should consider outreach to those SFAs with interest in expanding SFSP to new sites to provide technical assistance.

Figure 41. SFAs interest in expanding SFSP to additional sites (n=38).



SFA challenges to expanding SFSP to new sites

The SFAs without full site participation shared challenges to expanding to additional sites. The most common challenges included lack of summer programming/activities (38%), kitchen staff time/capacity (30%) and previous failed attempts (30%). Logistical concerns were cited by interview participants as the biggest barrier to summer meal implementation. One interviewee suggested that there was simply no additional labor available during the summer—at any cost—to staff kitchens. SFAs in rural areas with widely distributed populations noted that students often had no means to access centralized pickup/prep locations, mobile distribution was time or cost-prohibitive, and that participation was historically low. Others mentioned that only select schools offer any type of summer programming. Challenges should be considered and explored when School Nutrition provides technical assistance or develops trainings and resources.

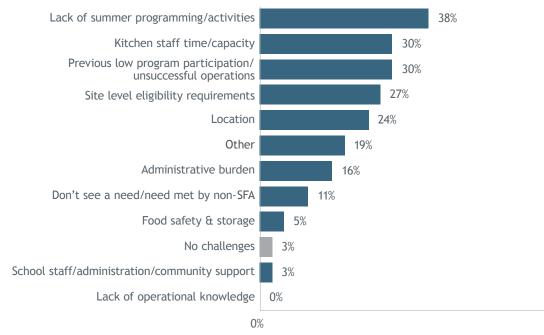


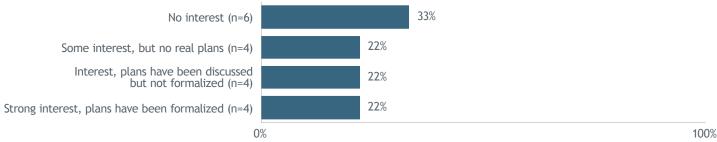
Figure 42. SFA challenges to expanding SFSP to new sites (n=37).

100%

Summer Sponsor interest in expanding SFSP to new sites

Four of the 22 responding Summer Sponsors reported not having additional sites to expand the program. Of the 18 sponsors with potential to expand to new sites, most expressed some level of interest in expanding to new sites (66%), while 33% expressed no interest in expanding to new sites. School Nutrition should consider outreach to those Summer Sponsors with interest in expanding SFSP to provide technical assistance.

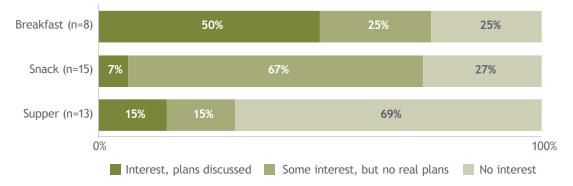
Figure 43. Sponsor's Interest in expanding SFSP to additional sites (n=18).



COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT | COLORADO DEPARTMENT OF EDUCATION 35

Summer Sponsor interest in expanding meal type options

Summer Sponsors also shared their level of interest with expanding the meal options served at the SFSP (Figure 44). Summer Sponsors had the most interest in expanding breakfast and snacks. There were lower levels of interest in providing supper. School Nutrition should consider outreach to those Summer Sponsors with interest in expanding meal type options to provide technical assistance. Lunch was not included as it is already implemented by all responding Summer Sponsors.





Summer Sponsor challenges to implementing or expanding SFSP

Summer Sponsors shared their challenges to implementing or expanding the SFSP (Figure 45). Nearly half reported not having any challenges (45%). However, it is important to note that 70% of the Summer Sponsors that reported not having any challenges require enrollment to participate (i.e., closed-enrolled site) and 90% currently only operate at one site, thus, expanding to new sites may not be an option. The most common challenge was school district and community support (18%). One interview respondent suggested that school districts/SFAs' "first right of refusal" for regional summer meal programming may be problematic in annual strategic planning efforts. There might be a role for CDE to broker relationships between SFAs and Summer Sponsors to facilitate better planning and avoid competition.

Eighteen percent of Summer Sponsors selected "Other" but no themes could be determined. During interviews, Summer Sponsors acknowledged special challenges with open sites (such as pools/recreation centers) and the difficulty of being able to forecast accurate meal counts. In some cases, the wide dispersion of sites presented barriers to providing oversight and collecting data on meal counts. One sponsor was developing an app to help with meal count reporting. Another was putting routine procedures into place, such as monthly meal planning, to help central office staff manage logistical functions (e.g., transportation, placing orders, adjusting meal counts). Challenges should be considered and explored when School Nutrition provides technical assistance or develops trainings and resources.

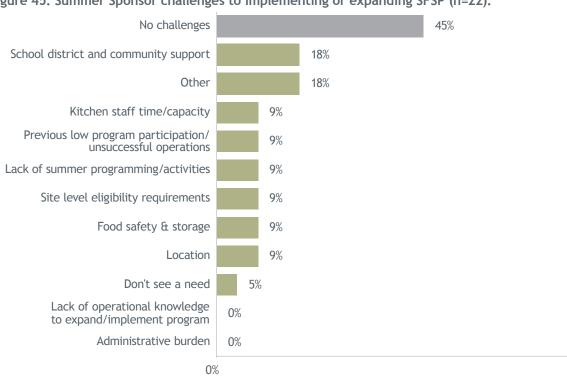
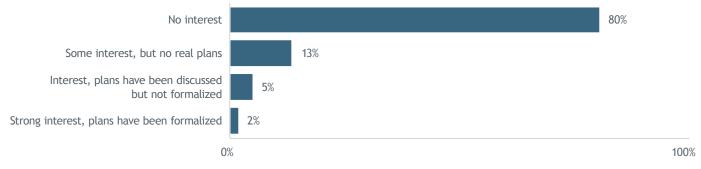


Figure 45. Summer Sponsor challenges to implementing or expanding SFSP (n=22).

SFA interest in implementing SFSP for the first time

Of the 127 responding SFAs not currently implementing a SFSP, most indicated not being interested in implementing SFSP (80%), while 20% indicated having some level of interest in implementing SFSP (Figure 46). School Nutrition should consider targeting the interested SFAs to provide technical assistance to support the implementation of new SFSP.

Figure 46. SFAs interest in implementing SFSP (n=127).



100%

SFA challenges to implementing SFSP for the first time

SFAs not currently implementing SFSP shared challenges to implementing SFSP (Figure 47). The most common challenges included kitchen staff time/capacity (37%) and lack of summer programming/activities (31%). Challenges should be considered and explored when School Nutrition provides technical assistance or develops trainings and resources.

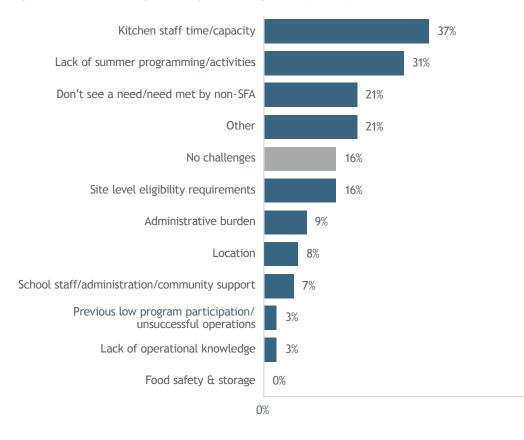


Figure 47. SFA challenges to implementing SFSP (n=106).

100%

The needs assessment will inform School Nutrition's Blueprint implementation plan and steer them towards meeting their goals of increasing access to and participation in federal child nutrition programs.

Based on the survey responses and reviewing the ADP data, opportunity was seen across all child nutrition programs to maximize participation. Increasing program access could be achieved through adding new or expanding sites participating in ASP, SBP, SFSP. Increasing participation and access could be achieved through the implementation of best practices found in the literature and from other SFAs and Summer Sponsors.

A greater understanding was gained of what best practices and challenges SFAs and Summer Sponsors face in increasing student participation and implementing the various child nutrition programs. Improving meal quality was reported as a best practice across all programs. Other commonly reported best practices for breakfast and lunch programs included the use of alternative service models as well as the involvement of students in menu development. The SFSP best practices were more about coordination with other summer activities or programs, accessible locations, and marketing and outreach to ensure the community knows about the program. Some of the best practices reported may help to counter the challenges SFAs and Summer Sponsors face in implementing the child nutrition programs. Improving meal quality and including youth in menu development can help to mitigate challenges related to student taste preferences and stigma/attitude towards school meals. Timing and alternative options were also common challenges across programs. ASP and SFSP also faced challenges related to a lack of school or summer programming to implement child nutrition programs, as well as challenges with operations and program eligibility. The best practices and common challenges are helpful to consider, along with the literature, to inform strategies that support SFAs and Summer Sponsors with the implementation of child nutrition programs.

While the USDA and other standard program requirements trainings are helpful for orienting staff, results highlighted the need for tailored training and technical assistance in order to be responsive to SFA and Summer Sponsor's unique needs. SFA Directors, who often provide their own training to site-level staff, reported a need for short, easy-to-digest, on demand training modules that could be built into their larger trainings or quickly shared. Respondents were highly interested in regional or live webinar trainings with time for questions and answers to engage with their peers and the trainer. Newer food service directors highlighted a need for more frequent technical assistance, particularly one-on-one coaching or mentoring in addition to an onboarding "roadmap" resource that clearly lays out a step-by-step path to help navigate the implementation of federal child nutrition programs.

Training needs varied across respondents, even when trying to categorize SFAs by different characteristics (i.e., geographic designation, four-day school week, FRL and total ADP rates). This reiterates the need for tailored training and technical assistance to be responsive to unique needs. However, the training needs mentioned most often across respondent characteristics were assistance with: program promotion and communication, stigma reduction, and improving the meal quality of child nutrition programs. Additional training needs that varied across respondents included: new food service models, procurement of local/fresh foods, general procurement, working with school boards & administration, and grant writing.

Initial findings were presented and discussed with the Colorado Blueprint to End Hunger Maximizing Child Nutrition Workgroup 5 in April 2019. The results resonated with workgroup members' experiences and understanding of federal child nutrition program implementation. The discussion helped to confirm the results of the needs assessment and provided insights into the data analysis which informed this report and the recommendations.

Recommendations

The needs assessment findings will be disseminated broadly to child nutrition program and Blueprint stakeholders to inform overall future strategies. School Nutrition should consider the following recommendations to increase student participation in and access to child nutrition programs in Colorado to support the Blueprint to End Hunger.

- Consider developing a communication and education strategy to help bridge the gap between child nutrition programs and school stakeholders (parents, community members, school admins) to increase positive perceptions, benefits and impact of child nutrition programs on the well-being and academic achievement of students.
- Consider ways to incorporate and institutionalize the tenants of meal quality (consistency, local procurement, food safety, culinary arts, etc.) into existing and new trainings.
- Consider developing and sharing resources that include an onboarding "roadmap" for food service directors that clearly lays out a step-by-step path to navigate the implementation of federal child nutrition programs.
- Consider developing a coaching and/or mentoring program for food service directors or managers to learn from other "experts" in the field to help them navigate the implementation of the various child nutrition programs and troubleshoot challenges.
- Consider regional trainings and networking opportunities for food service directors, managers and staff to engage with one another, learn new skills or ideas, discuss ideas to overcome challenges or facilitate program improvements, and to build relationships with broader school stakeholders (i.e., administrators, community partners).
- Consider developing short, on-demand training modules for food service directors to share with their kitchen staff.
- Consider ways to share SFA and Summer Sponsors best practices, success stories and partner engagement that resulted in greater access and participation in child nutrition programs.
- Review and provide outreach to individual SFA and Summer Sponsor survey respondents to help understand their specific training needs, challenges, and opportunities to inform technical assistance and interactions with respondents.
- Continue to explore and refine methodologies used for targeting SFA and Summer Sponsors and better understanding of performance or progress made to increase access to and participation in child nutrition programs. Targeting could be based on a variety of factors such as: interest, perceived

opportunity and need. Need can be further explored by using ADP benchmarks, FRL eligibility and four-day school week.

- Continue to build analytic and data utilization capacity of school nutrition data both at the state and local-level. At the local-level, School Nutrition could provide training or technical assistance to help SFAs and Summer Sponsors use and understand their data to inform program improvement efforts. At the state-level, School Nutrition could 1) establish standardized program data reporting processes and criteria to help with data validation and utilization and 2) develop a system to visualize program data in a more "real-time" manner to better inform technical assistance and program improvement efforts.
- School Nutrition should continue to collaborate with CDPHE's Child and Adult Care Food Program (CACFP) to identify areas of alignment to support Blueprint Goal 5 and cross-promote programs to ensure full-year meal access to child nutrition programs.

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- Bhatia R, Jones P, Reicker Z. Competitive Foods, Discrimination, and Participation in the National School Lunch Program. Am J. Public Health. 2011;10(8):1380-1386.doi:10.2105/AJPH.2011.300134
- 2. Hearst MO, Shanafelt A, Wang Q, Leduc R, Nanney MS. Altering the school breakfast environment reduces barriers to school breakfast participation among diverse rural youth. J Sch Health. 2018; 88: 3-8.
- Johnson DB, Podrabsky M, Rocha A, Otten JJ. Effect of the Healthy Hunger-Free Kids Act on the Nutritional Quality of Meals Selected by Students and School Lunch Participation Rates. JAMA Pediatr.2016;170(1):e153918. doi:10.1001/ jamapediatrics.2015.3918
- 4. Lambert L, Raidl M, Carr D, Safaii S, Tidwell D. School Nutrition Directors' and Teachers' Perceptions of the Advantages, Disadvantages, and Barriers to Participation in the School Breakfast Program. Journal of Child Nutrition and Management. 2007; 21 (2)
- 5. Lopez-Neyman S, Warren C. Barriers and Advantages to Student Participation in the School Breakfast Program Based on the Social Ecological Model: A Review of the Literature. Journal of Child Nutrition and Management. 2016; 40: (2).
- 6. McDonnell E, Probart C, Weirich E, Hartman T, Birkenshaw P. School breakfast programs: perceptions and barriers. J of Child Nutrition & Management. 2004; 28: 2
- 7. Murimi M, Chrisman M, Diaz-Rios L, McCollum H, Mcdonald O. A Qualitative study on factors that affect school lunch participation: perspectives of school food service managers and cooks. Journal of Nutrition and Health.. 2015; 1(2): 6.
- Nanney, M. S., Shanafelt, A., Wang, Q., Leduc, R., Dodds, E., Hearst, M., Harnack, L. (2016). Project BreakFAST: Rationale, design, and recruitment and enrollment methods of a randomized controlled trial to evaluate an intervention to improve School Breakfast Program participation in rural high schools. Contemporary Clinical Trials Communications, 3, 12-22.
- No Kid Hungry: Share our Strength. Effective Policies for Increasing Participation in School Breakfast. http:// bestpractices.nokidhungry.org/sites/default/files/download-resource/Effective%20Policies%20for%20Increasing%20 Participation%20in%20School%20Breakfast.pdf. Accessed on December 27, 2018
- 10. Ohri-Vachaspati P. Parental perception of the nutritional quality of school meals and its association with students' school lunch participation. Appetite. 2014;74:44-47.doi:10.1016/j.appet.2013.10.024.
- 11. Pope L, Roche E, Morgan C, Kolodinsky J. Sampling tomorrow's lunch today: Examining the effect of sampling a vegetable-focused entrée on school lunch participation, a pilot study. Prev Med Rep. 2018;12:152-157.doi:10.1016/j. pmedr.2018.09010
- 12. U.S. Department of Agriculture (USDA). HealthierUS School Challenge (HUSSC) award program. https://www.fns.usda. gov/tn/healthierus/index.html (Webpage no longer available).



